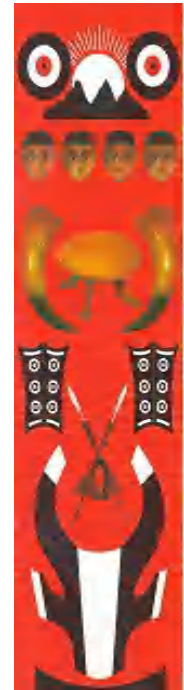
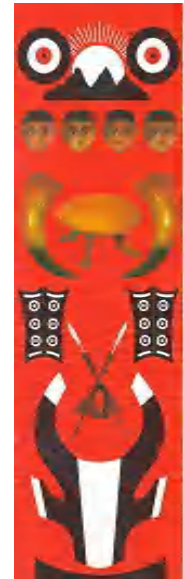


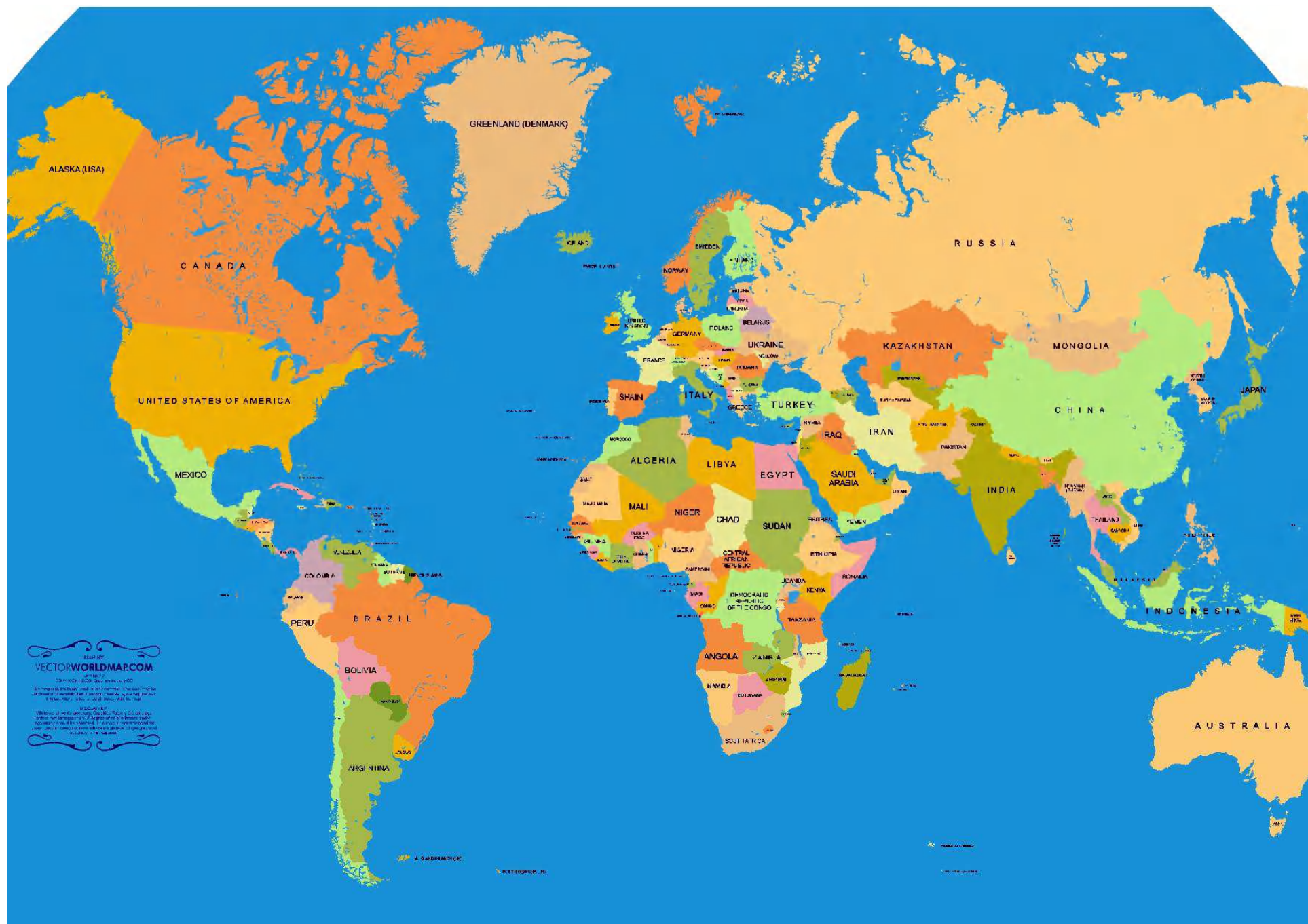
# **NAGALAND BEEKEEPING**

**&**

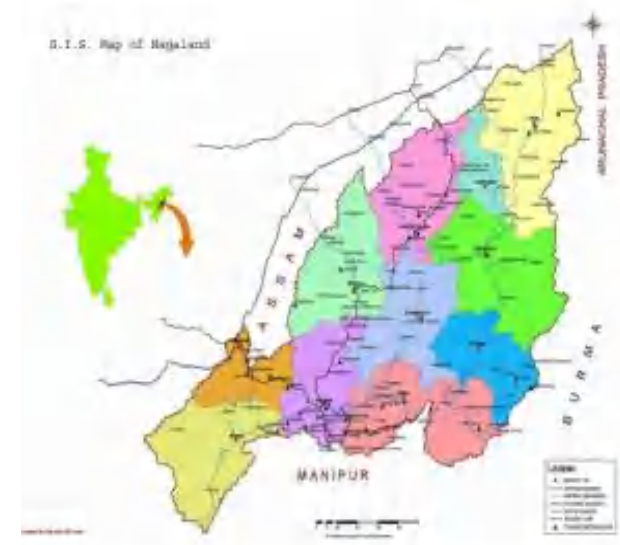
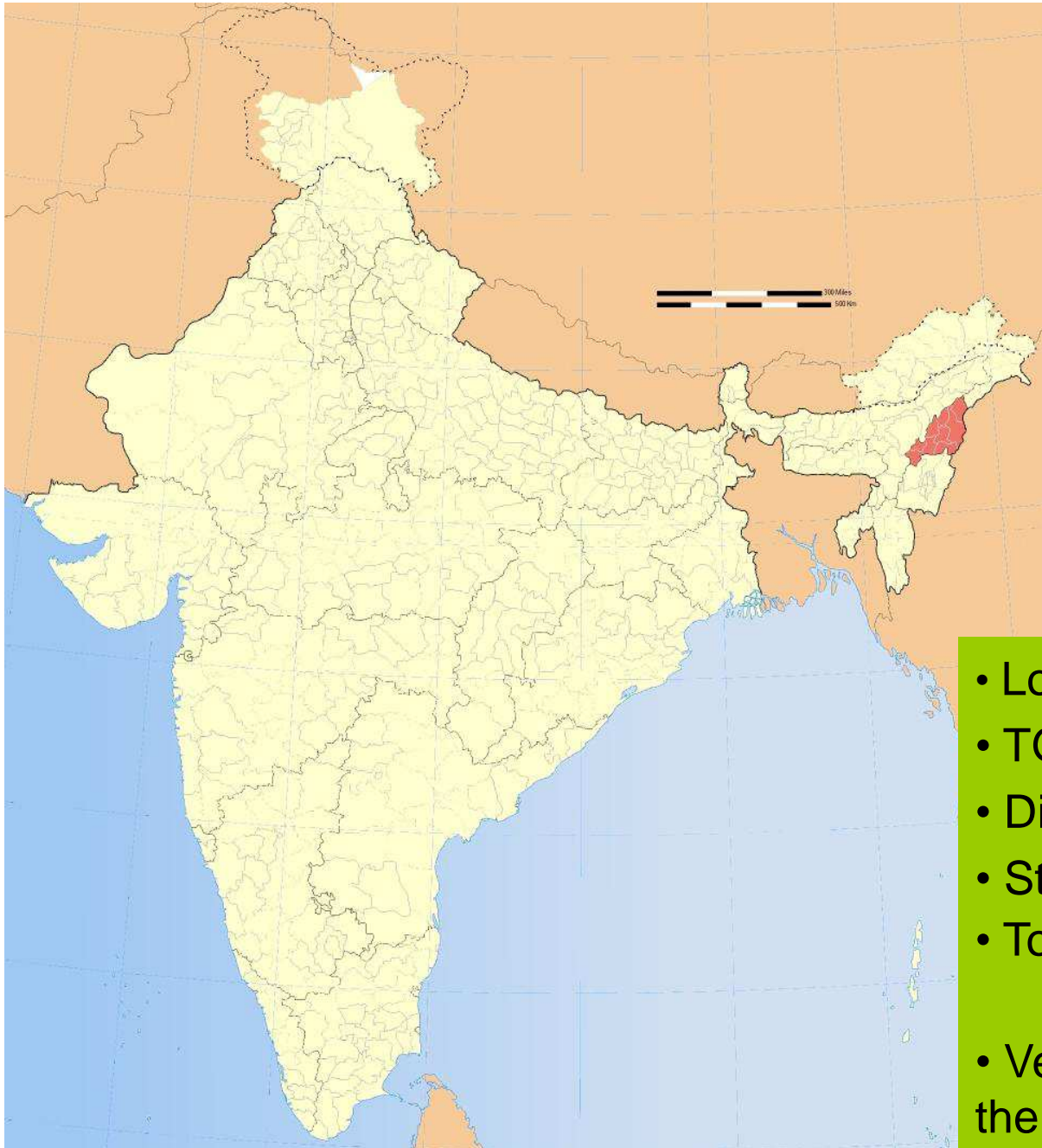
# **HONEY MISSION**

**(India)**





## NAGALAND AT A GLANCE



- Located : Extreme NE India
- TGA : 16,579 Sq. Km
- Districts : 11
- State Capital : Kohima
- Topography: Lies in temperate zone; and mountainous
- Vegetation: Botanically one of the 'Hot Spot' regions in India.





- Population: 2 million
- People: 16 major tribes, each having their own distinctive dialect, custom and traditions
- Language: English (official), Nagamese and local dialects
- Literacy Rate: 80.11%
- Per Capita Income: US\$ 450
- 80% of the population live in villages.
- Livelihood Pattern:  
Agriculture (63.03%). Other activities are animal husbandry, handloom, handicrafts, black smithy, and other small scale & cottage industries.



**The tribal Nagas &  
bees have been  
coexisting in  
perfect harmony  
since time  
immemorial**

**Their close link is  
synonymous to  
linking ecology with  
livelihoods**





# POTENTIALS

- Rich biodiversity
- Ideal climate
- Vast bee foraging areas from
  - Forests
  - Orchards
  - Plantations
  - Field crops
- Negligible use of pesticides in crops
- Vast scope for producing organic honey and pollen for the world market



Lush vegetation around the village





## Rich traditional beekeeping practice & knowledge





## Easy availability of wood & skilled carpenter





**Dense forests & steep escarpments provide  
natural resting place for rock bees**





## Home to many honeybee species

*Apis cerana*



*Apis florea*





*Apis laboriosa*/  
*dorsata*



*Trigona* &  
*Melipona* spp.  
(stingless bees)



- Potential to keep at least 3 million colonies.
- Can produce at least 15,000 MT of honey & 100 MT wax annually
- Generate an income of Rs. 500 crores (US\$ 100 Million) per annum.





# STATUS OF BEEKEEPING TILL RECENTLY



- Beekeeping – An age old tradition, practiced in unscientific & crude method
- Lack of proper bee management practices
- No application of bee pests and disease control measures





- Reared in simple boxes, tree trunks, logs, bamboos, underground etc.
- Lack of extension coverage
- Lack of research undertaking







- Unhygienic harvesting and handling of honey
- Unorganized marketing and lack of market facilities
- Honey production (2007)  
: 110 MT





- Isolated  
beekeepers
- No access to  
credit facilities
- Limited  
investment, low  
production
- No coordinated  
action in the sector





# NAGALAND BEEKEEPING & HONEY MISSION (NBHM)

- Launched in 2007-08
- To implement programs & policies for promotion and development of beekeeping in the state.
- Strong Government policy support
- Team constituted by pooling personnel from line departments
- All activities are implemented in a mission mode



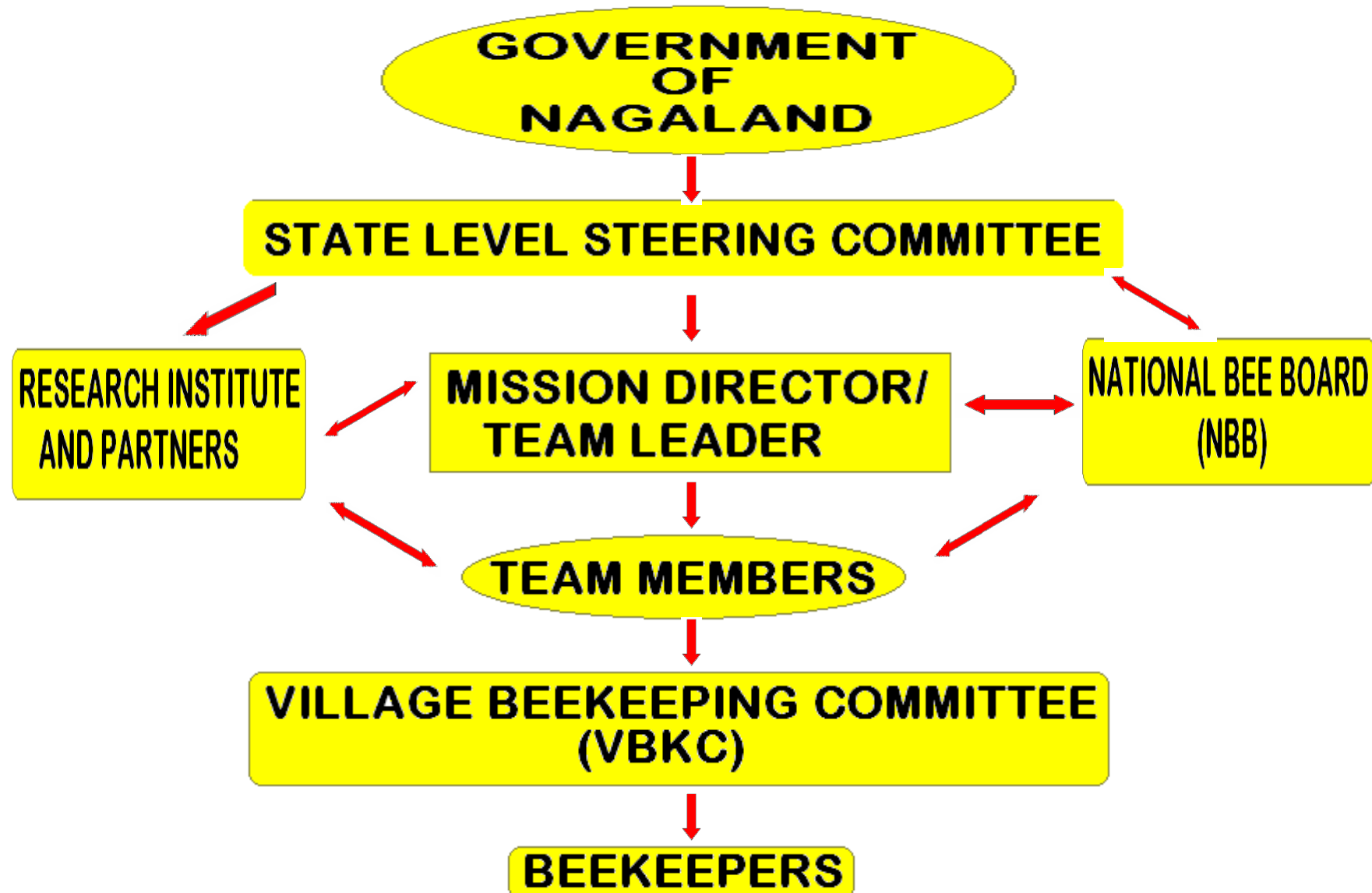




**THE NBHM TEAM**



# ORGANOGRAM OF NBHM





# OUR VISION

- *A transformed Nagaland of **prosperous people leading sustainable livelihood** with a vibrant economy that is self reliant, resulting in peaceful and harmonious atmosphere based on equity.*
- *There are agro-based industries competing in the global market that has been catalyzed **through apiculture**, biodiversity conservation and environmental protection.*
- *Nagaland is internationally recognized as the **knowledge centre for indigenous bees and its development**.*
- *A place where there is **happiness everywhere**.*

# OUR MISSION

- **To promote** scientific beekeeping management practices and value addition by creating awareness and imparting training for skill and knowledge
- **Research undertaking** to prepare a menu of best practices on all aspects of apiculture
- **Create production** zones by involving all section of people, especially in rural areas
- **Strategic focus** on industrialization and creating linkages with national and international market that is demand driven
- **Work with** the govt. to evolve policies that strengthens our approach
- **All these** shall be achieved with a participatory approach in a mission mode.



# OBJECTIVE

To create a roadmap for promotion and development of beekeeping and implement programs and policies which are aimed at fulfilling the economic, social and environmental objectives through beekeeping and honey enterprise.

# STRATEGY

- **POSITIONING STRATEGY**

Beekeeping as a natural choice of activity; and honey as a daily food item.

- **STRATEGY:**

The strategy of the mission is focused on 3 major areas namely-

- Capacity Building, Survey & Studies
- Apiculture Development and promotion.
- Industry Service and Marketing



## **SUPPORT PARTNERS**

- **State Government**
- **North Eastern Council (NEC), Govt. of India.**
- **TRIFED, Ministry of Tribal Affairs, Govt. of India.**
- **Sir Ratan Tata Trust**
- **National Bank for Agriculture & Rural Development NABARD – (RIF, CDA)**
- **National Bee Board (NBB)**

# ACTIVITIES

- Capacity Building.
- Survey & Studies
- Publicity & Extension
- Technology advancement & development
- Post Harvest Management & Quality Control
- Market infrastructure and support



## TARGET

Activity	Target by year 2020
Basic training	1000
No. of people to be trained	30000
Hives to be provided	400000 Nos.
Api Village/VBKC to be formed	1000
Honey production (State's overall)	5000 MT



## CAPACITY BUILDING TRAINING ACHIEVEMENTS

- Sensitization programs : 25 Nos.
- Basic BK Training imparted : 125
- No. of people trained : 5000 Nos.





Bee boxes  
being  
reached  
to remote  
villages





- VBKCs are Formed (106)
- No. of beekeepers so far : 2500
- Bee boxes are distributed to trained BK (25000)
- Present production of honey : 300 MT per annum





## Advanced training for Trainers - Team Members being trained





## Undertaking Surveys & Studies of bees



The Team at different locations of study visit





## Regular Publications & Documentations

Newsletter,  
Beekeeping manuals,  
promotional/education  
al literatures through  
brochures, calendar,  
posters, hoardings,  
documentaries, Radio  
talks, TV etc.



## PARTICIPATION IN EXHIBITIONS DURING IMPORTANT EVENTS









Top Left & Right : A section of Honey Fest 2010

Right : Honey Sales of Local Beekeepers





# IMPROVED LOCAL TECHNOLOGY



A Bee House with the beekeeper (Above)  
Inset (Left) : Inside of the bee house



## Building upon the traditional practices



Below : Concrete Hive for underground beekeeping



Improved stingless bee hive



## Bee chambers with thermocol boards for warmth







**Encouraging Innovative ideas –  
Different hives of Stingless  
bees developed by beekeepers**









**A Backyard Modern Apiary**



Support to  
Rock Bee  
Honey  
Harvesters







- Common Facility Centres established : 17 Nos.





# Post Harvest Management & Quality Control

Honey processing unit at Dimapur



Honey being tested for AGMARK  
Certification

Processed Honey ready for market



# GENERAL OBSERVATION

- Marked increase in people's awareness on the importance of bees & beekeeping
- High demand for beekeeping training & bee colonies
- Organized beekeeping replacing traditional honey hunting
- Increase in consumption & local demand of honey
- Observed syndrome
  - Affect of Climate Change taking a toll on honey bees
  - Loss of habitat diversity
  - Threat of Predators



## LEARNINGS

- Rural people swear by traditional knowledge & practice, as it has stood the test of time.
- Traditional beekeepers are found to learn fast & responsive to modern method.
- Beekeeping can be an income-generating activity. However, quantifying and generalizing the profits is extremely difficult for various reasons :
  - Skill of the beekeeper
  - Some places are more suitable than others
  - Honey harvest vary from year to year
  - Very difficult to take absconding into account
  - Some strains of bees are better than others

- The financial input with modern beekeeping is quite high.
- Subsidy culture is still inherent. Require strong motivation to erase this mindset.
- The initial costs for the farmers can be decreased by subsidizing the equipments or giving them as incentives.
- It is not necessary to focus only on beekeeping with Modern hives, but concentrate on improving traditional beekeeping.



## CHALLENGES

- Blending the strong traditional practices with scientific application to ensure sustainability
- Inherent subsidy culture – How to change people's mind set.
- Beekeeping of our indigenous bee species to be commercially successful.
- Addressing the issue of climate change adaptation mechanism.

## **The Way Forward .....**

.... to accept new challenges and attune ourselves to address local needs and aspirations through the lessons learnt; and to continue our task with renewed vigor to accomplish the Mission's objective.



# WELCOME TO NAGALAND

