

### NATRIPAL

- Nagkakaisang Mga Tribu ng Palawan (NATRIPAL) or United Tribes of Palawan
- Composed of Pala'wan, Batak and Tagbanua tribes
- Organized in 1989 and registered with SEC in 1991
- 68 member associations with 7 associations active in honey enterprise
- 3 major indigenous groups
- NATRIPAL aims to promote the rights of the indigenous peoples of Palawan, especially rights to land and natural resources, sustainable livelihood, health, education

### Interventions

- Policy development on honey purchasing and processing (including delivery of honey and comb in food grade plastic)
- Use of refractometer to test the moisture content, microscope for pollen count and PH meter to ensure the shelf life.
- Constructing new honey laboratory used for receiving, processing, testing, filtering, packaging and storage.



### Honey

subsistence use, part of indigenous culture and economic activity

### Apis dorsata (pukyutan) and Apis cerana (legwan)

During the dry season (January-May) the trees blossom and the bees start to build their hives and produce honey.

### Results

- 7 communities of more than 100 families trained and delivering good quality honey
- Good quality honey and good packaging results in better price
- Good system and testing facilities ensures recognition and credibility of quality
- Honey business has helped in the continuity of NATRIPAL despite lack of other project funds

### Challenges

- Need for many trainings before community can absorb all the new knowledge and procedures
- Permitting / Resource Access
- Search for other methods to determine purity of honey
- Financial management of honey enterprise (separate from Federation)

### Threats to Honey Enterprise Development

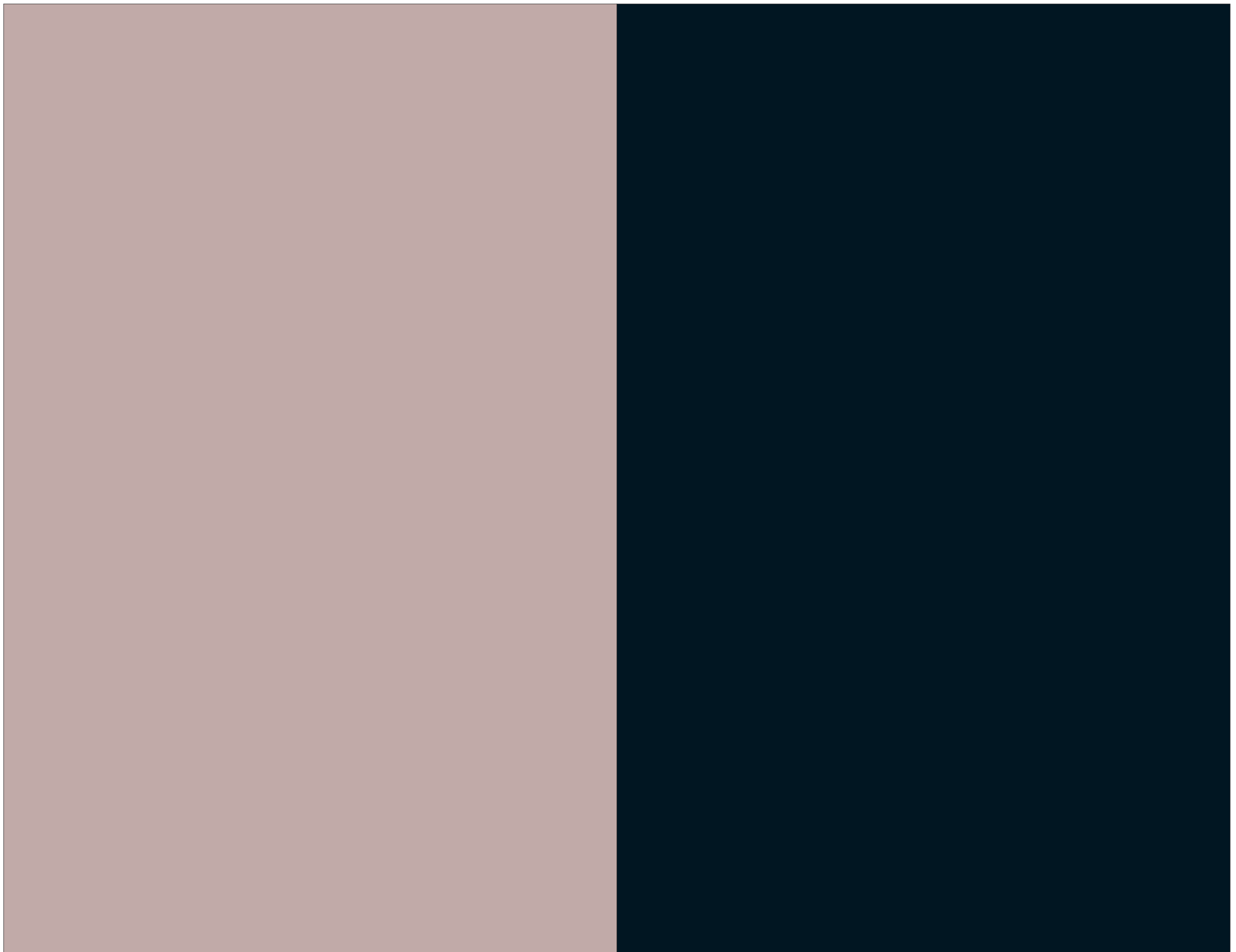
- Slash and burn farming
- Mining
- Deforestation, illegal logging activities
- No permit to be used in transporting non-timber forest products
- Natural calamity
- Climate Change (eg. long dry season or rainy season)

- Training on sustainable, hygienic harvesting & quality control
- Information dissemination campaigns (comics)
- Technical assistance (including permitting and policy reform support)
- Infrastructure support for setting up processing facilities linking up capital and packaging & marketing

### Plans

- Sustainable and proper harvesting through training of other communities (e.g. proper harvesting, processing, quality control) to ensure or increase supply of honey during harvesting season
- Source enough working capital for next year's honey flow
- Make a business plan
- Distribute share of community from delivery of honey products

*Maraming salamat po!!!*



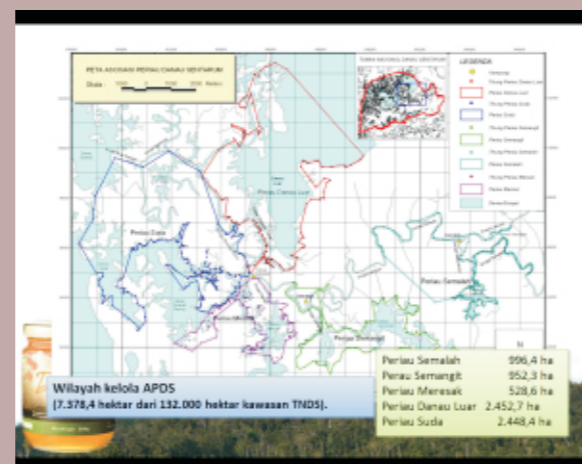
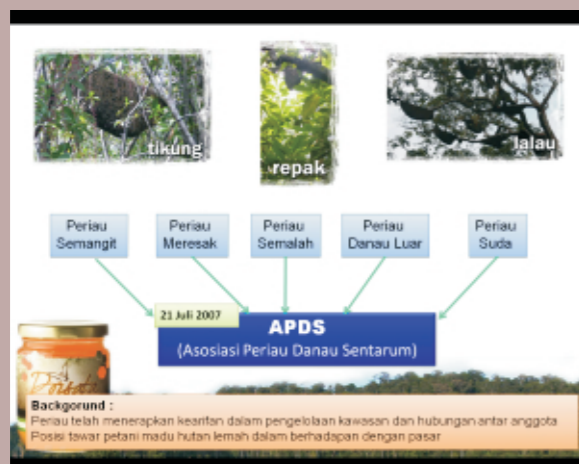
# from the forest gate to the sophisticate market

## "DORSATA" the Organic Forest Honey case

Presenting by  
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on behalf of  
Forest Honey Producer  
Indonesian Forest Honey Networking (JMHI)  
Dian Niaga Jakarta the Social Enterprise

Madhu Duniya  
Andhra Pradesh, India  
27 - 29 November 2007



Tahun 2007/2008, 10 periau akan bergabung dengan luas wilayah kelola sekitar 20.000 ha

- Periau Tempurau
- Periau Telatap
- Periau Pengumbang
- Periau Nanga Sumpak
- Periau Pemerak
- Periau Lubuk Kelekati
- Periau Lubuk Pengail
- Periau Belibis Panjang dan Pendek
- Periau Pulau Majang
- Periau Lupak Mawang

**Pemasaran 2006-2007:**  
Sebesar 4,3 ton madu hutan organik  
Harga di tingkat anggota Rp 25.000/kg  
Harga di tingkat Asosiasi Rp 28.000/kg

### Tantangan & Hambatan

- Rencana pembangunan pemerintah yang mengabaikan aspek kelestarian lingkungan
- Rencana HPH di sekitar TNDS, seperti di hulu sungai Leboyan
- Rencana pengembangan perkebunan sawit di sekitar TNDS, seperti di perbatasan serta di lintas utara dan selatan
- Tidak adanya modal kerja
- Beberapa Periau masih mementingkan periaunya masing-masing

### COMMUNITY Roles

- to apply hygienic processing
- during harvesting : slicing method - not hand squeezing
- post harvesting : filtering with nylon mesh

### COMMUNITY Roles

for packing use white and food grade jerry can

make a tag in every jerry can about :

Honey collector

Area Code

163

RIAK BUMI

weight

20 KG

Date of Harvesting

23-5-2007

Color

ORANGE KEMERAHAN

Taste

Nectar / Flower

### COMMUNITY Roles


meet JMHI's standard

water content 24% max


never heating the honey to prevent HMF damage

## Supporting NGO

- harvesting information to DNJ at least 3 months before harvesting season
  - color and taste of the honey
  - quantity (in ton) estimation
- base on those information DNJ will make a purchase order
- bank account for transfer money
- term of payment :
  - 50% advance payment 30 days before delivery
  - 50% balance payment 15 days after delivery
- transport cost to be borne by DNJ
- quality control
  - product : make sure community do the right things
  - packaging and tag
  - storage
  - delivery





## FOREST HONEY NETWORK INDONESIA



<b>1. WEST KALIMANTAN</b> TN DANAU SENTINGUNG MEAK RUMAH FOUNDATION 33 ton per year KRITAPANG UDT (Yayasan Diao Ternu) 1 ton per harvest time	<b>2. EAST KALIMANTAN</b> BIRKUI FORUM ADI, SAMARINDA 20 ton per year KRIDANG PAHJ PZR 1.5 ton per year	<b>3. SOUTH EAST SULAWESI</b> ALEHAA YASOTA 22.5 ton per year	<b>4. SOUTH SULAWESI</b> LUVUK UTARA YBS 20 ton per year
<b>2. CENTRAL KALIMANTAN</b> AIR HITAM COMMUNITY YAKOMSU 35 ton per year	<b>4. WEST KALIMANTAN</b> MARATUS LPMA 11 ton per year	<b>7. RIAU</b> TN TESSONOLO FORUM TESSONOLO 33 ton per year	<b>8. SUNDAWA</b> SUNDARA JHMS 20 ton per year

## Roles of JMHI

- facilitating organic certification
- national annual meeting
- workshop : new product & new technique

## DIAN NIAGA Roles

- reprocessing and finish packaging
  - filtering
  - reduce water content (dehumidifier)
  - bottling
  - labeling
  - sealing
  - packing in carton
- physical handling
  - port to port
  - port to door
  - door to door
- promotion and advertising
- match making - contract



## BACK GROUND

There are big potential of forest honey (Apis dorsata) in Indonesia

Forest honey produces from relatively good condition forest area that protected by local communities surrounding the forest

Alternative solution to de-forestation problems in Indonesia

As an NTFP, the utilization and management of Apis dorsata (forest honeybee) is very important in protecting the sustainability of the forest and the environment

Biggest problem is low quality and quantity of the honey marketing





## Roles of JMHI

- training of sustainable harvesting system
- training of hygienic processing
- training of good manufacturing practice





## DIAN NIAGA Roles

### brand strategy

- DORSATA for high end class
- MADU HUTAN for medium class
  - 280 gm
  - 1200 gm
- C brand for lower income (taxi driver)










## Roles of JMHI

- training of basic accounting
- training of basic marketing
- organize exchange visit amongst JMHI's members




## Roles of JMHI

- conduct on the spot visit for inspection and evaluation
- technical support
- information via : bulletin, website, mailing list

## HEALTHY CHOICE

New way of enjoying life in the forest...

RANCH MARKET

SOGO

CARREFOUR  
HERO  
GIANT  
HYPERMART  
Blue bird taxi




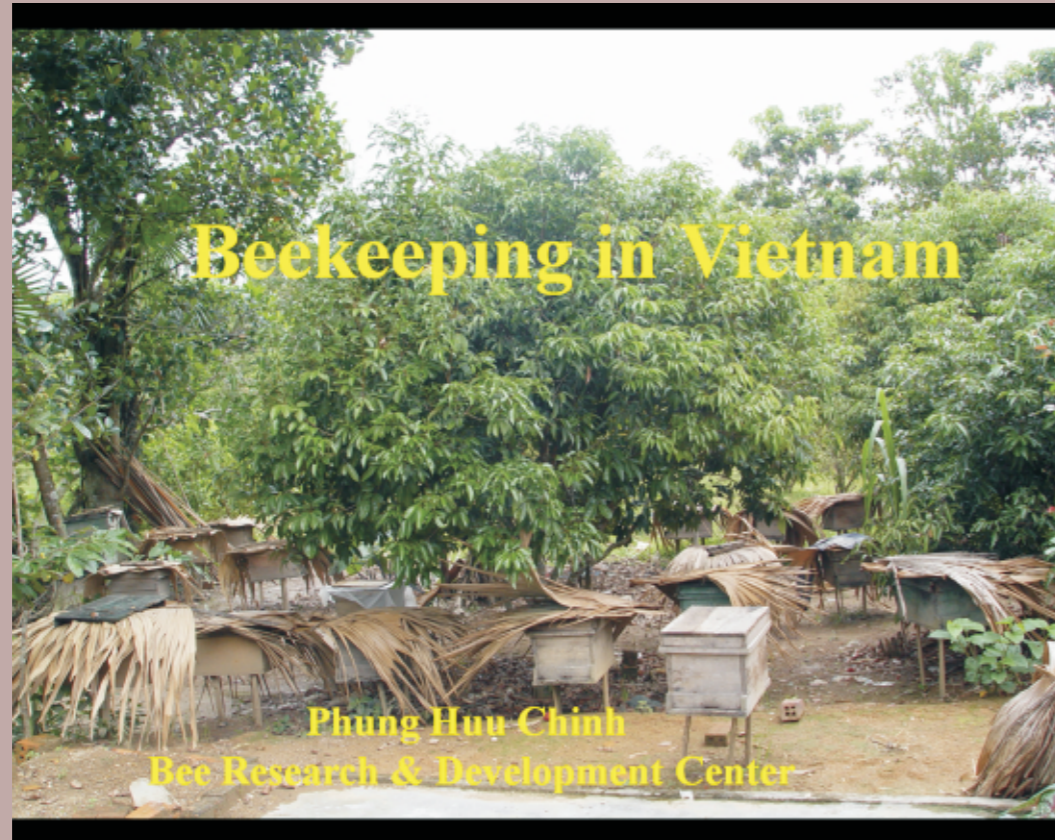

The best thing about this jar of honey has nothing to do with honey

*Dorsata Honey, Making Lives Sweeter.*




Thank You





### 1. Introduction

- ▶ Traditional beekeeping with *A. cerana* existed for a long time.
- ▶ In 1960s, the modern techniques were introduced to the north of Vietnam.
- ▶ *A. mellifera* bees were introduced to the south.
- ▶ In 1985 Vietnam started exporting honey.
- ▶ From 1990 honey quality has been improved, beekeeping developed, export expanded.
- ▶ In 2002 Vietnam exported 14,500 mt of honey.



### 2. Honey bee species in Vietnam

There are six honey bee species in Vietnam:

- ▶ Giant Asiatic honey bee *Apis dorsata*
- ▶ Giant rock bee *Apis laboriosa*
- ▶ Dwarf bee *Apis florea*
- ▶ *Apis andreniformis*
- ▶ Asian bee *Apis cerana* Fab and exotic bees
- ▶ European bee *Apis mellifera*
- ▶ Honey production is mainly harvested from *A. mellifera* and *A. cerana*.





### 3. Main floral sources

There are more than 100 nectar resources in Vietnam

Some main plant species such as:

- ◆ Rubber- *Hevea brasiliensis*
- ◆ Coffee - *Coffea robusta*
- ◆ Longan *Euphorbia longana*
- ◆ Rambutan - *Nephelium lappaceum*
- ◆ Litchi - *Litchi chinensis*
- ◆ Spanish needle - *Bidens pilosa*
- ◆ Eucaliptus
- ◆ Cashew *Anacardium occidentale*

Table 3: World honey production

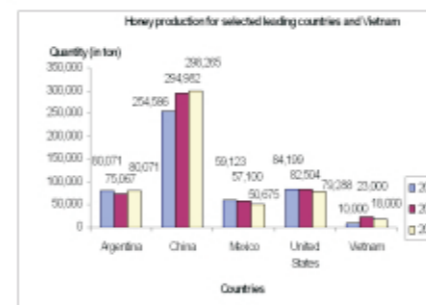


Table 4: Changes in number of *A. cerana* & *A. mellifera* in Vietnam

Unit: 1,000 colonies

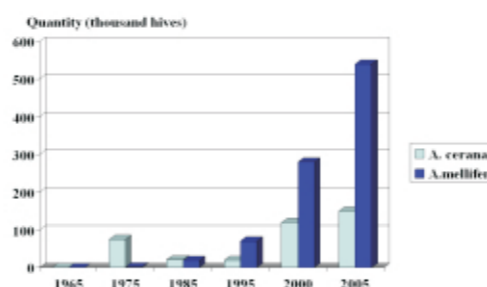
	1965	1974	1985	1995	2000	2005
<i>A. cerana</i>	1.5	74	22	50	120	160
<i>A. mellifera</i>	1.5	3	20	70	280	529

- 1974 sacbrood disease occurred in *A. cerana*
- Since 2002 number of *A. mellifera* colonies increased very fast.

### Main floral sources



Table 5: Changes in number of *A. cerana* & *A. mellifera* in Vietnam



### The challenges to Beekeeping Development

- Varroa & Tropilaelaps mites, Nosema- *A. mellifera*
- Sacbrood, European foulbrood - *A. cerana*;
- New dead adult diseases cause by bacteria;
- Pesticide hazards;
- False honey;
- Antibiotic residues in honey;
- Deforestation reduced nectar resources and nest making places of *A. cerana*, *A. dorsata*.

Table 1. Honey production and exportation from 1985 to 2005

Year	1985	1990	2000	2002	2003	2005
No. of Colonies (thousand)	80	150	400	600	672	689
Honey production (ton)	500	1,500	8,000	19,000	23,000	18,000
Honey export (ton)	50	800	6,000	15,700	20,571	14,820

Table 2: Honey production in Viet Nam



Source: Data from GDC

### II. Rafter beekeeping in Vietnam

- Submerged *Melaleuca* forest of Ca Mau province, southern Vietnam.



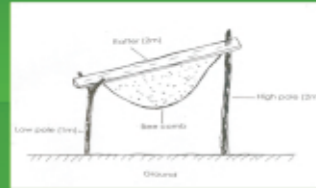
### Rafter beekeeping with *Apis dorsata*

- Trees in *Melaleuca* forest have thin branches, so colony chooses the rafter to build its nest.
- Rafters are put before the *Melaleuca* tree start to bloom.
- This method allows Beekeepers to harvest 2-3 times from one colony.
- Bees and brood combs are safe



#### What is rafter?

- The rafter is a tree trunk about 2 m in length and 10-15 cm in diameter.
- It is placed on two vertical poles, one pole is about 2m high and the other 1 m high.
- The rafter therefore slopes at an angle 20-30° to the horizontal.



#### Putting rafter

- Rafters are set up in December
- Upper end of the rafter is faced to open air.
- One beekeeper owns 30-50 rafters.
- They check their rafters every 2 or 3 days and know when the first harvest taken.
- About 50% rafters occupied by swarms.

#### Leave brood part for bees return and rebuild



before

nowadays

#### Using smoker to drive bees away for preventing forest fire



#### A rafter with bee colony



#### A mature comb with sealed honey cells



#### Harvesting practices

- The first harvest can be taken within 3-4 weeks after the bees' arrival.
- Torch is made from reed and fresh *Melaleuca* leaves or *Ficus altissima* root, and now smoker is used for preventing forest fire.
- Harvesters smoke to colony to drive the bees all off from the comb.
- Cut pollen storage part then the Honey portion.
- Before, they cut 2/3 of brood comb, now they leave it.
- Harvest is done quickly within two minutes
- The bees quickly turn back and rebuild the upper end of the comb.

#### Making smoke



Thank you



- The next harvest is after 2 weeks
- Each nest is cropped 2-4 times per season
- The yield per harvest is about 4 kg of honey
- Honey is collected during two major seasons
- Honey comb is collected in metal and plastic containers.
- At home, pollen and brood parts are removed
- Before, honey comb is squeezed by hand and storage it in earthenware vessels.
- Now honey comb is cut into small piece and put on thin cloth bag hang on, honey will drip through.
- Wax is melted in boiling water.
- In the south of Viet Nam 100 tones of honey is harvested from rafter beekeeping.

#### Honey and brood combs are seperated



