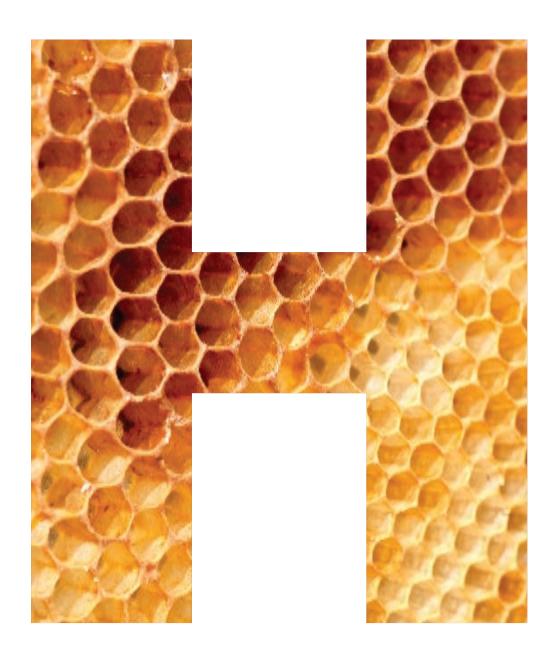


Most honey ends up in honey wine and less than 5% is exported. AMDe partenered with 5 beekeeping unions to incease the amount of hives and skills and co-funded 4 processing plants, in order to position the sector for improved incomes.



HONEY

- PARODI STICKS A HAND INTO ETHIOPIA'S HONEY POT
- MODERN HIVES GIVE WOMEN FARMERS NEW VOCATION
- Q&A, SANTIAGO HERRERO
 GENERAL MANAGER, PARODI APICULTURA
- BEESWAX
 BOUNCES BACK



very year, beekeepers from the Tana Zuria Cooperative sell most of their 10 tons of honey to traders passing through their town, which lies on a rural stretch of dirt road in northern Ethiopia. The traders are not the beekeepers' preferred customers. Regardless of the quality of their honey, the majority ends up in tej, local honey wine popular around holidays. In fact, selling their honey on the merit of its quality is the stuff of dreams of Tana Zuria beekeepers, until now.

Tana Zuria cooperative is a member of the Bahir Dar-based Zenbaba Farmer Union, which represents 20 honey producing cooperatives and over 13,000 beekeepers. Until this year, Zenbaba had never been able to purchase more than 20% of the cooperative's total honey production, but a new combination of capital investments, strategic partnerships and improved beekeeping capacity have put Zenbaba at the forefront of Ethiopia's honey export economy.

In December 2015, honey giant Parodi Apicultura will

have received its first shipment of high-grade, Fairtrade Ethiopian honey through its investor-partnership with Zenbaba Union. Parodi Apicultura, the second largest honey trader in the world, sources over 25,000 metric tons of honey from more than twenty countries and has operations on every continent with bees.

Parodi's incursion in the Ethiopian honey sector comes as a result of the grooming and preparation of Zenbaba Union and its member cooperatives by the USAID funded Agribusiness Market Development program—AMDe. Training in sales and marketing helped the union members promote their honey as a unique product in the context of global honey. In order to attract important buyers like Parodi, AMDe assisted Zenbaba and its cooperatives to achieve Fairtrade certification, which assures concerned consumers that their honey meets certain environmental, labor, and developmental standards.

"The major weakness among Zenbaba and member cooperatives was the complete lack of a records system.



HONEY GIANT AND BEEKEEPER UNION LAUNCH PARTNERSHIP TO BRING ETHIOPIAN TABLE HONEY TO CONSUMERS AROUND THE WORLD

Before the partnership, Zenbaba had no clear business plan and only one staff member covered accounting, honey purchasing and administration," explains Assefa Amaldegn, AMDe's national honey value chain expert. Strategic management training helped union and cooperative members develop realistic business plans while overhauling the union's organizational structure and its accounting and financial recording systems.

Then in 2013, at the Gulfood international trade show in Dubai, Zenbaba's General Manger, Sintayehu, and Parodi Apicultura's Santiago Herrero came face to face. The hard work to improve management and marketing paid off, and an extra degree of professionalism convinced Parodi of the union's potential. In June 2013, Parodi came to Ethiopia to examine Zenbaba's honey processing facilities and products, and visit honey producers in Tigray, Amhara and Oromia.

"Zenbaba board members and its union manager share our vision and are business oriented. We saw immense potential, and with the backing of AMDe we felt comfortable creating a strong partnership that will last well into the future," says Parodi's General Manager, Santiago Herrero. "For Parodi, Ethiopia represents the future of beekeeping."

Following the visit, Parodi matched investments with AMDe to purchase and install an industrial-sized honey homogenizer, a modern hot room and to refurbish Zenbaba Union's processing center. In addition, Parodi signed a MoU to purchase 500 MT of honey in the first vear and increase that to 1000 MT in the following year. The success has not been without obstacles. Over a period of ten months, AMDe and Zenbaba worked to transition a forgotten library into a honey factory. AMDe also used expert staff to design the facility's floorplan and equipment layout to assure efficiency as the honey goes from hot room to the separator before homogenization. "The hot room was one of the biggest problems. During set up, we were still unaware how much power was needed to achieve 45-55 degrees Celsius for 12 hours straight. All of this equipment uses a lot of energy,



"To think that Zenbaba, who has never done anything like this before, is now positioned to achieve global standards for food processing such as ISO 22000:2005 and HACCP. They have really come a long way."

Once the machinery was installed, processing and packaging was delayed due to the inability to acquire food-grade steel barrels, one of Parodi's export requisites. Zenbaba finally shipped 40 MT of honey to Parodi's Italy office in November. Since then, the export contract has given Zenbaba's famers hope that there are markets outside of local traders looking to turn their honey into the business of tej.

"We needed a way to solve the marketing problems of our primary cooperatives," says Shashi Fekadu, woman beekeeper and board member of Zenbaba Union. "The local traders try to cheat us and offer us low prices for honey of this quality. We know our honey is special because of its taste, color and moisture content. Now the rest of the world will know this too."

As a result of the partnership, Parodi opened a local office under the name of its local affiliate Matrunita,

which will also market honey on the local and neighboring markets. Parodi and Zenbaba want to see Matrunita open the world's door to Ethiopian honey. Perhaps more importantly, the partnership means more cash flow for Zenbaba, which means more frequent investments in upgrading member farmers' hives and equipment.

TRANSITION TO MODERN HIVES

Tana Zuria Cooperative member and beekeeper, Yemiker Ambelu, has been collecting honey for over five years. Most of her hives are traditional, which are long woven baskets usually hung high off the ground in trees and produce an average of 10 kilograms of honey each year. This year, she saved enough money to invest in a modern hive, which has easy to remove panels, which make honey collection simple and extend the life of the hive. She expects to more than double honey production.

"The modern hive is cleaner and easy to harvest. In the traditional hives, I find it difficult to separate the honey from the bee larvae, everything is mixed and it's very dark inside the hive," she says.

Poor access to modern beekeeping equipment makes it difficult for Ambelu and her fellow beekeepers to achieve significant growth. The majority of Ethiopian honey producers are going through the same thing: inefficient hives producing small quantities.

Since 2012, AMDe has worked with Ethiopian beekeepers from 200 cooperatives to increase the sector's capacity and motivation to move from



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traditional to modern hives. In addition to providing over 750 modern hives, the program's beekeeping training has encouraged over 17,000 beekeepers to adopt modern hives and improved practices to increase hive productivity and honey quality. Over three years of intervention, program beekeepers have seen hive yields go from an average 10 kilograms per hive to 50 kilograms per hive each year.

Nevertheless, the uptake of modern beekeeping equipment by farmers is slow due to lack of accessibility and rising prices. Modern beehives, which have the capacity to produce over 25 kilograms of honey each harvest, were priced at \$40 in 2014, and jumped \$75 in 2015.

OUALITY TESTING

Just as harvesting traditional hives is complicated, artisanal processing is problematic. Because so much Ethiopian honey ends up fermented for honey wine, beekeepers are less concerned with the initial processing; over-smoked table honeys are common throughout Ethiopia. To better gauge programsupported beekeepers' progress, AMDe te sted their honeys to ascertain the main challenges in quality.

"We found that to meet export-quality measures, we needed to place a stronger focus on semi-processing and smoking. That's why we also provided beekeeper cooperatives with mechanical honey extractors and the basic equipment needed to get their honey ready for the next step on the honey supply chain," says AMDe's honey expert, Assefa Amaldegn.

The production of honey in Ethiopia has a long history, and the over 50,000 metric tons of honey produced each year makes it Africa's top producer, representing 25% of African honey. Today, less than 5% of that ends up as exports. New buyers are emerging, and in 2015 Ethiopian honey exports reached buyers in Japan, Europe, the U.S. and the Middle East. Private sector players like Parodi Apicultura are joining Ethiopia's honey sector in the early stages, and it's just a matter of time before 25,000 MT of Ethiopian honey reaches consumers everywhere on the globe.



BEESWAX PROCESSING AND MARKETING

Partnered with Comel to establish Ethiopia's first automated beeswax factory and distributed **29,000** wax sheets to over **350** beekeepers in **2015**

HONEY PROGRAM RESULTS

BEEKEEPING INPUTS

Provided **320** women with protective clothing, **760** modern beehives, **14** pairs of wax extractors and printers and over **2300 kg** of wax

BEEKEEPER TRAINING

Trained some **17,500** beekeepers and workers in production, post-harvest handling, and improved semi-processing techniques

QUALITY TESTING

Tested **36** samples of honey to evaluate improvements in overall honey and funded the nationwide chemical residue certification required by the EU for export readiness during **2 years**

COLLECTION

Supported **2** private firms, **5** beekeeping unions, over **200** primary cooperatives and over **12,400** beekeepers in the aggregation of over **1400** MT of honey worth **\$3.5** million and established **2** honey collection points

EXPORT MARKETING AND CERTIFICATION

Assisted 2 farmer unions with achieving Fairtrade certification and sponsored partner participation in 7 specialty food trade shows helping partner honey and wax unions and producers reach more than \$2.7 million in exports to international buyers.



HONEY PROCESSING AND MARKETING

Supported the establishment of **4** honey processing and packaging plants and linked Zenbaba Union with multinational honey trader, Parodi Apicultura



SANTIAGO HERRERO General Manager, Parodi Apicultura





Why was Parodi initially attracted TO ETHIOPIAN HONEY?

Before USAID staff in Ethiopia introduced us to Zenbaba Union and other stakeholders, we were studying the possibility to do business in any of the four main honey producing countries of Africa: Ethiopia, Zambia, Kenya and Tanzania. The joint venture was a big advantage that allowed us to reduce the learning curve time about honey industries in Ethiopia and Africa. Ethiopia is the ninth largest honey producer in the world and the largest producer in Africa.

WHAT IS PARODI'S STRATEGY FOR ETHIOPIA?

We want to contribute to the modernization of Ethiopia's beekeeping industry and eventually become the number one exporter of Ethiopian Honey. Our supply chain development approach is tailor-made for every country. We find strategic partners, such as Zenbaba, and sometimes create our own export companies. This is the first time for Parodi Group to make a joint venture with a union of farmer cooperatives.

HOW IS WORKING WITH A FARMER COOPERATIVE UNION DIFFERENT?

It is a challenge dealing with a manager who respond to the interests and mandate of the union's board members. That board is democratically elected by all members, as such, decision making can take longer than with a private firm.

WHAT GIVES YOU CONFIDENCE THAT ZENBABA CAN CONSISTENTLY DELIVER?

They are the largest honey producing union of cooperatives in Ethiopia and have an enormous source of quality honey through

their thousands of members. AMDe has worked hard to bring their management and marketing capacity in line with exporting. Together we are prepared to achieve our mutual goals.

NEARLY ALL OF ETHIOPIAN BEEKEEPERS STILL USE TRADITIONAL BEEHIVES. HOW WILL PARODI ACCELERATE THE MOVE TO MODERN BEEHIVES?

There are still more traditional beehives than modern beehives, resulting in lower honey yields. However, this means even small changes in modern beehive adoption would boost volumes and could put Ethiopia among the five largest honey producers of the world. Beekeeping is such an integral part of Ethiopia's traditions, we believe the beekeepers are prepared for the jump to modern beekeeping.

WHAT TECHNICAL ISSUES AFFECT THE QUALITY OF PROCESSED HONEY IN ETHIOPIA

The inappropriate use of smoke is a major problem, it gives the honey an unpleasant smoky aroma and makes it difficult to sell. Also, the use of excess heat to separate honey from beeswax results in unacceptable levels of key honey parameters such as HMF levels and diastase activity. Parodi introduced a new technology in Ethiopia as part of our commitment with Zenbaba Union to process honey gently in order to improve its quality. That was a milestone in Ethiopian honey industry, and we will see results soon in terms of higher acceptance of Ethiopian honey by the international market.

How will you market Ethiopian HONEY TO THE WORLD? WHAT ARE THE MAJOR ADVANTAGES?

Fair Trade and Organic certifications are a must since nearly all Ethiopian honeys comply with both certification schemes and they provide a critical competitive advantage over other African honeys. We also plan to explore the unique characteristics of the Tigray white honey and the potential appeal of Ethiopian coffee honey. If we can responsibly promote production of honey in the Southern Region, we may have access to unlimited volumes of the world's first "Coffee Arabica" honey. Who can resist the coffee-honey story? Selling honey is in part storytelling, and Ethiopia has many stories to tell.

THROUGH YOUR LOCAL BRANCH, MATRUNITA, DO YOU ALSO PLAN TO MARKET HONEY IN ETHIOPIA?

The domestic market is full of opportunities since honey is consumed on a daily basis in Ethiopia. Ethiopians living in the diaspora are always asking friends and family to bring them honey. They would probably be pleased to receive some tej too. There are no commercial tej products. Maybe it's time for somebody to develop a commercial tej product, qué no?



Modern Hives Give Women Farmers New Vocation

Ethiopian farmer Ayelech Bekele, 55, joined the Lelistu Ogda farmer cooperative because she believed she had better chances to improve her quality of life as part of a group. She's married with six children and a fifth grade education. She and her family have always been farmers

Ayelech has one hectare of land that has deteriorated significantly over the years due to soil erosion and lack of maintenance. She has seen a decrease in maize and teff yields while her mango and avocado trees are bearing less fruit every year. Although the Ethiopian government facilitates fertilizer distribution, Ayelech cannot afford inputs to upgrade her soil's fertility. In fact, most of the farmers in the farmer cooperative struggle with soil fertility. That's why Ayelech and 19 other women now embrace beekeeping as an

alternative method for increasing their income.

"Since our farm lands are poor quality and we can't afford fertilizers, beekeeping is an alternative way for me to take care of my family since I can produce more income with this new skill. Our primary cooperative will improve too," says Ayelech.

In August 2015, Agribusiness Market Development program provided Ayelech and 19 women in her cooperative with beekeeping equipment and technical training. The activity starter kit gives each member two to three modern hives, beekeeping attire, three kilograms of wax and provides the group with a beeswax molder, honey extractor and queen excluders. Each woman then commits to purchasing two more beehives

In addition, the program trains the new beekeepers in





advanced techniques in honey production. On the first day, the women receive and follow a handbook and guide to beekeeping. The next day, the women are learning handson how to stamp wax panels and set up the modern hives. During the training, the women were excited, and their enthusiasm turned to smiles during the practical training. Most of the women farmers do not have an education beyond the fifth grade.

"Learning the methods of using modern hives will help us achieve more and increase my income. I am excited to produce honey," explains Farmer Ayelech.

Since 2014, AMDe has provided materials and training for over 320 women beekeepers in the four regions 40 in Oromia, 60 in SNNPR, 120 in Amhara and 100 in Tigray.

Some of the women were already keeping bees while others, like Ayalech, are learning the trade for the first time. In total, 320 women received over 750 modern beehives to promote their beekeeping business.

If done properly, one hive can produce 25kg of honey per harvest. In an average season and with four modern hives, Ayelech can get two harvests and an extra \$200 in plus the sales from her annual maize and teff harvests.

"In recent years, beeswax has become scarce in Oromia. The women can capitalize on this and with their excess honey they can make tej or sell it for table honey," explains Abiy Seifu, regional beekeeping and livestock expert.

Ayelech expects her hives to be buzzing soon and to make her first harvest in early 2016.

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BEESWAX BOUNCES BACK

Bees are exact. The creation of the beehive is based on perfect geometric patterns that are best sized to the production of honey. The recreation of wax panels is not an easy task, and even less so in rural Ethiopia where farmers lack access to time saving machinery.

Mekele-based honey processor, Comel, has ramped up the production of wax panels in the hope of giving farmers a big break this year. As Ethiopian beekeepers continute to transition from traditional to modern hive, stamped wax panels improve production and can save a farmer days of work. A sustainable industry devoted to creating wax panels could give farmers succor from the difficulties of stamping inexact panels.

"This is part of our value chain. If there is no beeswax, there can be no honey. And if there's no honey, we have nothing to process," explains Comel's Managing Director, Daniel Gebremeskel. In 2013, Comel partnered with the USAID funded Agribusiness Market Development program—AMDe—to establish Ethiopia's first automated beeswax factory. The partnership invested in wax melters, drying beds, cutters and stamp machinery. The machinery can easily produce 2,000 sheets a day. In 2015, Comel distributed 29,000 panels to over 350 beekeepers earning approximately \$38,000.

Before, farmers had to share manual equipment, often resulting in messy panels. If managed properly, the panels can remain in a beehive for up to two years.

"Our prices are very low. We need to do our part to keep beekeepers going. The regional government is providing modern beehive skills training," says Daniel. "If we all work together, we'll create a competitive and sustainable industry."

If more beeswax processors emerge in Ethiopia, Comel will consider sending its beeswax abroad. The cosmetic industry is one market where organic-certified beeswax is in high demand. For now, the panels will stay in Ethiopia.

AMDe also assisted Comel in finding new markets through international conferences and exhibitions in Dubai and Germany. Comel expects to export three containers of high quality honey to Europe this year, representing 80% of the firm's honey production.

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