DEVELOPMENT OF MICRO AND SMALL RURAL APICULTURAL PRODUCERS IN NICARAGUA & HONDURAS

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This project focused on incorporating micro- and small honey producers into the domestic (Honduras) and global (Nicaragua) value chains. In addition to making value chain coordination a key part of the project, a strong technical learning aspect was also added: offering a university diploma program and peer training to improve knowledge of productivity and quality.

This case study assesses the project "Development of Micro and Small Rural Apicultural Producers in Nicaragua and Honduras" one of more than 40 projects implemented in the Latin American and Caribbean Region, within MIF's "Linking Small Producers to High Value Agriculture Markets" thematic work area. These projects provide technical assistance, technological solutions, and access to finance to organized farmer groups (cooperatives, social enterprises and others) whose products have proven market demand in a variety of sectors and industries such as fisheries, horticulture, dairy, coffee, cocoa, and stevia, to name a few.

The CGGC – Duke University researchers assessed five of these projects using a four-pillar framework designed to identify key areas that improve sustainable inclusion to value chains. Each case study in the series synthesizes common challenges and best practices implemented by MIF's partner agencies, while providing valuable insights for ensuring successful outcomes and long-term impacts in inclusive value chain projects.

This case study is part of a more comprehensive study titled "Assessment of Five High-Value Agriculture Inclusive Business Projects" which encompasses other four case studies (available also in Spanish):

- Strengthening the competitiveness of the Stevia Value Chain in Paraguay.
- Strengthening the competitiveness of Organic Producers in Andean Micro Watersheds.
- Upgrading to Organic Cocoa Cultivation in Peru.
- Supporting the Competitiveness of Central American Coffee.

Other reports that complement the assessments are (available only in English):

- Inclusion of Small – and Medium-Sized Producers in High-Value Agro-Food Value Chains.
- Basic Principles and Guidelines for Impactful and Sustainable Inclusive Business Interventions in High-Value Agro-Food Value Chains.
- Recommendations to Enhance IDB-MIF Interventions for the Inclusion of Small- and Medium-Sized Producers in the High-Value Agro-Food Chains.

"DEVELOPMENT OF MICRO AND SMALL RURAL APICULTURAL PRODUCERS IN NICARAGUA & HONDURAS"

The present case study "Development of Micro and Small Rural Apicultural Producers in Nicaragua and Honduras" was elaborated by Penny Bamber and Karina Fernandez-Stark from the Center on

Globalization, Governance & Competitiveness (CGGC) of the Duke University in collaboration with Alejandro Escobar, Anabella Palacios, Yolanda Strachan, Dora Moscoso and Ana Castillo members of the thematic work area "Linking Small Producers to High Value Agriculture Markets" of the Multilateral investment Fund (a member of the Inter-American Development Bank (IDB) Group). This report is part of a group of studies that analyzed some of the MIF projects to identify best practices that successfully integrated small producers to national and international value chains.

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The views and interpretations expressed in this report are those of the authors and do not necessarily represent the views of the companies mentioned, the individuals interviewed or the Multilateral Investment Fund (MIF). The authors welcome comments and feedback at **penny.bamber@duke.edu** & **karina.stark@duke.edu**.

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The Duke University Center on Globalization, Governance & Competitiveness (Duke CGGC) is affiliated with the Social Science Research Institute at Duke University. Duke CGGC is a center of excellence in the United States that uses a global value chain methodology to study the effects of globalization in terms of economic, social and environmental upgrading, international competitiveness, and innovation in the knowledge economy. Duke CGGC works with a network of researchers and scholars around the world in order to link the global with the local and to understand the effects of globalization on countries, companies and the full range of development stakeholders.

The Multilateral Investment Fund (MIF) - a member of the **Inter-American Development Bank (IDB) Group** - is the largest provider of technical assistance for private sector development in the Latin American and Caribbean region. Established in 1993, the MIF supports economic growth and poverty reduction by encouraging increased private investment and advancing private sector development. The MIF collaborates with institutions from the private, public and nonprofit sectors to develop and execute business models that support entrepreneurs and poor and low-income households by providing technical assistance grants, equity investments and lending through its different units, organized by strategic thematic agendas.

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INTRODUCTION

The key to sustainable inclusion in any value chain is competitiveness; that is, the ability to provide the desired quantity and quality of a specific product in a more economical and timely manner than other suppliers. In high value agricultural markets, improved cold chain management and transport have facilitated the expansion of global trade, and now producers must compete with suppliers from all over the world. This requires continuous improvements in productivity and quality to meet product specifications of end buyers, cost-efficient market ready packaging, timely logistics, and, of course, economies of scale.

FOUR-PILLAR MODEL FOR VALUE CHAIN INCLUSION

Small- and medium-sized producers, in particular, face constraints that limit their competitiveness and prevent their participation in the value chain. We identified four major pillars that every intervention should include to raise the competitiveness of smallholders in order to include them in a sustainable way in the national or international value chain.

1. Access to market:

Many small producers do not have the required contacts to establish relationships with potential buyers due to broad geographic, cultural and educational factors, amongst others. Inclusive business interventions must fill an important role of establishing a connection between producers and buyers. This connection requires educating lead firms about the business potential of sourcing from small producers, as well as facilitating interactions until the small producers are in a position to sustainably manage the relationship independently. Generally, this is the weakest link in any value chain intervention.

2. Access to training:

While many small producers may have worked in agriculture their entire lives, specific training is often required in order to improve productivity and product quality, introduce new technologies and plant varieties, and facilitate compliance with food safety and other certification requirements that govern entry into the national, regional and

international value chains. The training component should include technical education, entrepreneurship, financial literacy and any other social/soft skills necessary to help insert producers in the value chain. In addition, peer knowledge transfer components; such as field visits to successful farms and demonstration plots should be included. These can be powerful tools for teaching and motivating producers.

3. Coordination and collaboration building:

Because small producers need to achieve economies of scale in order to compete in the marketplace, it is important they collaborate and work together. Additionally, and perhaps equally as important, collaboration facilitates the exchange of ideas to manage common problems, reduces information asymmetries in production and builds social capital that empowers producers to sell their products in more sophisticated markets. However, producers often fail to self-organize formally. Producers thus often need the encouragement and support of external actors to appreciate the payoffs of collective action and establish themselves as formal, legal organizations. These horizontal linkages facilitate producers' connections with other upstream and downstream value chain actors, such as input and service providers.

4. Access to finance:

Entry into the value chain requires certain investments such as infrastructure, equipment and obtaining certifications. Small producers, however, often face liquidity and credit constraints as they have no access to formal finance channels. In addition, they often lack the necessary financial literacy to apply for or manage potential loans. These limit their potential to make the required investments. These credit constraints have been found to prevent small producers from investing in necessary equipment, such as irrigation systems, greenhouses or cold storage, to achieve productivity improvements, to develop unused portions of their land or to upgrade into higher value products, thereby limiting their potential to participate in coordinated value chains. Interventions can play an important role in reducing information asymmetries and helping the banking sector to create appropriate, yet profitable, financial instruments to meet the needs of this group.

↘ PROJECT DESCRIPTION

The project focused on improving the competitiveness of micro and small producers in the Honduran and Nicaraguan beekeeping sector: strengthening value chain actors and activities in each country, improving technical capabilities and improving the supply chain environment by linking actors and creating synergies. The project finalized on August 2012 benefitting approximately 540 apicultural producers in both countries. In Nicaragua 412 producers across four areas received training, while in Honduras the 130 producers were located in two areas. Beneficiaries included micro (1-20 hives) and small (21-100 hives) beekeeping producers. This is a secondary/complementary occupation for the majority of producers. The project included a cascading training model by which knowledge was transferred from international experts to university graduates, who trained producer leaders who then trained micro and small producers. The teaching format was modified according to the audience. The executing agency, Swisscontact, was very successful in partnering with several organizations working on the same productive sector to create synergies and leverage limited resources. High demand for honey, particularly in Europe, eased sales and led beneficiaries to plan business expansions, however actual growth is complicated by the lack of finance in this sector. In Nicaragua, most honey is exported through intermediaries (exporters and cooperatives) that buy the honey directly from the micro and small producers, while in Honduras, a strong domestic market provided sales opportunities for beneficiaries to local supermarkets.

LESSONS LEARNED

- The cascading design of transferring knowledge from foreign experts to producers in remote areas worked extremely well, ensuring that sophisticated, cutting-edge knowledge was transferred to producers in an accessible manner. The combination of theory-practice was appropriately designed to match the learning needs of each group.
- The lack of access to finance limited producers' ability to apply the knowledge and skills developed in the training segment. The presence of all four 'inclusive pillars' is important to effectively address the producers' need to achieve minimum levels of efficiency.
- Coordination with other value chain stakeholders and round-tables significantly facilitated information flow, drawing timely attention to constraints faced by each actor and providing the opportunity to develop appropriate solutions.
- Alignment and synergies with other agencies working in the sector allowed for efficient leverage of limited project resources and, in turn, increased the number of beneficiaries. Public and private alliances were key to improve the sector competitiveness by identifying and offering solutions for critical issues.

OVERALL ASSESSMENT OF SUSTAINABLE INCLUSION

SUSTAINABLE INCLUSIVENESS	- The project selected a product with a strong international demand. Organic honey –especially non transgenic- is highly appreciated in European markets. Producers are selling all their production; however, lack of finance remains a barrier for expansion. - The project provided technical assistance, enabled access to market and helped to coordinate the chain actors. - The project did not include a finance component or an organizational building component among producers groups. - The project is creating key positive outcomes such as increase income that has been translated to better social conditions for the beneficiaries and their families. It is uncertain how the beneficiaries will sustain the inclusion, especially the most vulnerable ones that do not have permanent access to technical support and access to credit.	MEDIUM

INSTITUTIONAL ARRANGEMENT

Coordination and collaboration among stakeholders was excellent. Value chain actors such as producers, inputs providers, industry experts, exporters, and other supporting organizations created opportunities for dialogue to promote industry growth. However, networking and collaboration amongst producers was limited. Most producers were members of cooperatives, however, in general, these were institutionally weak and served principally to achieve economies of scale.

In order to maximize impact and obtain funds to hire international apicultural specialists, buy equipment and improve installations, Swisscontact partnered with 17 organizations for this project: Chemonic – CRM, CARANA (USAID), NITLAPAN, UNICAFE, Caritas (Matagalpa - Jinotega) y FIDER), INPRHU Somoto, UNAN León, ASODEPA-JFPS, CEI, ICCO, ASPRODIC, C.I.S.P. (Cooperación Italiana), Bolsa Samaritana, MAMUCA – ECOLOGIC, Iglesia Católica Santa Bárbara, Instituto Nacional de Formación Profesional (INFOP) y ACCESO-FINTRAC.

Project Stakeholders

ORGANIZATION	ROLE	DESCRIPTION
Swisscontact	EXECUTING AGENCY AND CO-FUNDER	Swisscontact is a global NGO headquartered in Switzerland focused on market development, workforce development and financial services for individuals in developing countries.
MIF	CO-FUNDER	Project began in 2008 and finalized in August 2012. MIF Specialist in the IDB Country Office in Nicaragua, Griselda Soto, supervised this project.
Producers	BENEFICIARIES	The beneficiaries were selected in 4 departments in Nicaragua (412 beneficiaries) and 2 in Honduras (130 beneficiaries).
UNAM-Leon	TECHNICAL ASSISTANCE	UNAM-Leon University offered the project's diploma on apiculture. They also carry out research in the field.
Instituto Nacional de Formación Profesional (INFOP)-Honduras	TECHNICAL ASSISTANCE	INFOP provided training for both producers and peer trainers for ongoing knowledge transfer.
Nicaraucoop	PROJECT SUPPORT-COMMERCIALIZATION	This umbrella cooperative, composed of several smaller cooperatives provides the link for producers with the international market.

ORGANIZATION	ROLE	DESCRIPTION
Ministerio Agropecuario y Forestal (MAGFOR)	PLAGUE REGULATIONS	The Nicaraguan ministry developed a plan to prevent plagues in apiculture.
Comisión Nacional Apícola	PROJECT SUPPORT AND BENEFICIARY	This commission was formed by the industry stakeholders in Nicaragua and they participated in producer roundtables. They served as an important voice for sector coordination in Nicaragua.
Centro de Exportaciones e Inversiones (CEI)- Nicaragua	PROJECT SUPPORT	CEI provided market information, preparing an extensive report on the apiculture sector in Nicaragua and Honduras. They also developed a market strategy for the sector.
Samaritan Bag and C.I.S.P. (Italian Cooperation)	ADDITIONAL FUNDING SOURCE, PROJECT SUPPORT	These institutions provided resources for equipment, apiculture diploma scholarships and financial support for international awareness and training events.
Chemonic-CRM	ADDITIONAL FUNDING SOURCE	This organization was implementing a Millennium Challenge project in the same industry and provided beneficiaries with equipment.
CARANA	ADDITIONAL FUNDING SOURCE	CARANA provided funding to support the diploma on apiculture and expand the number of beneficiaries.
ICCO	ADDITIONAL FUNDING SOURCE AND PROJECT SUPPORT	This NGO provided resources to run producer roundtables and develop a training plan. Provided financial support for producers to attend international workshops

"With my first year's profit and a few savings, I was able to build a house for my family. In the past, my house leaked during winter and it was unbearable for me and my kids. Now, I feel very proud of myself"

Socorro- Cooperativa Mujeres Apicolas de Masapias-Nicaragua

DESCRIPTION OF THE VALUE CHAIN

Apiculture Value Chain - Summary Project Intervention

Program Beneficiaries	542 NICARAGUA & HONDURAS					
Project Intervention Points						
Value Chain Segments	**Inputs**	**Production**	**Harvesting**	**Processing**	**Packing**	**Distribution and Marketing**
Key Actors	Implementing Agency (technical assistance), queen bee producers, equipment uppliers	Micro and Small producers (1-100 hives)	Producers and exporting/ packing actors	Producers, exporters and national distributors	Exporters and national distributors	Exporters and national distributors
Inputs/ Outputs	**Inputs:** Technical assistance, Queen bee, wax, equipment, suits access to finance, certification	**Inputs:** Hives managed with Good Apiculture Practices correct floration location, plague control, bee feeding, etc. **Output:** Helthly hives	**Outputs** Honey Post-harvesting process: drain and filter	**Inputs:** be wax, honey, propoleum, bee pollen **Output:** Honey, lotions, soaps, honey gummies, candies, etc	**Finished Outputs:** Jar of honey	**Buyers' brands and own brand**
Key Markets			**Key Markets:** Europe (80% production in Nicaragua exported)	**Key Markets:** Local stores in Honduras	**Key Markets:** Local stores in Honduras	

Source: Authors.

The honey value chain illustration above shows that the project intervenes in all segments of the value chain. Prior to the project, low productivity made it difficult for beekeeping producers to compete.[1] The value chain challenges identified and addressed in this intervention were: Increase productivity and quality through the implementation of good apicultural practices: plague control, product organic certification, queen bee replacement, artificial feeding, transhumance (moving the hives to a new geographic area in the search of flowering), harvesting good practices, connecting exporters with producers, creating new processed products, and developing honey packing suitable for the Honduran market. One unresolved issue was the inclusion/development of input providers to satisfy the equipment need of the producers.

This project also includes some functional upgrading activities:

a. processing (new products such as lotions, soaps and honey gummies)

b. packing (Honey packing suitable for Honduran market)

c. branding (honey for the Honduran market)

1 During the project design stage, it is imperative to perform a baseline of the beneficiary's competitiveness using a market study as benchmark. Criteria for competitiveness assessment include: Productivity, product/service quality, standards and certifications, produce/service image, packing, logistics, economies of scale, necessity to add value to the product/service, assess if the product/service is suitable for SMEs commercialization. See introductory note for further information.

↘ MODEL FOR VALUE CHAIN INCLUSION

Small- and medium-sized producers are often excluded from the value chain because they face resource, skills and market knowledge constraints. As noted before, four major constraints found to affect the success of agro-food inclusive business projects are access to finance, access to training, access to markets, and coordination and collaboration amongst producers and other value chain actors. Below we discuss how each of these constraints was addressed in this project.

Assessment of the Four Pillars in this Project

Access to Finance

- **No finance component included in this project.**
- Producers did not have access to formal finance channels.
- Need of capital to buy inputs and also to buy equipment to increase productivity and meet industry standards
- Due to limited access to credit, cooperatives often faced cash flow challenges and were unable to pay producers on delivery.

  This resulted in side-selling to intermediaries which paid a lower price but in cash, up front.

Collaboration and Coordination Building (horizontal and vertical)

- **This component focused principally on coordination of value chain actors and not on producer coordination.**
- Existing cooperatives served mainly as collection centers to reach economies of scale rather than supportive development networks in which producers exchange production techniques or develop internal credit schemes.
- No activities to strengthen existing cooperatives or create new ones.
- Value chain coordination was strong. Industry stakeholders were aligned towards a common objective.
- Creation of roundtables per department facilitated coordination and problem solving dialogue between producers with other actors in the value chain.

  Overcoming problems quickly helped to drive a higher level of development.



Access to Training

- **Technical training aspects of the project were strong.**
- University program trained peer trainers who in turn trained the producers. Program covered technical production, sanitary management, nutrition, quality and commercialization.
- Entrepreneurship training on how to value their product, accounting systems, productivity quantification, cost calculation, etc., was weak.
- International field visits of producers to technicians in successful sites e.g. Argentina, Costa Rica and Guatemala provided hands-on practical guidance for producers in the field following the project.

Access to Market

- **Market demand for honey was very high, and few additional initiatives were required for producers to access high value markets.**
- Exporters had pre-established relationships with foreign buyers and the focus was on linking small producers with exporters. Producers were linked with an exporting umbrella cooperative which subsequently purchased their honey for export to Europe.
- In Nicaragua, exporters purchase 100% of the honey production. There is only a weak domestic market for honey in the country.
- In Honduras, the project focused on developing packing, branding, sanitary certifications specifically for the local market.
- 8 organizations obtained organic certification to access international markets through an exporting cooperative.

PROJECT RESULTS

RESULTS	IMPACTS
▸ 35 professionals received a diploma in apiculture granted by UNAM-Leon. ▸ 24 peer trainers were trained. ▸ 542 producers were trained. ▸ 8 producer groups received organic certification. ▸ 6 roundtables were established among sector stakeholders that meet once a month. ▸ Plague prevention plan implemented by the Nicaraguan government. ▸ **Strong coordination and collaboration of stakeholders continued to promote growth.**	▸ Improved productivity and quality. ▸ Increased export volumes. ▸ Increased family income. ▸ Job creation (242 new jobs). ▸ Extended education for children. ▸ Producer empowerment. ◦ Producers proud of their achievements. ▸ Increased female participation. The project positioned apiculture as a strategic sector on the national agendas in both countries.

CASCADING TRAINING MODEL

This training system follows a cascading model in which every student signed a commitment to transfer knowledge to students in the strata below them. Since knowledge of apiculture was almost non-existent in Honduras and Nicaragua prior to the project, foreign experts were engaged to teach the first diploma to industry participants, who in turn offered programs to peer trainers, and then to producers. The programs were so successful that a second version of the diploma was offered, although no longer free of charge (many students were then sponsored by institutions: banks, governments, NGOs, etc.)

This model includes three stages:

At the **first level**, UNAM-LEON University offered a seven-month diploma on apiculture to 35 students in which foreign experts taught 6 modules: 1. Technical capacity/production; 2. Sanitary management; 3. Nutrition; 4. Quality; 5. Processing; 6. Commercialization.

Local university professors were incorporated into the teaching staff with the foreign experts for the second program. In the long term, the entire course will be taught by local professors.

At the **second level**, peer trainers were trained in 3-4 day program at the university (50% of the course content was theoretical and 50% practical).

Finally, at the **third level**, producers participated in training activities in their territories (70% of the training was practical).

SUSTAINABLE VALUE CHAIN INCLUSION OF SMALL PRODUCERS: AN ASSESSMENT

This project made progress towards incorporating micro and small producers in the honey global value chain. Producers with more experience increased their production, while those who had received equipment, but no training from other projects began to produce honey. In general, micro and small producers were in a much better position than before this project; however, several key elements were missing in the project design which made inclusion more difficult for small producers.

- Producers had great technical training in which they were able to increase their productivity, however, entrepreneurial training was not well incorporated in the program and some topics like administration, accounting, costs, and savings were not included.

- Strong value chain coordination was achieved through the roundtables. However, the collaboration and coordination building among the producers themselves was missing. Cooperatives required institutional strengthening in order to reach higher levels of development.
- Access to market component differed by country. In Nicaragua, the project focused on the export market by linking exporters with project beneficiaries. Specifically, this project established a partnership with an umbrella cooperative that exports the honey of smaller, less prepared cooperatives. Other beneficiaries sell their production to private exporters. In Honduras, the focus was on inclusion in the domestic value chain with the provision of finished products to local supermarkets.
- Access to finance was not included in this project and this created major difficulties for the producers. They needed capital to buy inputs, equipment and expand their businesses as well as to incorporate good apicultural practices. The majority of the producers wanted to increase their number of hives due to the high demand for honey; however, it was almost impossible for them to do so without access to finance.

Positive elements that facilitated the project included:

- High global demand for the organic and non-transgenic honey produced in Nicaragua and Honduras.
- Swisscontact was seen as the leader in the apiculture sector, and was invited to play a key consulting role in all aspects of industry development.
- Highly motivated and technically strong human resources within Swisscontact.
- Presence and collaboration of other agencies and development projects.
- Buy-in from reputable university in Nicaragua to facilitate knowledge transfer.

Some challenges limited the success of the project:

- Low level of development of the beneficiaries, some with no prior experience in honey production.
- MIF resources could not be used to provide important basic equipment to the beneficiaries.

The growing demand for organic and non-transgenic honey suggests a promising future for the beneficiaries in this project. However, to expand production beneficiaries need access to credit. So far this financing has not been available. In addition, institutional strengthening among producers would provide them with greater negotiating power vis-à-vis buyers and exporters and help them to capture greater value from their participation in the sector. The training aspect of this project was particularly strong and successfully built local capacity for both the current and future development of the sector. A comprehensive Assessment is provided in the table below.

SUSTAINABLE VALUE CHAIN INCLUSION OF SMALL PRODUCERS IN HONEY CHAINS: AN ASSESSMENT

	CRITERIA	KEY POINTS	ASSESSMENT
SELECTED VALUE CHAIN	Target Product	Honey is an excellent product for small- and medium-sized producers, especially organic honey due to labor intensity. However, it has high startup costs as equipment and materials are expensive. Commercial Viability: Local and growing demand for organic honey and its derivate is really high. There was unmet international demand especially for non-transgenic honey produced in Nicaragua and Honduras. In Nicaragua alone, honey exports almost tripled in value from 2009 to 2011. The majority of producers also have Fair Trade certification.	
	Beneficiaries	The level of development of the beneficiaries was low, often with limited schooling. They realized that beekeeping is a business and not just a hobby. This awareness needs to be reflected in the management of their cooperatives. Some of them were experienced beekeepers; however, others were just starting in this activity.	
INCLUSIVENESS	Inclusion four pillars	There were two missing components in the project: access to finance and internal coordination and collaboration building among the producers. These two elements are crucial to integrate micro and small producers in the national and international value chain.	
	Competitiveness	Failure to access credit limited application of good apicultural practices to increase productivity and raise the quality of the honey and other products. Producers were unaware of quality requirements and the strictness of the international sanitary regulations of export markets. They still need to advance on sanitary issues. Risks: Low level of education and economic development among producers. Weak support system to sustain industry growth (ex. Financial institutions, permanent technical assistance and sanitary control)	

	CRITERIA	KEY POINTS	ASSESSMENT
INCLUSIVENESS	Upgradeability/ Potential to add value	Honey production is in high demand, there were great opportunities to continue expanding production, improving productivity and producing a better quality honey. A variety of apicultural products can be developed for internal and external markets.	●
	Economic sustainability	The lack of the financial component and producer organization limits producers' capability to respond to future demands in quality and safety standards. Despite the excellent training initiatives developed during the project, beneficiaries still need ongoing technical assistance to maintain and update the knowledge.	◐
	Social sustainability	The project included supporting woman's cooperatives. This is a good sector for rural women since it doesn't require daily work and provides additional income. Other cooperatives made efforts to include young people in the sector as an alternative business opportunity.	●
	Environmental sustainability	Beekeeping has a positive impact on the natural environment as bees are essential for pollination of most wild and commercial plants and trees. It is a valuable conservation tool, allowing people to derive economic benefit from indigenous forests and other floral resources in a non-destructive way, ensuring local participation in conservation efforts. It also makes a very significant contribution to other forms of agriculture by effecting the pollination of many economically important plants, such as fruits and vegetables.	●
IMPACT	Spillovers/ impact	This project is having several positive impacts such as: improved productivity and quality, increased export volumes, increased family income, job creation, extended education for children, producer empowerment and female participation in the sector. Additionally, the project put apiculture as a strategic sector on the national agenda in both countries. The strong coordination and collaboration of stakeholders continued to promote sector growth.	●

	CRITERIA	KEY POINTS	ASSESSMENT
IMPACT	Potential for replication	Key aspects for potential replication include the cascading training model and the stakeholders' coordination. The project could be expanded within the countries and also to other countries in the region. As a high demand product, market linkages were easy to establish for the honey production. The access to market component would need to be correctly assessed for projects based on other products.	◐

Weak ○ Medium ◐ Strong ●

↘ PROJECT BUDGET

The budget for the project was US$1,430,726 with US$982,026 provided by IDB and US$448,700 provided by Swisscontact: The project received an additional US$200,000 from other organizations to finance purchase of inputs, equipment and the participation of foreign experts.

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