APIMONDIA SCANDINAVIA 2025
SWEDEN | DENMARK | NORWAY

PP-487 [Beekeeping for Rural Development]

Gastronomy as a Key for Market Access and Value Chain Development for Honey

Case Study in the Dominican Republic

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Introduction

This study shows how the use of honey in gastronomy can be a key factor for rural development and small beekeepers. The study shows patterns of behavior of honey consumption in a sample of restaurants and gives an approach of the number of small beekeepers benefited.

Description

The aim of the study is to analyze the potential use of honey in restaurants and correlate it to how many beehives are needed to fulfill the rising use of honey in gastronomy. This can be projected also to estimate how many small beekeepers can be benefited by the use of honey in restaurants.

This study serves as a framework for future studies and projects that can be part of the "Strategic Plan for Sustainable Gastronomic Tourism of the Dominican Republic".

The study is based in the business case of "Nucayní" honey in Dominican Republic from January 2024 to July 2025. The data is based on a sample of 49 restaurants located in Santo Domingo that use honey as an ingredient. The sample included mid sized restaurants with capacity to seat from 50 to 100 clients.

Beekeeping in Dominican Republic

- More than 3,000 beekeepers[1]
- Total honey production: 750,000 kg (in 2023) [2]
- Per capita consumption of honey: 0.04 kg / year[1]
- Tropical climate with dry and humid forest. Mostly multifloral honey.

Honey in Gastronomy

Main uses:

- Savory Food: marinades, glazes, sauces, dressings
- Beverages: Cold (alcoholic and non-alcoholic), Hot (coffee, tea and other infusions)
- Bakery and confectionery
- Direct use: as complement of desserts, snacks, etc.

Functional Characteristics:

- Natural sweetener
- Flavor enhancer
- Flavor balancing
- Hygroscopic (retains moisture)
- Helps caramelization and Maillard reaction

Data Analysis

1. Honey usage kg/year:

Total: 20,602 kg/yr

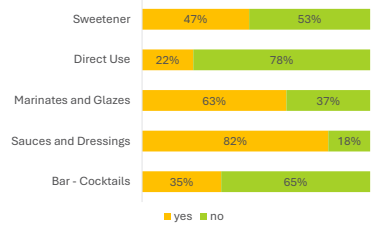
Per restaurant:

Average: 455 / Minimum: 14 / Maximum: 1,975 kg/yr

kg honey/yr	kg honey/yr		# of restaurants	
	total	%	total	%
1500-2000	8,218	40%	5	10%
1000-1500	7,072	34%	5	10%
500 - 1000	1,686	8%	2	4%
200-500	2,864	14%	12	24%
less than 200	763	4%	25	51%
total	20,602	100%	49	100%

- 74% of honey was used in 10 restaurants, each one with a consumption of more than 1,000 kg/yr.
- 73% of restaurants analyzed used less than 500 kg of honey/year.

2. Honey Uses in Restaurants



- Most of the restaurants in the sample use honey in sauces, dressings, marinates and glazes, which implies use in savory food.
- Of the 49 restaurants, 17 use honey in their bar. Of the other 32, only 6 of them does not serve cocktails.
- All the restaurants in the sample prefer to use honey in liquid state and not crystallized.

3. Beekeeping to fulfill restaurant demand

With an average production of 20 kg of honey per hive, the beehives needed to fulfill restaurant needs vary between 10 and 75 depending on the level of usage of honey.

In the case of small beekeepers with an average of 25 hives per apiary, each mid sized restaurant using honey can benefit up to 3 apiaries, contributing to rural development in the country.

Description	High Use	Medium Use	Low Use
kg Honey / yr	1,500	500	200
kg / hive / year	20	20	20
# hives / restaurant	75.0	25.0	10.0
hives / apiary	25	25	25
# apiaries / restaurant	3.0	1.0	0.4

Conclusion

- Honey is a versatile ingredient in gastronomy having many benefits in food´s flavor and texture. This shows that it can be used in many kinds of preparations.
- The sample of restaurants studied show that honey can be a key ingredient in their preparations, showing a use of more than 1,000 kg of honey per year per restaurant.
- There is an opportunity for increasing use of honey in restaurants as they incorporate it as an ingredient in more recipes, even if is only to replace other sweeteners.
- The use of honey as a key ingredient in restaurants increase per capita honey consumption in the country, which can strengthen the beekeeping value chain and therefore promoting rural development.
- Honey used in restaurants is preferred in liquid form, so there is a higher demand of honey from botanical sources that do not crystallize rapidly.
- With a secure market, beekeepers need to assure the proper logistics to deliver the product to the restaurants.
- According to ADERES there are 4500 restaurants in Dominican Republic. If each restaurant used 100 kg of honey per year, it would mean 900 apiaries benefiting at least 450 families and 22,500 beehives supporting agriculture and food safety.
- Restaurants can find other natural alternatives to honey in the market including cane sugar, agave syrup, stevia and maple syrup. But there are also industrialized honey flavored products that cost less than raw honey resulting in one of the major limitations for market development.

References

1. Diagnóstico del Sector Apícola de la Republica Dominicana. 2020
2. Production Reports Ministerio de Agricultura RD
3. Asociación Dominicana de Restaurantes (ADERES)
4.Maicelo-Quintana, Jorge L. et al. Potential application of bee products in food industry: An exploratory review. Heliyon.

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Gastronomy as a key for market access and value chain development for honey. Case study in Dominican Republic

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The potential of gastronomy as a high-value market for honey and other bee products presents a unique opportunity to drive rural development and enhance market access. This presentation explores the role of gastronomy in the value chain development of bee products, based on a case study of Nucayni Honey in the Dominican Republic. By leveraging the culinary traditions and the growing demand for gourmet and organic products, gastronomy can serve as a catalyst for economic growth in rural areas.

Over the past four years, Nucayni has played a pivotal role in supporting the beekeeping community of Monte Plata province in Dominican Republic by providing a secure market for their honey. By partnering with more than 20 beekeepers, it has ensured that their products reach a wider audience, thereby increasing their income and promoting sustainable beekeeping practices. Additionally, Nucayni has successfully established relationships with over 40 restaurants, integrating high-quality honey into their culinary offerings. This collaboration has enhanced the visibility of local honey and created a stable demand, benefiting both the beekeepers and the gastronomy sector.

The case study highlights the integration of honey and other bee products into the local gastronomy scene, showcasing innovative culinary applications that elevate these products' market value. Through collaborations with chefs, restaurants, and specialty markets, honey is becoming a main ingredient in many restaurants, securing a market for beekeepers and promoting sustainable practices. The presentation will discuss the strategies employed to enhance the visibility and appeal of bee products, including branding, development of value-added products, and the creation of unique gastronomic experiences.

Furthermore, the presentation will address the challenges and opportunities faced by beekeepers in the Dominican Republic, such as market access barriers, quality control, and the need for capacity building. This presentation aims to provide a roadmap for other regions to harness the power of gastronomy in promoting bee products and supporting rural development.

In conclusion, gastronomy offers a promising avenue for market access and value chain development for honey. This presentation demonstrates how culinary innovation, and strategic partnerships can transform the beekeeping industry, fostering economic resilience and sustainability in rural communities.