

International Interdisciplinary Congress on Renewable Energies, Industrial Maintenance, Mechatronics and Informatics Booklets



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Title: Meliponiculture in communities as a business unit for indigenous women

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Editorial label ECORFAN: 607-8695 BCIERMMI Control Number: 2022-01

BCIERMMI Classification (2022): 261022-0001

Pages: 13 RNA: 03-2010-032610115700-14

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Introduction

Meliponiculture was particularly important within the Mayan culture, which developed interesting management processes. This type of management forms the basis of the guidelines for modern rational breeding.

Stingless bees represent a group of culturally very important organisms for the natives of the country, since they have historically been a source of food and natural medicine for thousands of years. One of the many problems that the northern sierra of Puebla and the entire world is going through is the lack of pollination of the ecosystem and the aggressive use of fertilizers in planting, as well as the lack of employment in marginalized communities and more so for **indigenous women**.

Methodology

The implementation of meliponiculture in marginalized communities for indigenous women is of the utmost importance since they are used in something totally different from everyday life, without investing in the process of supervision or development of the hives, they are totally self-sustaining and for good management it is essential to follow the following steps:

Methodology

1. Sensitization and introduction to meliponiculture

2. Learn about the biology of melipona bees.

3. Select the most suitable native bees for honey production in the Huauchinango region.

4. Transfer or racking

Methodology

5. Obtaining new hives by the division method.

6. The products of the hive and their harvest.

7. Follow-up of the meliponario and monitoring of the floral calendar

Table 1 Proyect investment for 20 hives

Descripción	Costo
1. Infrastructure	\$8,300
2. Hives (20 pieces)	\$24,000
3. Training	\$3,500
4. Lodging (instructor)	\$800
5. Foods (instructor)	\$600
Total:	\$37,200

Table 2 One year income with 20 hives

Description	One year income
Honey (20 hives)	20 lt.(1500 x liter) =\$30,000
20 Hives	20 new (\$2,600 x hives) =\$52,000
Total:	\$82,000

Annex

It is worth mentioning that the formats shown below by the author Amazon Conservation Team, T. N. (2020) served as a reference for monitoring, data collection and inventories for this project

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Inventario de Colonias

Meliponary Colony Inventory:
Meliponiculturist Name:
Location:

CODE HIVE	NAME	ORIGIN	DATE ACQUISITION	OBSERVATIONS

Annex 2

Tracing	Follow-up of Meliponario:	
	Meliponiculturist Name:	
	Local:	

DATE	CODE	COURCE	STRONG/	LOCATION	MATURE			EXERCISE											
DATE	HIVE	SOURCE	WEAK	LOCATION	BREEDING	TRANSFER	DIVISION	HARVEST	FOOD	OTHERS									

Annex 3

Flavor calcudes	Malinania di viat.	reiepnone:
Flower calendar	Meliponiculturist:	
(mark with X the weeks in which the plant has flowers)	Name of the Meliponary:	Location:
(mark with A the weeks in which the plant has howers)	realite of the interportary.	

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FLANT	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2		4	1	2	3	4	1	2	3	4	1	2	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
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Conclusions

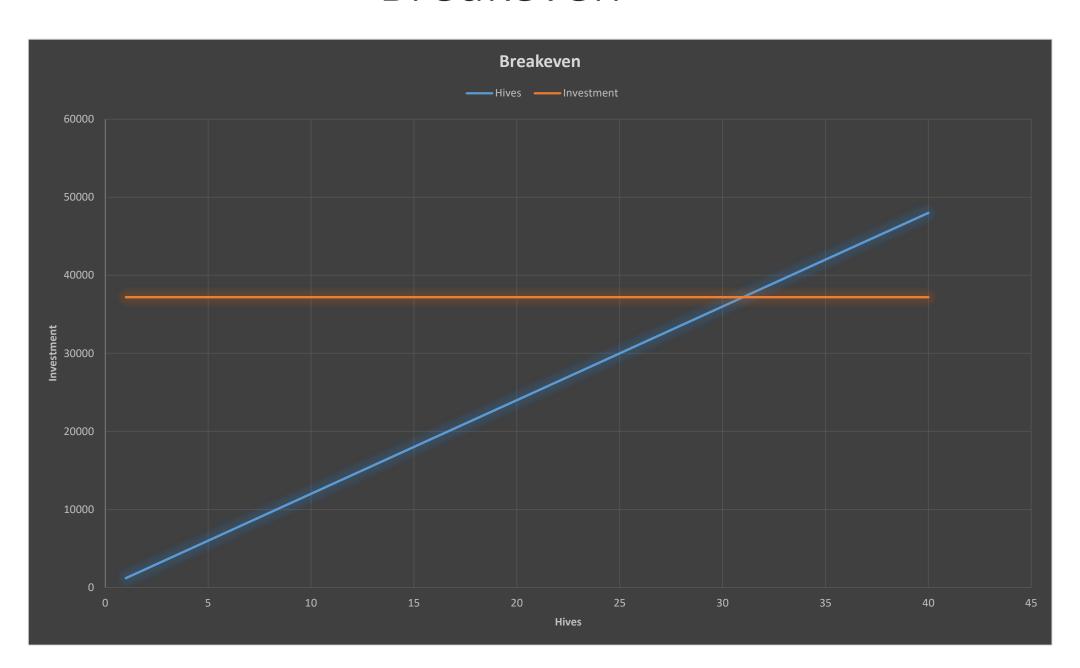
The economy in indigenous communities is very difficult to maintain or have employment opportunities on a constant basis and even more so for indigenous women, who with effort and dedication lead the integration of a family, which is why this project called "Meliponiculture" is implemented. in communities as a business unit for indigenous women", with the aim of contributing to the activation of the economy for marginalized communities.

Below is a projection of recovery of the initial investment in one year, with the sale of hives.

Price per number of hives

Years	No.	Number of hives	\$ Sale
	1	1	1200
	2	5	6000
1 YEAR	3	10	12000
	4	15	18000
	5	20	24000
	б	25	30000
2 YEARS	7	30	36000
	8	35	42000
	9	40	48000

Breakeven



Referencias

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