

**Sustainable Management of Natural
Resource in Central, Vietnam**



Report

Application of Value Chain Approach for Development of Honey Beekeeping in Tuyen Hoa District, Quang Binh Province

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Table of Content

| | | |
|----|---|----|
| 1. | INTRODUCTION AND SUMMARY | 1 |
| 2. | THE VALUE CHAIN CONCEPT | 2 |
| | 2.1. Concept | 2 |
| 3. | PRACTICAL IMPLEMENTATION STEPS | 4 |
| | Step 1 - Selection of value chain: Selection of Honey beekeeping VC in the two Districts of TH & MH | 4 |
| | Step 2 - Value Chain Analysis for Honey beekeeping in the two Districts of TH & MH | 6 |
| | Step 3 – Formulation of strategic solutions for Value Chain | 9 |
| 4. | STRATEGIC SOLUTIONS FOR THE DISTRICTS TUYEN HOA AND MINH HOA (WORKSHOP RESULTS)..... | 11 |
| | 4.1. Tuyen Hoa district ? | 11 |
| | 4.2. Minh Hoa district | 12 |
| 5. | NEXT STEPS – IMPLEMENTATION OF ACTION PLANS | 13 |

Annex

Annex 1 Honey Market Analysis

1. INTRODUCTION AND SUMMARY

Sustainable Management of Natural Resource in Central, Vietnam (SMNR-CV) is followed up of 6 year Integrated Food Security Project (GTZ - IFSP QuangBinh, implemented in the two pilot districts of Tuyenhua and Minhhoa, Quangbinh Province, from 1996 to 2002). The overall goal of SMNR-CV is to improve the living conditions of the local population in the mountains areas of the project region, in accordance with a stabilization of the ecology. The project purpose and the intended impact of the project is focused on capacity building, namely that the stakeholders in the project region are able and effectively manage their natural resources in a sustainable way.

The general implementation strategy is to consolidate the achievements of the IFSP and develop its outputs further in the fields of i) community-based village and commune development planning (VDP), ii) the application of appropriate farming systems, iii) community-based forest management (CBFM), and iv) the promotion of alternative income opportunities from the marketing and processing of agricultural and non-timber forest products (NTFP).

After more than one year of the project implementation, under the framework of supporting income generation opportunities and its major activities for the target groups (result No. 4.), the SMNR-CV has supported these groups in the application of various approaches to identify and develop the solutions towards their income generation. The implemented activities are organizing "Local Economic Development (LED) workshops at provincial and district levels, conducting pre-feasibility surveys for potential products such as bee honey, mulberry and silkworm, bamboo and rattans ... through which respective technical trainings have been organized in order to support increased productivity and up-scaled production of these products.

It needs to be considered and worked out solutions on how to make the poor get involved and how they can get benefits from the development of the market-oriented economy in general and of specific business in particular; how to increase the value of the available products for producers. Thus, the SMNR-CV has applied the "Value Chain" - a methodology has been using by various development organizations. It allows reviewing and evaluating a product or a specific business from various chains, levels and aspects; thereby it is able to find out and identify the limits and problems to the production, processing and consumption of the product as well as the competition capacity of enterprises getting involved in that business or product. Based on these, strategies and action plans can be set up to enhance the competition capacity and solutions for increasing the added value for local enterprises also be worked out by stakeholders.

Based on existing experiences (analysis and assessment of some previous reports on the feasibility and potential of the honey beekeeping), the project has selected the production of bee honey in Tuyen Hoa and Minh Hoa districts as a potential Value Chain for analysis and support for its development (based on the). In the period of November 2005 the project carried out the collection, processing and analysis of primary and secondary data, group discussion and analysis of bee honey value chain, analysis of problems to the product consumption and competition capacity of local enterprises (results in Annex 1). Then, an official workshop was organized on the 6th December 2005. Objective of the workshop was to share the information, enhance the systematic understanding of all Value Chain links, role and relation of the stakeholders through which to encourage their participation and discussion for additional information as well as agreement upon related strategies, solutions and plans supportive for the Value Chain of honey beekeeping.

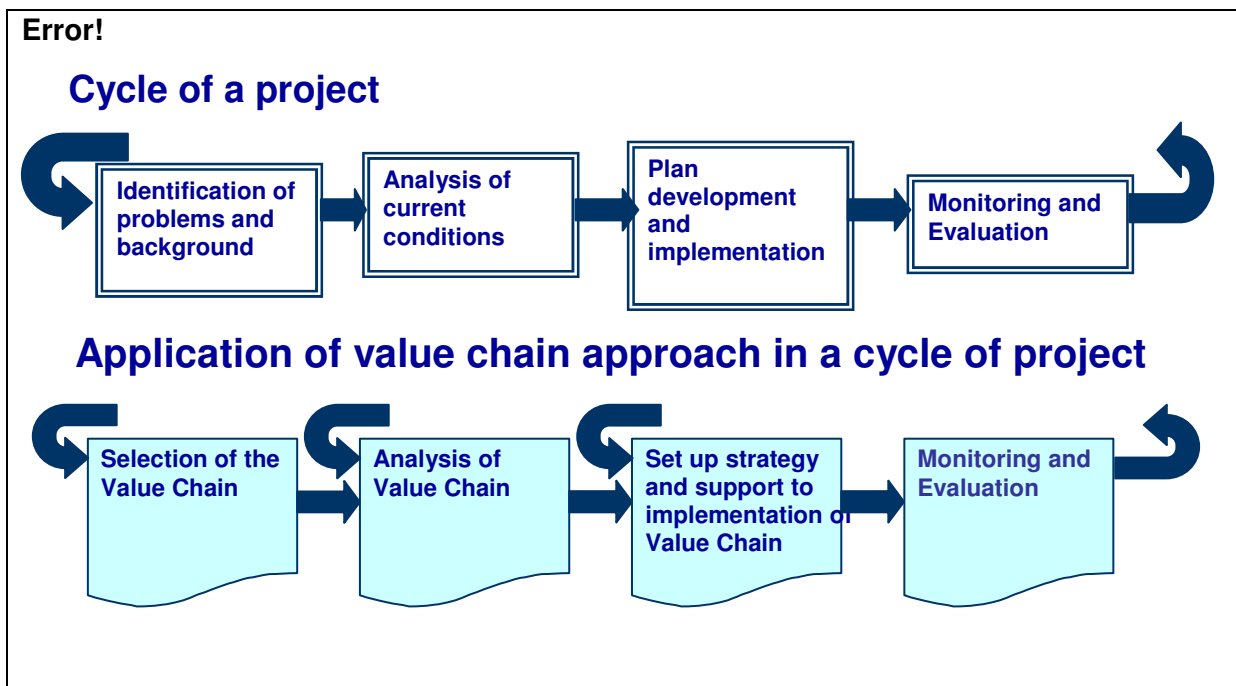
2. The VALUE CHAIN Concept

2.1. *Concept*

The value chain means

- the sequence of productive processes from the provision of specific inputs for a particular product to primary production, transformation, marketing and up to final consumption
- an arrangement in which every step is organized logically and effectively such as the link and coordination between the producer, manufacturer and businessman and deliverer for a specific product
- an institutional arrangement linking and coordinating producers, processors, traders and distributors of a particular product

The application of Value Chain Approach is a part of implementation cycle of a development project as indicated below:



The fundamental goal of the Value Chain Approach is “pro-poor growth” (PPG). The PPG concept builds on the basic premise, that only economic growth and the market success of poor people provide a sustainable solution to the poverty problem. Wherever poor people are able to participate in product markets, e.g. in the markets for food or labour-intensive manufacturing products, promoting the respective value chains can help lifting people out of poverty.

The following slide presents two standard definitions of pro-poor growth, both relating to an increasing income of the poor. While income poverty is the focus of market-oriented development, other poverty aspects are also highly relevant. Property rights, access to education and social services or political participation are all factors enabling the poor to participate in business gaining a higher income in the future.



What is “Pro-Poor Growth” ?

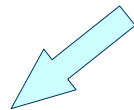
A generic definition:

- Growth is *pro-poor*, when the income of the poorest (e.g. of the lowest quintile) increases more than the average income.
- PPG stresses the need to make the poor participate *directly* in the economic growth, and does not rely on „trickle down“ processes or social transfers



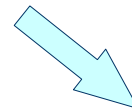
Two dimensions of pro-poor growth

“Pro-poor growth”
= greater employment and income of poor people



Economic growth

= greater *volume* sold,
higher value products
 (“the cake grows”)




Poverty alleviation

= the poor benefit at least equally
or above average from the
income generated (poor get their
“share of the cake”)

3. Practical Implementation Steps


Step 1 - Selection of value chain: Selection of Honey beekeeping VC in the two Districts of TH & MH

So far, all steps mentioned in the project cycle have been followed by the project; however, within the framework of the SMNR-CV – its tasks are to continue and develop the achievements of the IFSP, which had been implemented in the same area from 1996 – 2002 - the selection of value chain for potential products has been done with simplicity and convenience. Based on the information and data of the report on assessment of potential products in the project area, the value chain of honey beekeeping has been screened and selected, under the set up criteria, for considering how the project can support the production.



Selecting a Chain to promote: Generic Criteria


| | |
|--|--|
| <i>Growth potential, competitiveness</i> | <ul style="list-style-type: none"> • (unmet) market demand/growth potential/potential for value-adding • Comparative advantage in national and export markets |
| <i>Poverty reduction potential, social benefits</i> | <ul style="list-style-type: none"> • Potential for income creation, • Potential for employment creation, • Relevance to the poor, social inclusion, SMEs participating • Relevance to women • Social and ecological standards |



Selecting a Chain to promote: Generic Criteria

| | |
|----------------------------------|---|
| Prospects of success | <ul style="list-style-type: none"> • Conducive policy environment • Own initiatives of VC partners, commitment • Readiness for change • Urgency of interventions |
| Outreach | <ul style="list-style-type: none"> • Number of enterprises, no. of households • Regional coverage |
| Programme-related aspects | <ul style="list-style-type: none"> • Relevance to components of programme, demand of partners • Synergies/ linkages/ cooperation with other programmes • Problems that may be addressed by programme, added value & own experience that can be contributed • Relevance to mandated area |

The value chain of bee keeping is satisfied with the criteria: a product with good name in terms of quality, high competition capacity, potential markets in the province and others; it has attracted a high number of labourers who are the poor (with 1.000 households involving in the beekeeping); in order to meet the market demand opportunities can be created for other 1.000 households for involving in this production, generating significant income for them. Extension and development of the honey beekeeping also a way to contribute to the management of local natural resources, especially forest resources.



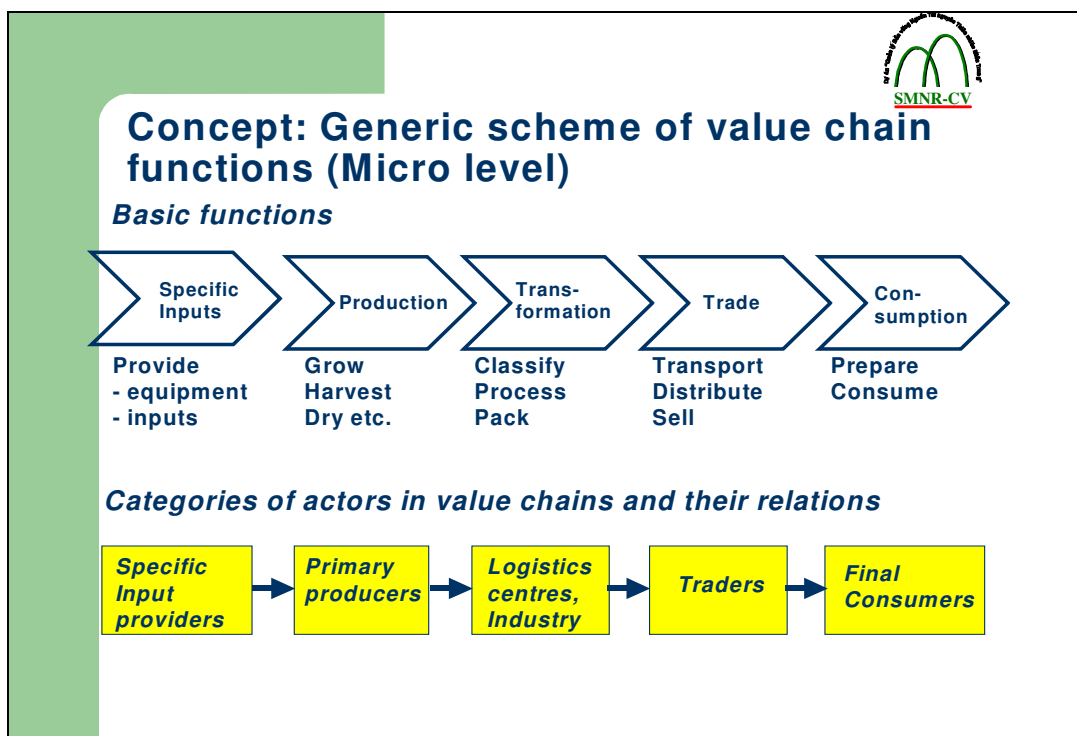
Criteria and reasons for selection of honey chain

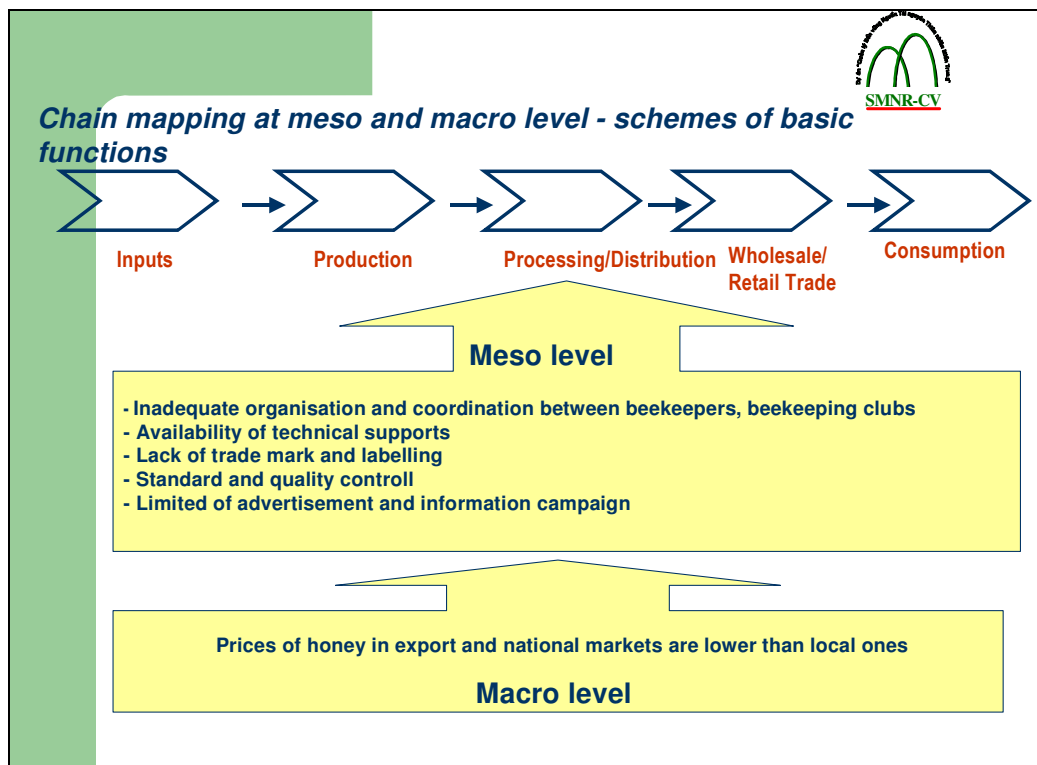
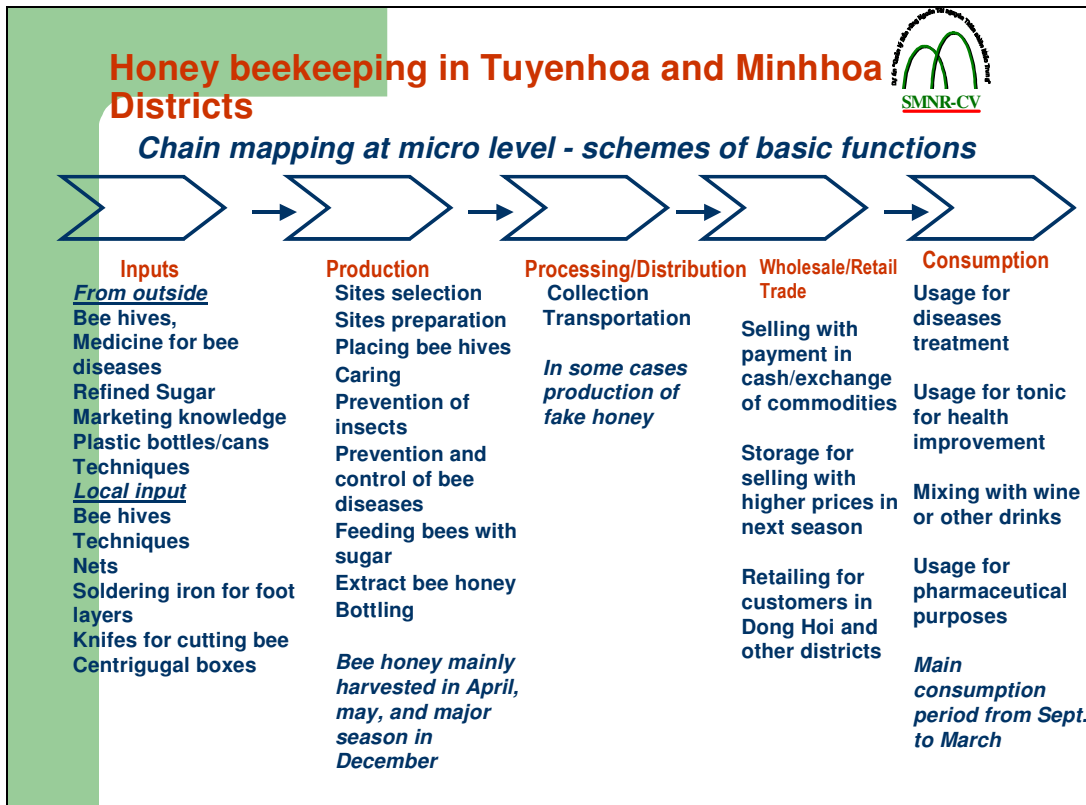
- Currently, involving 1000 households in the two districts
- Good quality, special preferences from customers
- Natural and markets potentials for increasing a scale of production
- High economic effectiveness, high income/ investment.
- Effectively supported by IFSP, SMNR-CV Projects since 1997 up to now.
- People's committee of the two districts referres to as the prioritized activity for long term development in 5 years socio-economic development plan.
- Economic development, poverty reduction with combination of natural resources management

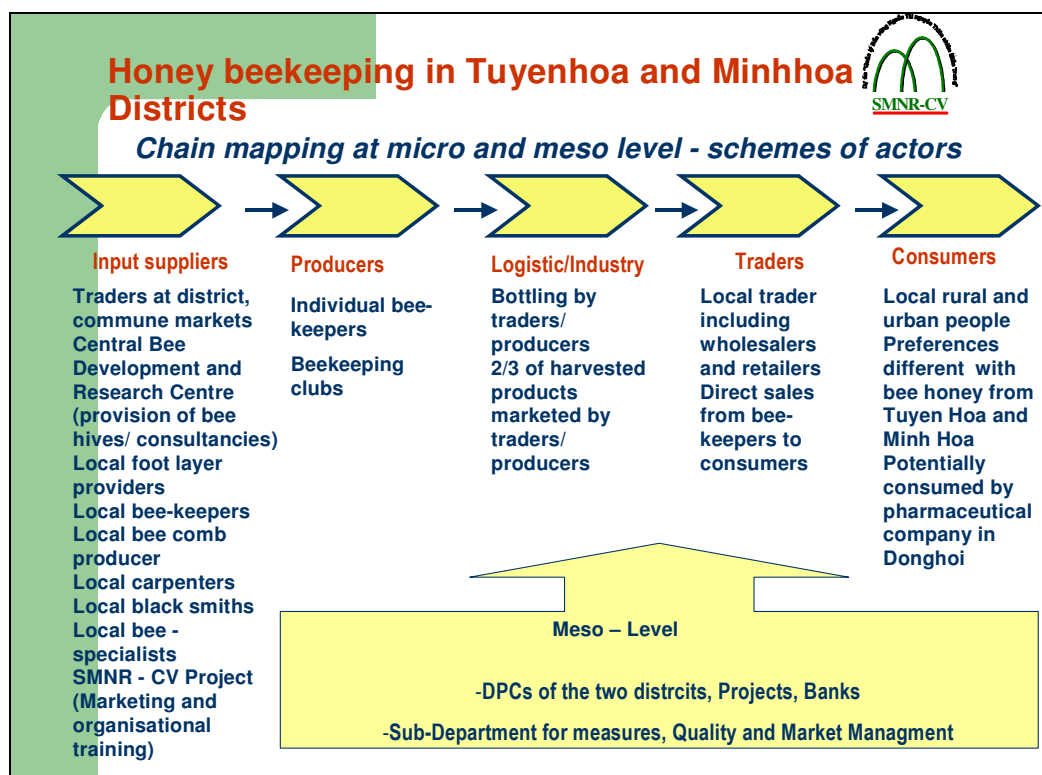
Step 2 - Value Chain Analysis for Honey beekeeping in the two Districts of TH & MH

It needs to be clear about the purpose of analysis for the value chain properly all steps and series of the chain, including progressive process of inputs, production, processing, marketing and consumption. With those clear identifications, it is possible to set up the specific strategy in order to create the added values for the particular schemes steps belonging to the chain, thus increasing its competition capacity.

As of result, the project has built the map of value chain of honey beekeeping in Tuyen Hoa and Minh Hoa district in accordance with different functions in the chain and other coordinations between the actors at both macro and micro levels.








According to the established maps, the project has analyzed and presented relevant comments; the major are: some basic inputs are available and prepared for the production (many of them are made by the local people and others are produced by outsiders but can be supplied by the local. Beekeeping mainly depends on the nature conditions; honey is harvested according to seasons, with two major harvests in a year: one season in solar Aprils and Mays and the other in Decembers. The honey productivity in the two districts Tuyen Hoa and Minh Hoa is about 25-30 tons/year, including that from forests. However, the fake bee honey is still prevailing. Honey is consumed in two ways: the bee keepers sell it for customers who often buy and offer as gifts to others; and the traders collect it from different keepers with big quantity (with payments in cash or exchange with other commodities); the later is more prevailing. Around 1/3 of the bee honey produced in the districts are sold to final customers/consumers right in the districts and 2/3 sold to traders who often keep it to sell it in Dong Hoi city, other districts or other provinces. Some traders purchase and preserve it in a certain time and then sell it with higher price.

Bee honey is used by purchasers as a high-class product, as a direct product or mixed with green tea or wine. It is generally used in cold season, from previous September to March in next year. It is estimated that the consumption of honey in Quang Binh is about 50 tons/year. Apart of honey produced in Minh Hoa and Tuyen Hoa districts, a rather big amount of honey, around other 20 tons, is brought in from other districts of the province (mainly honey collected from forests) and from other provinces that is often sold in pharmaceutical shops. The analysis and identification of honey consumption demand is based on the market study for bee honey in 2000 conducted by the project and also based on the data of honey production and consumption in the nation provided by the Bee Development and Research Centre (BDRC).

Sustainable Management of Natural
Resources in Central, Vietnam



Overview of natural honey production in Vietnam

| Year | Total production | Quantity of exports |
|------|------------------|---------------------|
| 2001 | 10.000 | 8000 |
| 2002 | 17.000 | 14.500 |
| 2003 | 14.000 | 11.500 |
| 2004 | 13.700 | 11.800 |

8

However, the information and data from the report of the project is considered as forecast figures only – which estimates the consumption of bee honey in Quang Binh province is about 80 tons in total/year and the consumption per capita is approximately 50 g/year, higher than that in the whole nation. Whilst the second information resource (statistics by BDR) relating to honey consumption is only quantitative, not reflecting the customers' demands of preferences, purchase price and consumption quantity in specific seasons in a year; however the later resource also provide the honey production and consumption in the other provinces in the whole nation and bee honey export over years. Another capacity also considered here is the demand for processed bee honey using as tonic for the diseased – whose customers are Quang Binh and other Pharmaceutical Company. Additionally, the analysis shows the capacity for diversification of products from beekeeping such as production of bee wax as a material to make candles, harvesting and processing of flower pollen – with these produces sold with relatively high price.

Step 3 – Formulation of strategic solutions for Value Chain

Based in the analysis of the production and consumption in Tuyen Hoa and Minh Hoa districts, the following strategic proposals at intermediary and micro levels have been developed by the project and discussed within the workshop:

* **Stimulation of demands and promotion of consumption:** The consumption has been identified in the province and the potential customers are local people of Quang Binh province where the bee honey from Tuyen Hoa and Minh Hoa districts has seen as a product of good name and image for the consumers. Solutions for increasing consumption includes:

- Organization of sale promotion campaigns, including respective information campaigns on the local television, radio, newspaper and product show at fairs.
- Intensification of product distribution channels by opening more bee honey shops and other products from beekeeping in Dong Hoi and other districts.
- Introduction and selling bee honey at tourist sites such at Phong Nha- Ke Bang.
- Introduction of the bee honey to Quang Binh Pharmaceutical Company for cooperation capacity in production of bee honey nutrient.

* **Promotion and improvement of processing and distribution of bee honey:**

- Stabilize the difference/gap of selling prices for producers through credits of the bee keeping clubs in villages, communes.
- Register label and build up trademark for the product for management of product quality and have its position confirmed in the market.
- Improve the product's design, packaging; diversify the product size and design.
- Diversify products form beekeeping: production of candles from bee wax, harvesting and processing pollen.

*** Establishment of Beekeepers' Association in the two districts:**

The establishment of Beekeepers' Association in the two districts is to addressing the problems at intermediary level which the local beekeepers are to able to solve and do not belong to the functions of authority levels. The Beekeepers' Association should include the functions as follows:

- To ensure the product quality: First, the association members are not allowed to produce fake bee honey; harvesting of bee honey must be at the right time, with adequate techniques to ensure its quality. In addition, the Association is to recommend and collaborate with functional agencies and authorities for prevention and control of fake bee honey production behaviours.
- To promote the consumption of bee honey by information campaigns, marketing and product show at fairs.
- To conduct surveys for market demands for bee honey, assessing beekeeping potentials in localities and conduct trainings of beekeeping techniques for beekeeping clubs, members who have demands.
- Based on the Association, to mobilize funds and apply for credit loans from banks and other credit organizations for development of the honey beekeeping.

4. Strategic solutions for the Districts Tuyen Hoa and Minh Hoa (Workshop results)

Based on the analysis of the market potentials for bee honey of the two districts of Tuyen Hoa and Minh Hoa, respective information about bee honey market collected from different levels, a strategy and solutions for development of honey beekeeping has been formulated in the workshop held on 06/12/2005 at Dong Le town, Tuyen Hoa district.

Participants invited were the representatives for the stakeholders of the honey beekeeping Value Chain from the two districts of Tuyen Hoa and Minh Hoa, 10 persons each: 1 material supplier, 4 beekeepers, 1 bee honey trader, 2 staff from the district Economic Division, 1 staff from the district Planning and Financial Division and 1 from the district Tax Division.

4.1. Tuyen Hoa district ?

| |
|--|
| Overall objective |
| To maintain and develop the beekeeping for honey, build up its trademark for increased consumption of the product. |
| Strategic solutions |
| 1) Promotion of consumption of the product |
| 2) Conduction of trainings on beekeeping techniques |
| 3) Increase of bee hives kept in the district area |

| Action plan | | | | | | |
|--------------------|--|---|---|------------------------------------|------------------------------------|---|
| | Solutions | Activities | Inputs | Implemented by | Time | Related agencies |
| 1 | Promotion of consumption of the product | Establishment of Beekeepers' Association | | | | |
| | | Building up Bee honey trademark through the Association | | | | District Beekeepers' Association |
| | | Information campaign and advertisement of the product | | | | District Beekeepers' Association, Quang Binh Pharmaceutical Company |
| 2 | Conduction of technical trainings | | Local beekeeping trainers | Villagers interested in beekeeping | Feb, Mar, and Oct, Nov every year | DPC and projects implemented in the district |
| 3 | Increase of bee hives | | Techniques of creating industrial bee queen | Big-scale beekeeping households | Before the honey harvesting season | |

4.2. *Minh Hoa district*

| |
|---|
| Overall objective |
| To increase the number of bee hives upto 5.000 by 2010. |
| Strategic solutions |
| 1) Consolidate the beekeepers' clubs for establishment of Beekeepers' Association |
| 2) Increase of beehives |

| Action plan | | | | | | |
|--------------------|---|---|------------------------------|---|--------------------|--------------------------|
| | Solutions | Activities | Inputs | Implemented by | Time | Related agencies |
| 1 | Consolidate the beekeepers' clubs and develop new ones | Establish 25 beekeepers' clubs | | Beekeeping members | 15/12/05 - 12/2007 | Authorities and projects |
| 2 | Increase bee hives | Technical trainings for 200 persons (new) | District beekeeping trainers | Villagers interested in beekeeping, local beekeeping trainers | 11/2005 - 12/2007 | Authorities and projects |
| | | Provision of new bee hives | 500 bee hives | As above | As above | As above |
| | | Provision of centrifugal boxes | 15 pcs | As above | As above | As above |

5. Next Steps – Implementation of Action Plans

Annex 1

Sustainable Management of Natural Resources in Central, Vietnam




Natural honey



Honey Market Analysis

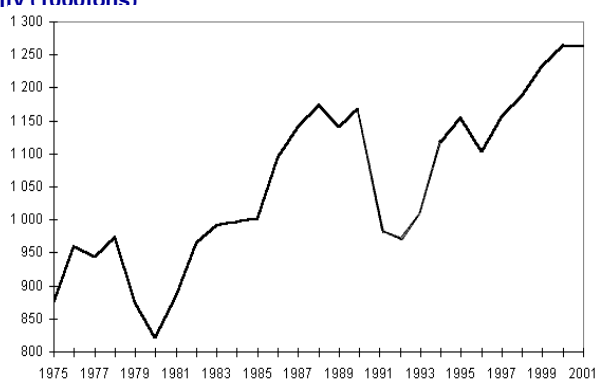
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Sustainable Management of Natural Resources in Central, Vietnam



Overview of production of world natural honey

Quantity (1000tons)



| Year | Quantity (1000tons) |
|------|---------------------|
| 1975 | 880 |
| 1976 | 950 |
| 1977 | 940 |
| 1978 | 960 |
| 1979 | 900 |
| 1980 | 830 |
| 1981 | 960 |
| 1982 | 980 |
| 1983 | 990 |
| 1984 | 1000 |
| 1985 | 1000 |
| 1986 | 1100 |
| 1987 | 1150 |
| 1988 | 1170 |
| 1989 | 1150 |
| 1990 | 1170 |
| 1991 | 970 |
| 1992 | 980 |
| 1993 | 1000 |
| 1994 | 1120 |
| 1995 | 1150 |
| 1996 | 1110 |
| 1997 | 1150 |
| 1998 | 1200 |
| 1999 | 1250 |
| 2000 | 1260 |
| 2001 | 1260 |

2



Some major producing countries

- There are biggest honey producers in the world:
China, USSR, United State, Argentina,
Turkey, Ukraine, Mexico, India, Canada
(ranging from 30 to 250 thousand tons per
year)

3



Importation and Exportation

- Major exporting countries:
 - China, Argentina, Mexico, Canada, Chile,
Brazil
- Major importing countries:
 - United State, Japanese, EU

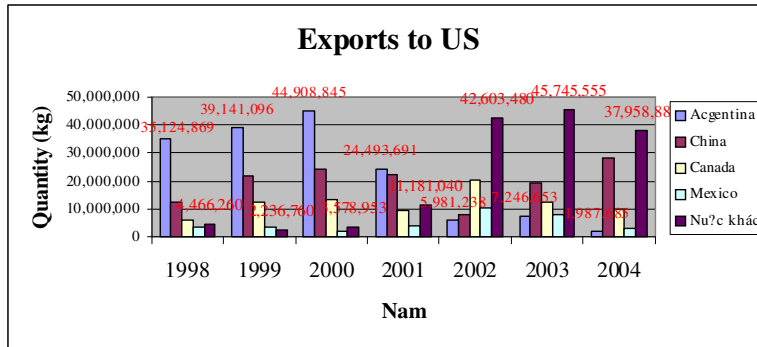


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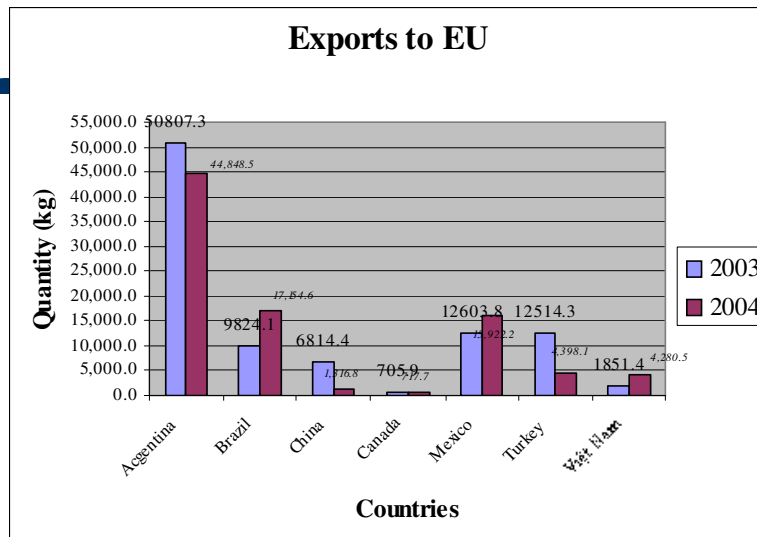


Import and export statistics

5



6





Export prices to different regions

- Average export price to EU is around 1.800Euro/ ton, while Vietnam honey export price is only around 1.330 Euro/ ton.
- Average consumption in importing countries is 200g percapita.

7



Overview of natural honey production in Vietnam

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|------|------------------|---------------------|
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8



Export statistic

- Since 2001, Vietnam has become the exporting country of natural honey with quite stable quantity of around 10.000 tons/ year.
- Exports prices has increased in comparision with the periods before year 2000, how ever export price of Vietnam honey is much lower than other exporting countries, only reach to 1.200 – 1.500 USD/ton in the US and EU markets.
- Average consumption of honey in the nation is merely 30g per capita.

9



Major natural honey producing areas in Vietnam

- Currently, there are about 20 provinces have quite large scale of honey production, including:Đ?ng Nai, Bà R?n, Sông Bé, Tì?n Giang và V?nh Long, Đ?c L?c, Gia Lai ,Kon Tum, Lâm Đ?ng, secondly the northern and Central provinces.
- There are two main species of bees: foreign bee (*A. Melifera*), domestic bee (*A. Cerana*)

10



Honey bee-keeping in Tuyên Hóa and Minh Hóa

- **Natural honey from two main sources:**
 - Beekeepers applying advanced bee-keeping techniques (Domestic species - Apis Cerana) in square wooden boxes, extracting honey by centrifugal machine.
 - Local people go to forest exploiting wide honey (including 3 species of Apis Dorsata, Apis Cerana, Apis Florea).

12



Natural honey in Tuyên Hóa and Minh Hóa

- Advanced beekeeping method was introduced and supported by IFSP since 1997, follow up development by SMNR-CV.
- Involving about 1000 households in the two districts
- Quantity produced increasing from 10 - 12 tons/ year since 1997 up to 30 tons by year 2003, 2004 (including wide honey and bee-keeping).
- Major quantity of honey consumed in QuangBinh province come from the two districts (Estimated consumption volume is around 50 tons/ year).
- There is good reputation from Quangbinh people for natural honey from Tuyenhoa and Minhhoa.

13



Natural honey in Tuyên Hóa and Minh Hóa

- There is belief from users for effects of honey from TH & MH.
- According to results of survey, there are some purposes oriented consumption of honey :
 - 35,8% for diseases treatment
 - 31,3% as healthy foods
 - 32,9% for both purposes above

14



Natural honey in Tuyên Hóa and Minh Hóa

- Local people charge higher price for honey from TH & MH than honey from other provinces, amount of 10.000VND - 15.000VND more for 1 kg.
- How ever, Quangbinh people rarely buy honey from other areas.
- There is seasonal characters of honey consumption, more in cold seasons and less in hotter seasons.

15



Natural honey in Tuyên Hóa and Minh Hóa

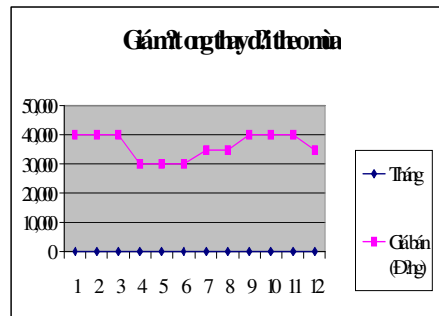
- Honey mainly harvested at two short periods of December and April and May in a year.
- In some cases, people make faked honey.
- Bee-keepers usually sell honey at their houses (90%), some bring honey to sell at commune and district markets.

16



Natural honey in Tuyên Hóa and Minh Hóa

- There is people opinion that honey from beekeeping is not as good as honey from hunting because of feeding sugar.
- There is lower price of honey right after harvest



17



Natural honey in Tuyên Hóa and Minh Hóa

- Honey bee-keeping is mainly organised by individual households, formation of Bee clubs was based on needs of beekeepers for technique exchanging and sharing, also fulfillment of commitments of beekeepers
- There are 30 bee clubs in the two districts.

18



SWOT analysis for honey beekeeping

● Strengths

- Experienced local bees specialists
- High natural potentials for honey bee-keeping

● Weaknesses

- Linkages and coordination between local beekeepers, bees clubs in different communes
- Limited skills of packing, marketing

● Opportunities

- Income of local people increasing
- Trend of increase of honey consumption

● Threats

- Forestation with pine trees
- Many type of other healthy soft drinks

19