



**KORPORASI PEMBANGUNAN DESA**  
(Rural Development Cooperation)

# **2<sup>ND</sup> INTERNATIONAL STINGLESS BEES CONFERENCE & WORKSHOP**

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**TH Hotel, Kota Kinabalu Sabah**



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# **SOCIAL & ECONOMIC VALUE OF BEEKEEPING**

by

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## Introduction

Beekeeping have long provided food and materials to the society. Bees are also an important agents for conservation of the environment.

- Commercialization of honey production can be a key driver in food security and **poverty eradication, especially for rural community.**
- Bees plays a major role in enhancing biodiversity, environmental conservation and **increasing crop production through pollination.**



## **Social Value**

This ranges from improved crop yields as a result of pollination, to improved food and nutrition, an assured supply for traditional medicine and improved community health.

### **Improve Human Interaction**

Beekeeping can create social benefits as for example when small-scale farmers join together to form an association, either formal or informal.





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shorten the gap between  
rural and urban community





## **Pollination**

Bees pollinate flowering plants and thereby maintain the balance of ecosystem. Bees - 75% pollination of cultivated plants done by bees.

## **Beekeeping encourages ecological awareness**

Beekeepers have a financial reason to conserve the environment: To make sure flowers are available and bees are protected.



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**Bees pollinating coconut**



**Watermelon pollination**



**Flower pollination**





## **Beekeeping is compassionate and environmentally friendly**

Beekeeping generates income without destroying the habitat. Encouraging beekeeping encourages the maintenance of biodiversity.







## **Economic Value**

Many bee products have a good value on local markets and are easily tradable. Honey, if appropriately extracted and processed can become a non perishable and to provide a more constant and regular income for the farmers.

## **Food & Manufacturing Industry**

### **Honey**

Honey is a natural food made by the bee with nectar, pollen and other substances. It is considered nature's most completely nourishing food as it contains nearly all nutrients required by humans.



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## **Beewax**

Cosmetic and skin care products such as Moisturizers  
Lip gloss Lip balm Eye shadows Eye liner Moustaches  
wax Hair pomade which makes the hair sleek







## Propolis

Honey bees collect sticky resins that ooze from the buds of some trees and conifers. Propolis often used in medicine.







## Royal Jelly

Secretions from the salivary glands of the worker bee contains a high concentration of vitamins B5, B6, and amino acids and is believed to be a potent antioxidant.





## **Bee Pollen**

Bee pollen contains more protein than any other animal. High in vitamins A, B1, B3, and B12, as well as fatty acids, carbohydrates, trace minerals, and at least 22 amino acids essential for muscle growth.



## **Agriculture sector**

Managed honey bees are the most valuable pollinators in terms of agricultural economics (Table 1 & 2). These hyper-efficient insects can provide pollination to virtually any crop.

This can increase plant production, by the same increment as the pollination success rate; and also by shortening the harvesting period, from once a year to two or three times annually.



## **Generate Additional Income**

### **Contract Farming By KPD**

- Research was carried out in Kota Marudu from 1980 to 1988 with the assistance of a bee expert from Canada.
- Introduced the first honeybee keeping project in Sabah involving rural farmers in 1989.
- Honeybee Contract farming started in 1991 in Kota Marudu, Matunggong, Kudat and Pitas.





- This concept is a complete development package that includes all requirements such as agricultural inputs, advisory services, on farm training, processing and marketing.
- Selected farmers will provide idle land and labor.
- KPD will buy all the honey produce by farmers (cash on delivery) which create instant income (Table 3).



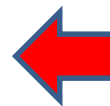
**Table 3. Ten years production of honey under KPD's Contract Farming**

Year	Quantity (kg)	Value (RM)
2009	12,189.55	85,519.91
2010	7,585.70	117,695.24
2011	4,054.66	95,456.56
2012	7,229.92	163,876.07
2013	5,441.70	117,023.49
2014	12,510.36	280,177.40
2015	7,036.45	173,256.24
2016	5,962.45	140,210.01
2017	7,732.11	333,982.95
2018	12,522.30	350,810.35

*\* Production include Wild Honey and Stingless Bee Honey.*



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Beekeeping training for  
the rural people in Kudat  
District





## KORPORASI PEMBANGUNAN DESA (Rural Development Cooperation)



Beekeeping training for the rural people in Kota Marudu





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Stingless bee logs along the road side near Kota Marudu



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Farmer weighing his honey at KPD's processing plant in Sikuati, Kudat



## **Agro-tourism**

### **Borneo Honey Bee Centre (BHBC)**

- Use to be a copra processing plant. Converted to honey processing and packaging plant in 2006.
- Borneo Honey Bee Centre was officialy open in April 2017.
- BHBC facilities:
  - Honey bee Park
  - Stingless bee trail
  - Bee Gallery
  - Honey Processing & Packeging plant
  - Sourvenir shop





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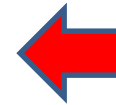


Borneo Honey Bee Centre (BHBC) in Sikuati, Kudat



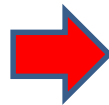


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Honey Bee Park

Stingless Bee Trail





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← Honey processing & packaging

Bee gallery →







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Sourvenir shop

International tourist  
during visit to BHBC





**BHBC: Visitors Arrival**

Visitors	2017	2018
Domestic tourist	2338	3619
International tourist	101	392
Honey buyer	1432	2468



## Conclusion

Beekeeping as a business can be a great way to generate **additional income** with minimal capital and low risk. In addition to producing honey, beekeepers play a critical role in agriculture, contributing to crop pollination, enhancing biodiversity and the development of valuable by-products such as royal jelly and beeswax.

Bee breeding is a significant activity that permits sustainable agricultural development and wildlife conservation, but for many species it requires specific management techniques and intact natural environments.





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**THANK YOU**