

# ASPIRE

## Apiculture Scaling-up Program for Income and Rural Employment

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### Final Narrative Report

(01 December 2012 – 01 December 2017)



Embassy of the Kingdom of Netherlands -funded project, implemented by a consortium led by SNV and including EAB, ProFound and Enclude



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## ACRONYMS/ABBREVIATIONS

ASPIRE	Apiculture Scaling-Up Programme for Income and Rural Employment
BoA	Bureau of Agriculture
BOAM	Business Opportunities for Accessing Markets
BoCD	Bureau of Cooperatives Development
BoFED	Bureau of Finance and Economic Development
BOLFD	Bureau of Livestock and Fisheries Development
EAB	Ethiopian Apiculture Board
EBA	Ethiopian Beekeepers Association
ETHBPEA	Ethiopian Honey and Beeswax Producers and Exporters Association
EKN	Embassy of the Kingdom of the Netherlands
FTC	Farmer Training Centers
IEC	Informational, Educational and Communication
IPs	Implementing Partners
Kg	Kilogram
MFI	Micro-finance institutions
MoA	Ministry of Agriculture
MoU	Memorandum of Understanding
MSP	Multi-Stakeholder Platform
PCU	Project Coordination Unit
SLM	Sustainable Land Management
SNNPR	Southern Nations, Nationalities and Peoples' Region
VC	Value Chain

## 1. PROJECT BACKGROUND

The Apiculture Scaling-up Program for Income and Rural Employment (ASPIRE) project started its interventions in December 2012. The project ended in 01 December 2017. It builds on the achievements of the Business Organizations and their Access to Market project (BOAM) that has laid fundamentals for the honey value chain development in Ethiopia. ASPIRE funded by the Embassy of the Kingdom of Netherlands and with parallel co-financing of some technical assistance by GIZ. It is designed to contribute to poverty reduction in rural areas of Ethiopia by establishing a dynamic and sustainable apiculture sector. It is implemented by a consortium of four partners, SNV Ethiopia as a leader of the consortium, ProFound, Enclude and the Ethiopian Apiculture Board (EAB). ASPIRE has a budget of €6.59 Million and implemented in 52 woredas of four regions as listed below:

REGION	LIST OF WOREDAS
TIGRAY	Aheferom, Weree Leke, Kolatemben, Degaua Temben, Seharti Samre, Enderta, Atsbi Womberta and KildeAwelaelo
AMHARA	BahirDar Zuria, Gozamen, Chilga, Ebnat, Fageta Lokoma, Bugena, Lasta, Ambassel, Sekota, Dahina, Basona, Dewa Cheffe.
OROMIA	Gomma, Manna, Gera, Mettu, Yayo, Alle, Adama, Lalo Asabi, Gimbi, Ayira, Bore , Ana Sora, Ameya, Gida Ayana, Limmu Bilbilo, Jimma rare, Guduru, Chelia and Dendi
SNNPR	Gewatta, Kedida Gamela, Angacha, Gesha, Damotgalle, Sheka, Guraferda, Cheha, Yirga Cheffe, Wenago, Gombora. Masha, and Anderacha,

### 1.1 PROJECT GOAL, OBJECTIVES AND RESULTS

ASPIRE's overall goal is to contribute to poverty reduction in rural areas of Ethiopia by establishing a dynamic and sustainable apiculture in the country. To achieve this the project used a mix of intervention strategies including technical assistance, innovation funding (for pilot projects by partners leading to working methods which can be up-scaled by the sector), grants (for critical sector interventions and institutions) and a guarantee instrument to enhance access to commercial finance for beekeepers and other value chain actors. The main objectives and targets set by ASPIRE are:

- Targeted 30,000 smallholder beekeepers income (at least 20% women) should reach at least the €360 (8400 ETB<sup>1</sup>) per annum from beekeeping by the end of the project period
- Ethiopia established as a significant exporter of apiculture products

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<sup>1</sup> 1 EUR = 23.33 ETB

- Another 30,000 smallholder beekeepers (at least 20% women) increased their income through copying and crowding

To achieve these driving objectives, six main result areas were formulated which are organized under two main pillars:

**Pillar I: Business relationships development**

- **Result 1:** Business relationships initiated, Ethiopian beekeepers, of which at least 20% women, organised as commercially viable business units (e.g. cooperatives, associations and / or out-grower schemes) and upgraded to modern production practices (quantity, quality, semi-commercial operations, sale of by-products)
- **Result 2:** Input suppliers and service (BDS) providers launched in commercial operations and different business modalities in place
- **Result 3:** Credit/lease financing available to beekeepers and other value chain actors through MFIs, banks, VC partners with existing or innovative arrangements
- **Result 4:** Ethiopia internationally recognized as producer of quality honey (market development) and the processing companies strengthened

**Pillar 2: Sector and institutional development**

- **Result 5:** Honey and other bee products national platform, sector associations and environment become inclusive and self-steering
- **Result 6:** Apiculture sector knowledge development and sharing, and collaboration improved

## 2. MAJOR ACCOMPLISHMENTS

The following sections highlight major accomplishments of the project and associated achievements under each key result area.

### Result 1: Business relationship development

Under Result 1, ASPIRE sought to initiate business relationships among the various players in the apiculture value chain, and launch smallholder beekeepers, at least 20% of which will be women, to semi- commercial beekeeping operations. The project envisioned to achieve these results, through the following key strategies: business relationships initiated by lead organization (processor, cooperative and lead beekeeper), upgrade beekeeping training packages, build knowledge and skills of smallholder beekeepers in modern beekeeping, and support value chain actors to establish nucleus / demonstration apiary sites. Key achievements of the project under this result are as follows:

#### Business relationship development

The project promoted two broad categories of business relationship development models (I) Company- led business model and (II) Supporters –led buyers light touch business model in which the business relationships are initiated and developed gradually.

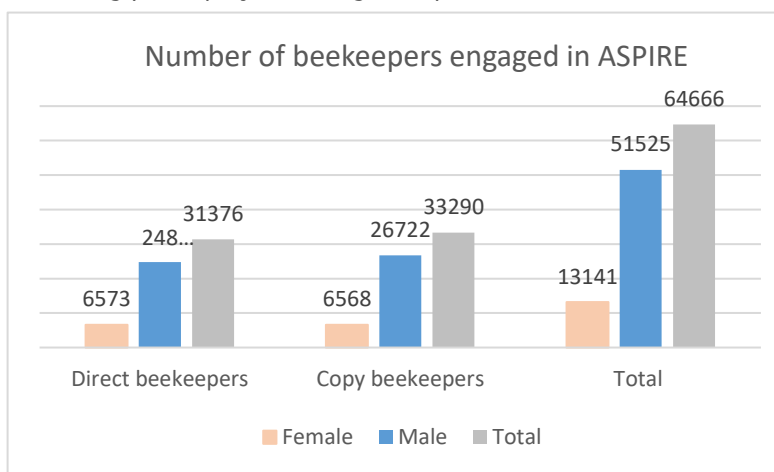
**Company-led business model:** Using the project innovation and business linkage grant instrument 42 private business companies and 12 unions/cooperatives initiated business relationships and they provided embedded technical, input, financial and marketing services for 12,982 beekeepers. The beekeepers received training from lead organizations using ASPIRE’s minimum package training which includes both technical beekeeping and business skills. Further, the lead organizations established apiary sites which were used for demonstration of improved technologies and management practices. The relationships established led to business deals in which most of the companies and all the unions started purchasing honey and wax from the beekeepers.

**Supporters –led buyers light touch business model:** under this model institutions which include government sector offices (regional, zonal and woreda) and other development organizations have accessed the innovation grant fund to train and support beekeepers and ultimately to facilitate linkage to formal business relationships with private sector. Accordingly, 73 sector offices and NGOs trained 18,394 beekeepers using the ASPIRE minimum package training. Following the training the institutions provided day to day coaching and follow- up and facilitated linkage either to the private companies and/or unions and cooperatives.

## Beekeepers training and capacity building

Using the two business models mentioned above the project facilitated capacity building of smallholder beekeepers in the 52 targeted woredas. Accordingly, the project through the partners trained and coached

**31,376 (21% female)** smallholder beekeepers, achieving 105% of the life of the project target. The training includes both theoretical and practical sessions in basics of beekeeping, dearth period management, colony transfer, transitional hive making, pre and post-harvest and quality of hive products, bee health, bee forage and business skills. Further experience sharing visits conducted to facilitate peer to peer learning. The following are the key results achieved as a result of the trainings and the technical assistance provided to the beekeepers:



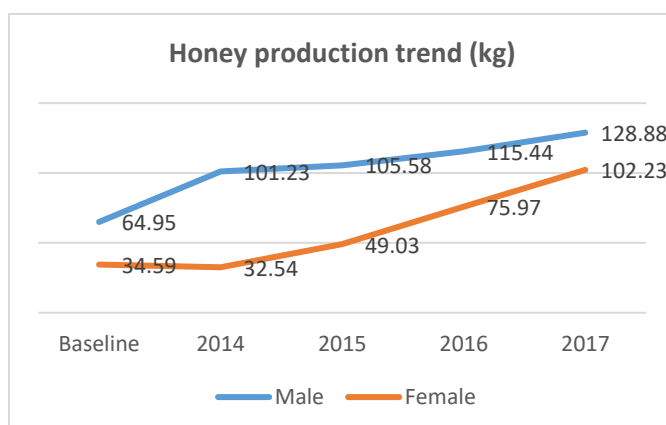
**Copy Beekeepers:** The trained beekeepers have technically supported **33,290(6,568 female)** copy beekeepers to start and/or strengthen beekeeping activities. Most of the copy beekeepers are their neighbors and family members. The project achieved 111% of its plan of creating copy beekeepers by the direct target beekeepers.

**Transitional hive making:** Following the practical training on transitional hive construction using locally available materials, 25,519(4,766 female) targeted beekeepers constructed 67,066 transitional hives of which 44,471 hives were colonized and started production of honey. The remaining hives are expected to be colonized in the coming year.

**Adoption of modern/framed hives:** After joining ASPIRE project 14,971(2,470 female) beekeepers increased their framed hives. These beekeepers owned 31,279 framed hives of which 26,376 are colonized by the end of 2017.

**Colony splitting/multiplication:** among the trained beekeepers 6,655(1,015 female) multiplied 15,246 bee colonies. Colony is one of the key input for beekeeping. Beekeepers who have this skill will have dual benefit using the colonies for own apiary as well as sell to others and generate income.

**Honey production:** According the information collected from the field in most of the targeted woredas, by the end of 2017 around 42,100 beekeeper (including the copy beekeepers) produced 6,438 tons of honey for the 2017



production season. The annual ASPIRE result assessment survey conducted by an independent firm ( PRIN<sup>2</sup>) shows that the average honey production for male is 128.88 kg while for female beekeepers is 102.23 kgs from the base line amount of 64.95 Kg for male and 34.59 kg for female beekeepers. The increase in volume of production is tripled for female and doubled for male beekeepers. This change is due to both increase in productivity per hive and increase in the number of hives per beekeeper. The final project evaluation report also confirmed the change though there is difference in the figures.

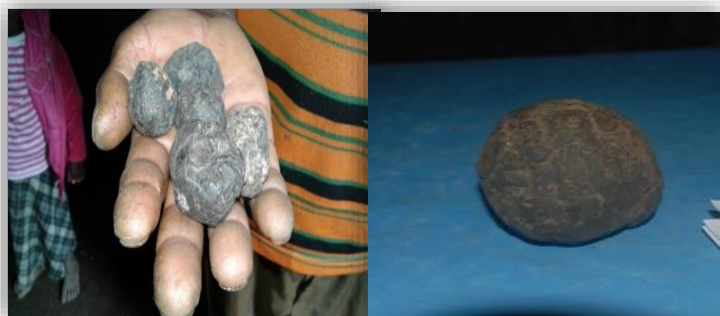
**Beekeepers income increased:** ASPIRE program interventions resulted in significant increase in income and rural employment. According to the annual result assessment report (conducted by PRIN), the average gross annual income from beekeeping has increased from € 169(in 2013) to € 397(in 2017) for male and from € 98(in 2013) to €328(in 2017) for female beekeepers. The change in male beekeepers income surpassed the project target while the female income is slightly behind. We are confident that the female beekeepers will surpass the target income next year.

**Hive product diversification:** Besides honey production, the targeted beekeepers were trained in production and collection of other hive products. Based on the new skills and knowledge gained almost all the trained and copy beekeepers started collecting and processing wax both for own use (as an input to continue next cycle of honey production) or for sale to others. Further, some beekeepers and cooperatives started producing, collecting and processing wax as a business. For instance, Yismanegus cooperative is specializing on bees wax production and marketing. With the support of ASPIRE the cooperative purchased modern wax printing machine. In 2017, Yismanegus sold wax with a total value of ETB 690,000.



Picture 1: A female beekeeper with the wax she extracted, Ambassel woreda

On the other hand, few beekeepers have started collection of propolis and royal jelly to diversify their bee products. The beekeepers initiative indicates that when more training and technical support is extended, they can manage collections and supplying of those products to markets. However, as collecting propolis and royal jelly are new practice it needs time to be adopted by many. In addition, about 105 female beekeepers were trained



Picture 2: sample of propolis produced by beekeepers at Limu Bilbilo (left) and Wenago (right) woredas

<sup>2</sup> ASPIRE contracted PRIN International Consultancy and Research Services Plc to conduct the project annual output and results assessment on the project selected indicators.



by Emebet Commercial PLC in Cheha Woreda and started producing candle from beeswax as source of income.

**Nutrition and food security:** Although nutrition and food security was not major focus area of the project, 44% (21 woredas) of the ASPIRE target woredas are food insecure as categorized by the government of Ethiopia. About 18% or 5,643 households targeted by ASPIRE are from the chronically food insecure woredas. The IOB mission's field interview in early February 2016 revealed that income earned from beekeeping by food insecure targets of ASPIRE is contributing to increased purchasing power of food items. Though not recognized in the list of nutritious food items, target households also use honey with bread to feed their families (especially their children). In the ASPIRE trainings beekeepers are informed on the importance of diversified food consumption for their family and particularly children, lactating and pregnant women.

**Youth Employment opportunities:** ASPIRE has been supporting landless youth groups through access to enclosure areas (PSNP supported NRM based enclosures) and providing them with technical supports in beekeeping and access to markets. In the project around 4,500 youth (14% of the total) were targeted and improved their livelihoods.

#### **Demonstration/ nucleus (apiary) sites establishment**

The project supported private companies/Cooperatives and woreda sector offices to establish/strengthen demonstration sites (apiaries); mainly to conduct practical training sessions and skill transfer to target beekeepers at the respective project areas. The apiary sites are equipped with range of hives and beekeeping accessories. To date 112 apiary sites were established and rendering service for demonstrating improved technologies and practices in all the 52 woredas.



Picture 3: Apiary sites established for training and demonstration

## Strengthening producers organizations

To enhance beekeepers collective effort to effectively engage in marketing of their produce, ASPIRE strengthened 38 cooperatives and unions with total membership of 35,504 beekeepers (6,958 female). The support includes technical assistance in members' mobilization, business management, quality control, financial management, governance /leadership, internal control, procurement and marketing of apiculture products. As a result the cooperatives have improved their internal management in terms of members handling, new members mobilization, human and financial management and marketing.

## Result 2: Input supply and service providers development

Quality supply of inputs and limited and inconsistent access to extension /business development services were the critical challenges for the smallholder beekeepers and other value chain actors in the sector. ASPIRE has been developing and piloting different innovative models to address these challenges. The project approach focused in strengthening the existing systems while developing/adopting innovative solutions to bring systemic change to the subsector. The key achievement under this result are presented below:

### Strengthening the extension system

**Standardized training package developed:** the project in collaboration with Holeta bee research center and senior apiculture experts developed a TOT facilitation guide in beekeeping technical and business skills. During the project period the manual was refined several times based on the feedback from experts and beekeepers. In 2017, the manual was published and 500 copies were printed. Both hard and soft copies of the manual were distributed to the project targeted woreda, zonal and regional sector offices, private sector, cooperatives, unions and NGOs. Further, the manual was distributed to research centers, universities, Federal level institutions and sector associations for wider use. The manuals will help stakeholders to deliver standardized trainings in beekeeping.



**Beekeepers reference guide/poster prepared and distributed:** the poster is prepared in three local languages to train and support the beekeepers. The posters are dispatched to all ASPIRE targeted beekeepers to be used as a reference material. The posters were also provided to woreda experts, DAs and lead beekeepers to be used as teaching aid.



**Training of Trainers:** five rounds of intensive training of trainers provided to 150 experts from the Livestock and Fishery development, private sector and other stakeholders. The trainings has been provided by senior apiculture experts and researchers from Holeta bee research center using the ToT manual prepared by the project. The ToT trainees in turn trained 1,364(262 female) development agents and subject matter specialists. The TOT trainees were accompanied with the senior trainers while facilitating the training to the DAs. The trainers received coaching, technical assistance and refresher trainings so that they can internalize the subject. These approach enabled the trainers to develop confidence in delivering similar trainings in the project period and beyond. The various capacity building

efforts enhanced professionalization among the experts and development agents. As indicated above these trained experts and DAs cascaded the training to more than 31,000 beekeepers.

### Lead beekeepers model:

A lead beekeepers model introduced to complement the existing government extension service. To address the lack of enough apiculture experts at grassroots level, 89 progressive beekeepers selected and received



Picture 4: Ato Tsegahun, lead beekeeper in Tigray, teaching beekeepers.

ToT in modern beekeeping and facilitation skills. They received also the basic beekeeping equipment and accessories to facilitate their training delivery. Currently, 87 lead beekeepers are delivering various services to the local communities. The services include training and technical assistance in setting up apiary sites, transitional hive making, colony multiplication/splitting, colony transferring, bee forage development and overall apiary management. In the last two years, the lead beekeepers assisted 5,115 beekeepers whom the majority are new beekeepers. In addition to the extension service, the lead beekeepers are engaged in colony multiplication and transitional

hive making as a business availing these inputs to the beekeepers in their locality. Learning from ASPIRE experience Tigray regional livestock agency adopted the methodology and scaled- up to non- ASPIRE operational woredas and Kebeles. The regional livestock agency trained 350 lead beekeepers and they started providing service to the beekeeping community.

### Input and Services Supply Systems Development

**Establish and strengthen local input suppliers:** input suppliers and some service providers initiated and strengthened their business and commercial engagement in the sector. The major achievements by partners who have initiated their schemes through provision of skill development and establishing business relationships with their clients include:

- Sodo and Mizan Rural technology promotion centers trained 27 small scale enterprises engaged in hive making. The training focused on how to produce quality hives. Following the training, the enterprises engaged in production and marketing of the quality hives to beekeepers.
- Two private businesses established network of their own agents to produce colonies for commercial purpose. Accordingly, Hintsu from Tigray and Kahssay from Amhara, trained 30 and 20 beekeepers in colony multiplication and are supplying bee colonies to the market.

#### **Local input supplier**

Mulugeta is one of the ASPIRE input supplier trainee in Amhara region, Bure town. He is new entrant to beekeeping inputs business. He started this business by supplying 600 overalls to ICIPE project. The business provided him with additional income source while creating access to the input for the beekeepers.



- Oromia and SNNP regional livestock and fishery development bureaus trained 40 beekeepers and 20 Development agents in colony multiplication. The Development agents cascaded the training to over 360 beekeepers in the two regions.
- Amhara and SNNP regional bureaus trained 44 tailors in protective cloths preparation. Most of the trainees are supplying the protective closes to the beekeepers.

**Input suppliers' scheme:** Fourteen input suppliers established/strengthened in relatively large scale and are providing the service to the beekeepers and other actors in the four regions. To date the lead input suppliers were able to provide service to more than 5,000 beekeepers and other institutions engaged in beekeeping. The total sales value of these 14 input suppliers reached ETB 9.2 million. To scale up their intervention areas, profile of each input supplier prepared and shared to woreda, zonal and regional level stakeholders.



Picture 5: Beekeeping inputs shop, Agaro

### Lead input Supplier scheme

The inaccessibility, unaffordability and limited use of beekeeping inputs led the project to introduce private input suppliers' scheme. The project provided technical and financial support to 14 lead input suppliers and engaged them to supply localized inputs to both ASPIRE and non-ASPIRE households. The technical support aimed to improve the skill and knowledge of the input suppliers in business management, financial management and the use and handling of inputs. The project, through the innovation development fund, granted financial support for renovating/improving facilities and promotion of the services to the beekeepers and stakeholders.

#### Performance

- The input suppliers delivered inputs for more than 5250 beekeepers and institutions.
- Total sales value for two years reached ETB 9,205,230.00

#### Observed changes

- **Access to package of inputs:** The input suppliers allowed beekeepers to access inputs affordably relatively close to their woredas. Beekeepers were forced to buy inputs travelling to regional towns or in Addis. Because of the inaccessibility of the inputs close by to beekeepers they usually did not use the all inputs. This practice has been affecting the quality of honey produced.
- **Expanding advisory service.** ASPIRE introduced the input supplier scheme not only to supply inputs, but also to embed advisory service on the use of inputs.
- **Wide choices.** Range of inputs accessed by beekeepers. After seeing inputs displayed in the input suppliers' shops and receiving advice on usage, beekeepers bought products that they had not purchased before.
- **Expanding business partnership.** Input suppliers have expanded their business horizon through new partnerships with major input suppliers. This allows the input suppliers to access diversified inputs with fair prices.



### Result 3: Credit/lease financing development

Apiculture, similar to other agriculture sub sectors in Ethiopia, has been challenged with lack of access to finance. Commercial banks do not consider the value chain actors as bankable. This has affected the processors /exporters' capacity in sourcing required volume of honey and bees wax to meet their buyers' contracts and orders. On the other hand it has also constrained smallholders' capacity to access required inputs there by affecting the production and productivity.

To bridge the gap, ASPIRE designed intervention (partial guarantee fund scheme-AGF) in partnership with commercial banks and microfinance institutions. Overall, the Aspire Guarantee Facility (AGF) has provided partial guarantees for 23 commercial loans to 10 aggregating honey value chain actors and two MFIs, for a total loan value of ETB 63.1 million (EUR 2.8 million). Cumulatively, **22,501** beekeepers have been reached through 14 working capital and nine input loans.

The AGF started out with an initial capitalization of EUR 800 thousand, to which as added a further EUR 388 thousand from Oxfam GB, combining to create a guarantee fund of approximately EUR 1.18 million. Overall, these funds were leveraged 2.37 times (2.8 million / 1.18 million).

The total amount disbursed for all 23 loans was ETB 63.1 million (EUR 2.81 million), of which ETB 38.5 million (EUR 1.7 million) has been repaid (61%) and ETB 24.6 million (EUR 1.1 million) remains outstanding (39%).

The total amount disbursed for the 14 working capital loans was ETB 47.4 million (EUR 2.1 million), of which ETB 33 million (EUR 1.47 million) has been repaid (70%) and ETB 14.3 million (EUR 0.64 million) remains outstanding (30%)

The total amount disbursed for the nine input loans was ETB 15.7 million (EUR 0.7 million), of which ETB 5.47 million (EUR 0.24 million) has been repaid (35%) and ETB 10.2 million (EUR 0.46 million) remains outstanding (65%).

The overall, average percent coverage of the AGF on the entire portfolio disbursed is 38%.

Wasasa MFI input loan: Through its two branches of Yayo and Gimbi, Wasasa MFI is able to make an input loan of ETB 1,136,300 to 182 clients. As of June 30 2017, the outstanding loan became ETB 621,044.

Wasasa provided the loans to the beekeepers getting only strategic support from AGF as there is no guarantee coverage. This shows the interest of Wasasa MFI to lend to the Apiculture sector. According the information collected from Wasasa, the MFI continued working with the beekeepers with 100% repayment most of the beekeepers took second round loan.

Vision Fund Ethiopia (VFE) MFI input loan: In relation to the credit guarantee framework signed between AGF and Vision Fund MFI to finance the apiculture sector, Vision fund was able to disburse an additional of ETB 100,000 to 25 beekeepers in the first half of 2017. This increased the input loans made by Vision Fund to ETB 140,000 reaching a total of 37 beekeepers. By the end of 2017 Vision fund returned uncommitted amount of ETB 446,288.

CBO released the uncommitted 10 million birr back to AGF. The released fund utilized to cover on-going project implementation costs as planned.

CBO claimed against Zenbaba, Babich and Yerkisho loans: CBO requested AGF to cover the non-performing loans amounting to ETB 8.6 million made to the three loanees. Accordingly, AGF agreed with CBO that the loans with non-performing principal balances in arrears over 90 days can be claimed and CBO reclaimed.

BIB fund release and closure of the facility: Follow-up has been made with the Buna International Bank (BIB) legal department on the request to release the AGF fund provided to guarantee 50% of the Izemen PLC loan. Accordingly, the bank has agreed and released the fund amounting ETB 2,417,970 and closed the case in November 2017.

Overall, till end of November 2017 the project reclaimed a total of ETB 12 million and as planned most of it utilized for the project other activities. ASPIRE prepared phase out strategy for proper close out of the guarantee fund and waiting for EKNs endorsement.

#### Unlocking access to finance for the value chain actors

- **First local commercial bank loans for working capital to actors in the apiculture sector:** Before the existence of the ASPIRE project and the ASPIRE Guarantee Facility (AGF), none of the processors in the apiculture sector in Ethiopia had ever received a loan from a local commercial bank for working capital purposes. Working capital loans were used under the project to increase the capacity of processors to buy honey from beekeeper producers.
  - **Increased purchasing power:** Working capital loans have enabled VC actors to purchase large amounts of honey, creating the opportunity to bring the production to the formal market, especially the export market.
  - **Increased production and access to markets:** Input investment loans have supported farmers to increase their production, which in turn is creating a more sustainable supply base to processors with quality honey that is not adulterated. Farmers are also guaranteed a reliable buyer.
  - **New market players:** The AGF paved the way for three new processors to enter the export market (Zenbaba Union, Yershiko, and Babich), obtaining their own processing plants with their own equity, and strengthening the prospect to access the formal market supported by the loans.
  - **Lowest guarantee fund coverage:** The AGF negotiated with CBO to reduce guarantee coverage from 50% to 30%, which is the lowest guarantee coverage in the country. With this arrangement, AGF was able to significantly increase its outreach.
- **Zenbaba Union first export:** The Zenbaba Honey Producer Cooperative Union managed to export one container (20,000 kg.) to the EU during the first half of 2017 – the first ever export achievement for the Union.
- **Yerkisho plc first export:** Yerkisho made its first ever export of one container honey to EU market in 2016.
- **Wasasa MFI lends without AGF guarantee:** After receiving technical assistance and advice from ASPIRE, WASASA MFI management decided to proceed with lending to beekeepers without requiring a guarantee from the AGF. The MFI continued providing the loan to beekeepers after the project period.
- **CBO provided loan without AGF backing:** After having received and successfully repaid two loans for a total of ETB 12 million from CBO with the AGF guarantee, CBO agreed to lend ETB 7 million to BEZA MAR without requiring the backing of the AGF. CBO also continued its business relationship and lending to Comel PLC, South Federation, Apinec and Tutu without the AGF.

#### Result 4: Market Development

Export of honey from Ethiopia started in 2009 with support of BOAM program. ASPIRE has built on BOAM's gain to enhance honey and other bee products export, mainly to Europe, Middle East and other regional markets. The main interventions under this result area were strengthening capacity of processors and

exporters, matchmaking/ Business to business relationship building and promotion of the country potential and products internationally.

### **Capacity building for companies:**

At the start of ASPIRE, the programme established the Market Access Facilitation Programme to achieve the expected outputs. The Market Access Facilitation Programme was designed to identify the most promising processors and provide targeted support to strengthen these selected processors.

For the in-take of processors, ProFound audited all processors that were interested to participate in the programme to determine the gaps in their capacities as required for exporting honey. The main functions required for export, and where capacities are needed, are: sourcing, processing, packaging, certification, promotion, and Finances.

The assessment showed that companies have limited professional capacities in terms of skills and facilities management. Further, the analysis showed which processors had the best chance of realizing exports within the programme timeframe and which capacities needed to be strengthened by ASPIRE. Based on these gap analyses and a recommendation of the Mid-Term Review, ASPIRE selected seven processors for intensive support which are: Apinec, Babich, Comel, Sheka Nordic, SRFCF, Yerkisho, and Zembaba Union. The selected companies received tailored trainings and technical assistance to fill the gaps identified which includes developing marketing strategy, food safety management, quality, certification and communication.

In 2017 the project continued to address capacity gaps regarding quality management with distant guidance for individual processors. ProFound promoted about the need for food safety/quality management for sustainable exports, and how to take basic measures such as proper sampling for representative samples and importing drums for packaging. Out of the seven high-potential processors supported by ASPIRE:

- Four out of the seven selected honey processors in the Market Access Facilitation Programme have now successfully sold honey in bulk. Most of these sales were realized through exports to Europe.
- Four processors currently have a certified food safety management system in place.
- Three processors have plans to implement a food safety management system, but first have to secure resources required to invest in construction of a suitable building and development of documentation.
- Five processors have an organic certificate.
- One processor is in the process of organic certification and one processor needs financial resources to regain the organic certificate.

The progress of the honey processors in terms of exports is a result of their investments in the past years. ASPIRE's support to the processors has been crucial for many of them, particularly in terms of linkages to beekeepers, financing of working capital, export marketing knowledge, contracts, export packaging and international promotion. Continuous exhibition at the international Biofach trade fair in Germany over the past three years was key to development of trade relationships with buyers.

It is expected that all the seven companies will be capable of processing and selling honey. However, some of them found the local market more attractive than the international market. High quality requirements in

the international market demand high investments in improvement of their food safety management systems (including buildings, skilled personnel, equipment, laboratory testing, documentation and certification).

### **Matchmaking and promotion:**

The Biofach trade fair in Europe provided an excellent opportunity for promotion in this priority market:

ProFound supported Ethiopian companies/unions to exhibit at Biofach and Gulfood events for consecutive years. The exhibitions generated over 100 business contacts. 36% of those contacts were marked as 'very important' by the processors and another 32% was marked as 'important'. Accordingly, they prioritised and negotiated contracts. Exporters supported with advice on next steps to take for follow-up.

Side by side visits organised to a German honey importers by the Ethiopian Biofach delegation and facilitated signing of a Letter of Intent by one of the German importer in which they express their intent to start sourcing in Ethiopia.

Following Biofach, ProFound supported Ethiopian exporters with preparation of suitable offers by providing a template to address all questions that European buyers need answers to. This includes quality, price, and delivery and payment terms.

Currently, all of the seven high-potential processors have contracts with European buyers. These contracts are sufficient to export all of their production capacity, which is currently around a few hundred tones.

### **Export results of strengthened processors**

At the start of ASPIRE, only three Ethiopian processors had the capacity to export full container loads of honey to Europe: Beza Mar, Apinec and Tutu. At the end of the ASPIRE programme, eight processors had the capacity to export honey to Europe. These included six ASPIRE participants. Out of the ASPIRE participants only Babich was not able to realise exports within the programme period for various reasons.



Picture 6: Biofach Trade fair participant, Germany

The sustainability of exports by the

Ethiopian processors largely depends on developments in the local market situation. During the programme, local crude honey prices in the main beekeeping regions increased significantly. Despite all efforts of ASPIRE to increased production, demand outpaced supply. Though incomes of beekeepers have increased



considerably as a result, the price competitiveness of processors has decreased and exports have become more difficult to achieve.

The processors have gained a lot of interest from international buyers and acquired many business contacts during the exhibitions at the Biofach trade fair. They developed the capacities to follow-up on these existing business contacts and are not fully dependent on trade fairs anymore to identify potential buyers for their honey.

### **Result 5: Inclusive and Self-Steering National Platforms, Sector Associations and Environment Development**

To respond to critical apiculture sector issues and developing a value- adding and self -steering sub sector, ASPIRE has been supporting the sectoral organizations in collaboration with similar initiatives. The major interventions under this include strengthening sector associations, capacity building of government staff and extension system, capacity building of agri food laboratories, strengthening quality assurance, development of legal framework and organizing multi-stakeholders forums. The achievements are as follows:

#### **Sector Associations capacity building**

Capacities of the three sectoral associations are enhanced by supporting them to set systems and services for resources mobilization, membership development, and building their expertise through partial financing of their professional staffs. To maximize their effort, avoid duplication of effort and unnecessary competition, ASPIRE facilitated discussions among the three sector associations. In early 2017, the sector associations signed a Memorandum of Understanding in which they agreed on their respective roles and task division.

Due to the enhanced capacity, the sector associations have been incrementally leading and played key role in various sector development initiatives in the last five years. Some of the key initiatives in which the sector associations engaged were: voice their members questions and lobby the government to address policy and systemic issues, engaged and contributed in strategy and policy development, facilitated the annual residue monitoring and registration of the country in the EU third country listing, organized Api-trade Ethiopia, promoted Ethiopia potential in Apiculture in various international trade fairs and events, represented Ethiopia in the global Apiculture institutions and networks such as Apimondia, Api trade Africa and Africa union initiative and supported knowledge development and sharing.

Despite the active engagement and self-steering by the sector associations, still they have resource limitation to engage with full force. They are expanding their membership and approaching different development actors for funding support by developing proposals. Delay in registering /renewal of registration with government and limited internal financial capacity of the associations are the major reasons for requiring more time to be self-sustained.



Picture 7: Signing of Memorandum of Understanding between sector organisations



## Quality assurance Capacity development

**Develop quality management manuals:** With the objective of contributing to reduce the quality and safety problems of bee products (specifically honey), ASPIRE has supported the development of a “Quality Management Manuals” for honey: 1) *quality production and harvest manual*; 2) *processing and marketing manual*; and 3) *food safety code of conduct manual*. The manuals published and distributed to all value chain actors in hard and soft copies.



**Ethiopian agri-food laboratories capacity building:** with the overall objective of “strengthening the testing capacity of Ethiopian agri-food laboratories for testing residues, and selected hard metals and full honey analysis”, ASPIRE has conducted capacity assessment and prepared a road map for capacity development of ten agri-food laboratories in Ethiopia. According to the assessment results, the surveyed laboratories critically lack skilled personnel who are well equipped with basic principles of laboratory analysis and management.

To respond to this identified gap, a total of 21 laboratory technicians from nine agri-food laboratories (from government, private and universities) are trained in general principles of laboratory analysis and management, in full honey analysis, and in residue analysis for more than 80 working days. The trainees were exposed to the laboratory facilities in the Ethiopian Conformity Assessment Enterprise and management practices. As the training was very participatory and interactive, the trainees have acquired the necessary basic skills of laboratory analysis and management. Finally, the trainees have evaluated the knowledge they have received during the training period in their respective laboratory perspectives and developed action plans for practical application in their laboratories’ capacity contexts. Following the training, the trainees were coached by senior expert in their respective laboratories. SNV believes that the trained laboratories and technicians are assets for the country and can contribute in food safety management and to reduce significantly foreign currency currently paid for honey testing service by international laboratories. Two of the laboratories (ECAE and Bless) are at advanced stage accredited for different types of tests and are working hard to get accreditation for the remaining few tests.



Picture 8: Training of lab technicians

**Training and coaching of government staff:** ASPIRE has trained and practically coached 1,363(162 female) extension services providers of government staff and private companies from national to kebele

level. The trained extension service providers have been technically supported in cascading their skills to target beekeepers by the senior national and regional local capacity builders from Holeta bee research center and ministry of agriculture/livestock and fishery. Although some of the trained and capacitated staff from woreda and zonal agriculture/livestock and fishery offices have changed their positions, most of them are still providing technical supports for the sub sector development.

**Government staff capacity building in bee health:**

ASPIRE in collaboration with Holeta bee research center conducted a survey in eastern Tigray on the prevalent diseases and pests of honey bees. The survey revealed that the capacity of the extension staff in identifying, taking measure and advising the community on the prevention methods of bees' disease and pest is very limited. Hence, ASPIRE in collaboration with Holeta bee research center organized two rounds of trainings and trained 50 beekeeping experts and veterinarians from Tigray and Amhara regions.



Picture 9: trainees in practical training

Further, Tigray BoARD Livestock Development and Health directorate with support of ASPIRE provided similar training for 27 experts from non-ASPIRE woredas using regional resource persons.

As the result both the regional and woreda bee and animal health experts acquired skill and scientific knowledge of major bee disease and pest. Such capacity building improves monitoring and inspection of bee disease and pest in the respective regions.

**Result 6: Knowledge Development and Sharing**

Throughout the programme period attention has been given to learning and knowledge development. ASPIRE involved a range of stakeholders in the development of a learning agenda and structures closely linked to the development of business and service models and the consequent up-scaling of these models to other actors. ASPIRE's knowledge development was done in coordination with local research and knowledge institutes like Holeta bee research center, regional research centers, Bahirdar University, and Jimma University.

ASPIRE pro-actively sought partnership and collaboration with relevant on-going and starting projects such as ATA, OXFAM GB, NORAD, AGP/AMDe , world vision, GIZ, ICPI and GRAD projects to share the project lessons, maximize the up-scaling and avoid duplication. During the project period using different forums such as the multi-stakeholders platforms there had been exchange of information and lesson sharing. Most of the newly started programs incorporated ASPIRE's lessons and are using the different manuals and knowledge products. This section presents the various ASPIRE knowledge products and mechanisms for sharing.

## Newsletter

The first quarterly Beekeeping newsletter, The API News, is being prepared and shared by EAB since 2014. The Api-Newsletters are mainly dispatched electronically to about 200 recipients. The newsletter shares useful information about the sector including lessons from the field, good practices and sector development issues.

## Api-Directory

The second version of Api-Business directory prepared and published by EAB. The directory has very useful information about key stakeholders, private sector and service providers. The directory distributed to sector actors at Federal, regional, zonal and woreda levels.

## Media visit and documentation

Ethiopian Broadcast Corporation (EBC) and Communication Department of the Ministry of Livestock and Fishery Development in collaboration with Ethiopian Apiculture Board Office and SNV-ASPIRE project travelled to West Oromia and South regions for beekeeping scheme for documentation.

Model beekeepers, honey Cooperatives, companies, and experts were visited and interviewed for the TV documentation. The documentary film both in Amharic and English languages aired on the EBC. The film has shown the potential of the country, the current status of the sector and ASPIRE project contribution and successes in changing the livelihoods of the beekeepers. Further, regional media documented ASPIRE interventions and events and aired to the public.

## Strengthening knowledge institutions

ASPIRE supported Bahirdar University to establish apiary site which is being used by MSc. students to practically learn and do research in Apiculture. The project also supported eight MSc. Students (one student is from Jimma University) from the first and second batch to do their research focusing on apiculture issues challenging the beekeepers. The research areas include: bee health, effect of chemical application on bees, marketing and honey value chain, quality of apiculture products and women engagement in apiculture. The apiary site helped the teachers to provide quality education.

Further, a PhD candidate, supported by ASPIRE and other development partner, did his research on botanical origin of Ethiopian Honey. This study will help to promote the Ethiopian honey globally. The study is published in international journals and can be accessed from the link below.

Sugar profile and physicochemical properties of Ethiopian monofloral honey.

<http://dx.doi.org/10.1080/10942912.2016.1255898>

Rheology and botanical origin of Ethiopian monofloral honey. [www.elsevier.com/locate/lwt](http://www.elsevier.com/locate/lwt)





## Publications

EAB as key player in the sector is contributing for knowledge development and sharing. Some of the articles prepared and published by EAB include:

- **“Quality Focused Api-Sector Value Chain Development in Ethiopia”** which has been published in the “Journal of Agriculture Science & Technology”.  
<https://www.davidpublisher.org/Public/uploads/Contribute/591aa999de34c.pdf>
- **“The Importance of Beekeeping in Africa pp 233-246”** on the Book: No Bees, No Life:  
<https://beebooks.si/trigovina>, <https://beebooks.si/en>
- **“The potential and the need to push beekeeping sector development in Africa’** Apimondia Newsletter, No. 6, 2017. Available at:  
[https://www.apimondia.com/documents/apimondia\\_newsletter\\_en\\_6.pdf](https://www.apimondia.com/documents/apimondia_newsletter_en_6.pdf)
- **“Ethiopia’s sweet buzzes- Africa’s bee pride’.** Africa Honey Magazine, September 2017. Kampala, Uganda. Available at: [https://www.apitradeafrica.org/Documents/Issue-026\\_The-African-Honey-Magazine.pdf](https://www.apitradeafrica.org/Documents/Issue-026_The-African-Honey-Magazine.pdf)

## Api-Mondia Symposium

The Apimondia secretariat approved the APIMONDIA symposium for a 2018 on **“The Role of Bees in Pollination and its Contributions to Food Security”** to be held in Addis Ababa. EAB with support of ASPIRE did various promotional activities, established national organizing committee, developed webpage and a call for abstract distributed. More information is available on the web site [www.apisymposium2018.org](http://www.apisymposium2018.org).

## Sector promotion and Collaboration

ASPIRE supported sector actors to promote the country potential and seek collaboration in different forums and events. EAB has been coordinating sector actors and represent Ethiopia in Apimondia symposiums and congresses, Apitrade Africa and many international exhibitions and trade fairs. Recently, an Ethiopian team of 19 has participated in the 45<sup>th</sup> Apimondia congress in Turkey where more than 1,400 delegates from all over the world participated.



Picture 10: Ethiopia Booth in API Expo Africa 2016

## Consolidating and lesson documentation

The project documented the lessons in the last five years in five thematic areas with the support of professionals. The documents are attached herewith as annex. Further video documentation and case stories prepared on the various best practices of ASPIRE and shared to wider stakeholders.

**Handover of project interventions:** by the end of the project period, the team held a review and hand over meeting with all the **52 operational woreda** level stakeholders. In the meetings the project team and woreda stakeholders reviewed the performance and status of the project; identified remaining activities and agreed on time line to finalize them; reflected on the success and lessons generated in the course of the project implementation and agreed on the mechanisms to ensure sustainability and scale up.

Finally, ASPIRE team handed over all relevant documents to the respective sector offices. The woreda



Picture 11: Project hand over discussion woreda

stakeholders agreed to include ASPIRE initiatives in the woreda annual plan starting July 2017( Ethiopian calendar year of 2010)for continuing the good results and scaling up in non- ASPIRE target households and Kebeles.

Later on the project team has confirmed that most of the woredas have included in their annual plan as agreed and continued implementation. This is a key strategy to ensure sustainability and much appreciated by government stakeholders.

**Regional level project Hand over workshops:** in the last week of November 2017, ASPIRE conducted four regional level workshops. In the workshops beekeepers, sector actors, private sector, woreda, zonal, regional and federal level government stakeholders and other partners participated. The purpose of the workshops were to share the project achievements and lessons and officially announce close of the project. In the workshop SNV handed over project documents and results to government partners to ensure implementation at scale. The government and other actors vowed to scale the results of the project.



Picture 12: Project hand over Region level, Amhara

### Replication and scale-up of ASPIRE approaches and strategies

Frequent external visits and open sharing of learning has promoted replication of ASPIRE in many ways and in many locations. The project’s monitoring system was not designed to track external replication but many cases have been observed, including the following:

- Following the training and coaching, around five laboratories are strengthening their capacities further as per the road map prepared by ASPIRE support. Many of them are purchasing testing equipment and accredited with some of the tests. Building on the project lessons ATA and Oxfam planned interventions

related to lab testing capacity building in their respective programs. Such interventions by the institutions will fill the remaining gap of the Labs to get full accreditation for testing Honey and other food items.

- ASPIRE's lead beekeeper model has been copied by the regional sector bureaus and has been adopted for implementation by other project initiatives. The model compliments the government system and good strategy for improving quality of service for beekeepers, scale –up and increasing outreach.
- Communities adjoining ASPIRE's target beekeeper are adopting technical approaches and strengthened or started beekeeping as main income source. Peer to peer education used to scale- up adoption of new practices with in the community.
- The MSP model, being led by EAB, is a means to coordinate sector interventions and create collaboration among the sector actors.
- The knowledge materials prepared by ASPIRE, which include experts training manuals, beekeepers guide poster, the quality management guides, research papers and other materials, contributed in enhancing knowledge about the sector. ASPIRE shared all these materials to all actors in hard and soft copies which will be the basis for scaling up the project lessons and good practices.



### 3. CHALLENGES

**Fall of International price Vs. Increasing Farm gate price:** While the international honey price decreases the farm gate prices for honey have increased due to high demand by the exporter's and local consumers. To stabilize the price increasing production is necessary by intensifying the technical support and scaling up the ASPIRE approach to non-target Woreda's. Overall, the export amount is decreasing from time to time because of the fall of international price for Honey. This affected the planned target for export.

**Delay in repayment of the loan by companies and unions:** For many reasons the repayment of the loan delayed which affected the amount of Guarantee fund reclaimed by the project. About 64% of the uncommitted amount of the guarantee fund returned to ASPIRE in the second half of 2017 which forced us to implement the remaining activities with in limited time frame. Further still four companies and one union didn't repay back all the loan due to delayed export, institutional challenge and difficulty in collecting repayment from beekeepers ( because of price difference locally and internationally as well as the unrest in most of the woredas where loans disbursed). As a result the remaining repayment will come back after the project end. Therefore, we propose a phase out strategy beyond Nov 2017 to properly close the guarantee fund and follow up the repayment of the loans.

**Limited follow up and technical Supports from partners:** The unrest, government staff turnover and the engagement for long time in meetings created delays in some of the project activities. More importantly this affected the input loan collection from beekeepers by the private companies and Zembaba union. ASPIRE team tried to flexibly manage the implementation of the activities planned with additional follow up and technical support.

**Institutional capacity and governance structure of grass-root level implementers:** Weak institutional capacity of beekeepers, farmer organizations, unions and cooperatives leads to inadequate capacity to proactively engage with banks and follow-up loan applications. Many unions and cooperatives are dependent on one person (agent) leading all the operations. Since this individual is not personally benefiting in a material way from the operations, particularly as compared to private businesses, he/she lacks the required incentive to engage in the 'painstaking' loan application and follow-up processes for other partners.

**Absence of financial technical assistance dedicated to grass-root level implementers:** There was no technical assistance dedicated to the different value chain actors on financial services in the design of the programme. A hand-holding type of support, especially to producer cooperatives and unions, on financial record keeping, loan application and follow-ups, and BDS would have curbed part of the institutional capacity and agency problems mentioned above.

**Fragmented mode of operation of individual beekeepers:** The very fragmented and micro-level operation of individual beekeepers caused difficulty to organize, train, do due diligence, and make them ready for the credit facility. The resulting overhead cost was also discouraging for processors to actively engage in this endeavor. This could have been partly mitigated if the TA and its grant component were more integrated with the processors from the beginning so that part of these costs would be subsidized.

#### 4. LESSONS LEARNED

ASPIRE generated a wealth of learning for each of its interventions. Much of that learning is summarized in learning briefs, attached to this report. Below are additional specific lessons:

- The most important learning from the project is that the model, if applied correctly, is successful in helping smallholders transform into commercialization and improve their livelihoods. In many cases, the gains were significant, for instance, an increment in annual gross income, women participation, increased access to inputs and extension services.
- Beekeeping is contributing to sustain the investments in area closures and afforestation interventions. Beekeeping provides a non-timber income source there by incentivizing the community to protect the area closures.
- Access to extension service and improved apiculture technologies (transitional and modern hives, back yard apiary), which are more manageable than traditional tree hives, is encouraging many women to take the lead in apiculture.
- A number of farmers that have otherwise used apiculture as a side business, are now making it one of their main sources of income. To reach to this level and scale up the approach the government and other actors must give attention to apiculture like the other commodities/sectors in agriculture.
- The availability of experts at the woreda level who have knowledge and skills in apiculture will ensure the sustainability of conducting similar trainings in the future. Focus should be given in creating professional apiculturist, in partnership with the private sector whom will be the driving force for transformation of the sector to commercial level.
- The ASPIRE programme was a value chain development programme and designed to address several bottlenecks in the value chain simultaneously. The ASPIRE partners recognized from the start that success of the Ethiopian exporters in international markets was not only dependent on their own performance, but also on the crude honey supplies from beekeepers. With this knowledge, ASPIRE made a great effort to build strong linkages between processors and beekeepers. The processors received technical and financial support to train beekeepers who would be able to supply high quality honey to the processors. In fact, ASPIRE made loans available through the Access to Finance scheme for the supply of beekeeping equipment to beekeepers with facilitation by the processors. The investments by both beekeepers and processors in training and supply of equipment were expected to strengthen linkages and result in the mutually beneficial trade in high quality bee products. However, this process takes time and similar programs in the future should take into account when designing programs.
- The assumption that the investments by processors in training and equipment of beekeepers would lead to the supply of honey from those capacitated beekeepers to the respective processors proved to be optimistic. They have not been able to build reliable supply chains for high quality crude honey. Instead, they are fiercely competing for crude honey without discerning high quality from low quality. Obviously, the lack of reliable supply chains for crude honey continues to affect the quality consistency of the honey that is being exported and the reputation of Ethiopia as a source of high quality honey.

In future honey value chain development programmes, linkages between beekeepers and processors will have to be strengthened which needs time and enabling environment. Mutual trust and dependency

will have to increase to forge strong links and decrease the frequency of defaulting on supply agreements by both types of value chain actors. While training and equipment supplies may be useful for building stronger linkages, they have to be part of a long-term agreement that extends beyond the period in which the training or equipment is delivered.

- Export development in smaller steps: Despite the long history of beekeeping, honey processing is a relatively young sector in Ethiopia. During the ASPIRE programme, many new processors entered the market. Ambitious entrepreneurs established new companies and applied for support from ASPIRE to realise exports. ProFound and ASPIRE partners performed audits to determine their capacities and chance of success. During these audits, it became clear that many of these entrepreneurs had invested large amounts of money into the sourcing of crude honey without the capacity to process and export the honey afterwards.
- For many processors, including some of the seven selected processors, the long time needed to develop their capacities for export became problematic as they had already invested much of their capital in crude honey when they started up their business. Over time, their honey lost value due to quality deterioration while decreasing global market prices aggravated the situation. Furthermore, they had to pay interest on their working capital loans and came under financial pressure.
- Future honey value chain development programmes can stimulate companies to develop their business in smaller steps to achieve more sustainable growth. The programmes can make wholesale or retail of honey on the domestic market a pre-condition for support with exports. Local sales require less capacities than export and allow companies to make a faster return on their investment. This reduces financial risks and may help companies to focus their resources on development of the most basic capacities for honey processing before developing additional capacities for export.

## **5. ANNEXES**

### **ASPIRE Learning Briefs**

- Annex 1: Learning Brief #1 Apiculture Input Supply System Development
- Annex 2: Learning Brief #2 Commercialization of Small holder beekeepers
- Annex 3: Learning Brief #3 Strengthening extension service delivery
- Annex 4: Learning Brief #4 Institutional capacity development
- Annex 5: Learning Brief #5 Inclusive Apiculture Business development
- Annex 6: Learning Brief #6 Enhancing Women and Youth Livelihoods and the Environment