The Vietnam-Finland Forestry Sector Co-operation Programme in brief

The Programme started in March 1996 and the first phase will last three years. The Programme is financed jointly by the Governments of Finland and Vietnam. The geographic coverage of the Programme is concentrated in the mountainous regions of Bac Kan Province where forestry is taken as a key potential activity which could contribute to social and economic development. Local population, mainly people from different ethnic minorities, suffer from social and economic problems due to lack of income generating opportunities. At the same time the mountainous regions are facing severe deforestation and forest degradation due to mismanagement and non-optimal use of the resources. The development objective of the Programme is to contribute to sustainable rural development in the mountainous regions of Vietnam, through the integration of forestry activities in the rural land-use and economy. The target groups of the Programme are rural households, ethnic groups, professional personnel at province, district and commune level and in national forestry administration. The Programme strategy is to introduce and disseminate sustainable forest management and other farm-forestry practices as viable alternatives to shifting cultivation and other forms of unsustainable land use. The Programme implementation will be a continuous process of participatory learning and application. The following Programme components form the implementation strategy (i) community development, (ii) capacity building, (iii) dissemination and (iv) monitoring and evaluation. The immediate objectives respective to the above components are (i) established and tested mechanism to assist farmers/forest owners at the village level, (ii) improved capacity of the existing institutions in providing services for forestry extension, (iii) transferred practical experience from the pilot villages/communes to neighbouring areas, province level and finally national level and (iv) established monitoring and evaluation system at different levels. The implementing agencies of the Programme are Department of Agriculture and Rural Development in Bac Kan Province and Ministry of Agriculture and Rural Development, while the People’s Committee of Bac Kan Province and the Ministry of Agriculture and Rural Development are the competent authorities of the Programme. The supporting consultant is Indufor Ltd. in partnership with Enso Forest Development Ltd. and FTP International Ltd.

The team members

Department of Agriculture and Rural Development, Bac Kan province

Mr. Nguyen Van Viet, Programme Director, Director of the Department
Mr. Vu Luan, Programme Secretary, Forest Officer
Mr. Ngo Tan, Accountant
Ms. Bui Thi Khoa, Cashier
The first joint consultancy on marketing of wood & non-wood products and application of appropriate technologies in wood & non-wood processing was carried out from mid September to mid November 1996 principally in the Programme’s pilot area in Cho Don district. The results of the consultancy were published in the Technical Report No.2. The consultancy gave a general overview of market opportunities and possibilities to apply appropriate technologies in the Programme area.

The second consultancy on marketing and application of appropriate technologies took place from the end of April to the end of May 1997. The starting point for this consultancy was the products produced in the demonstration farms. Majority of the products are non-wood forest products. The results of the second study were published in the Technical Report No. 6.

In October 1997 Mr. Jukka Tissari carried out a desk study to review the international markets for Vietnamese wood and non-wood forest products in order to analyse export possibilities for potential wood and non-wood forest products from Bac Kan province. The results were published in technical report No. 10.

The Programme carried out a third consultancy on marketing of forest products in May 1998. The purpose of the consultancy was to put into practise the earlier results of the market and appropriate technology studies. The results of the third market study were analysed in a workshop held in Cho Don on 27 May 1998. The results of the study are presented in this report.

We wish to thank Mr. Jukka Tissari, market research consultant from Indufor - Finland, Dr. Tran Tuan Nghia, technological research consultant from the Forest Science Institute of Vietnam, as well as all the other participants who have contributed to finalise this report.
1. INTRODUCTION

1.1. Background

This consultancy is the third of its kind under the Finland-Vietnam Forestry Sector Co-operation Programme. Already two earlier consultancies have been carried out on marketing of wood and non-wood forest products in September/November 1996 and May 1997. In addition, a separate desk research was done on the Vietnamese exports of non-wood forest products to the international markets (Finland, October 1997). All these earlier reports should be read in parallel with the proposals of this work in order to realise the linkages between primary producers in Cho Don and final end users in different markets.

The third consultancy mainly deals with the practical application of the previous study results as it appears that the farmers’ ability to utilise the market information has been poorly developed. The farmers - as well as the extensionists in charge of the training and dissemination - do not know how to apply market information in practice. Some of the key recommendations like the establishment of a price information system have neither been implemented.
1.2. Objectives of the Consultancy

The main objectives of the third consultancy were:

- establishment of the price information system focusing on the products produced in the demonstration farms
- improved capacity of the local staff to carry out market studies and disseminate prices and other market information to farmers
- improve the farmers' knowledge on the markets

1.3. Timing, Methodology and Organizing the Work

The consultancy period was short this time, starting from May 18th and ending on May 30th 1998. The consultant team comprised Mr. Jukka Tissari and Dr. Tran Tuan Nghia.

The work was conducted in the following steps:

- briefing meetings with Programme staff and work plan (May 18-19th, 1998)
- fast survey among farmers to reveal current level of experiences on marketing (May 20-21st, 1998)
- recommendations on the establishment of price information system and producers' groups, as well as practical solutions for marketing of apricot, ginger, cassava, cinnamon and canarium fruit (May 22-24th, 1998)
- extension workers carry out a survey on bamboo mat markets in Bac Kan and Cao Bang (May 25-26th, 1998)
- dissemination workshop in Bang Lung (May 27th, 1998)
- report finalization and final meetings in Hanoi (May 28-30th, 1998)

The dissemination workshop was used as a forum for discussions with the farmers, Programme staff and other stakeholders on the practical marketing tools proposed by the consultants.

2. SURVEY AMONG FARMERS

A brief survey was carried out among farmers in Cho Don district in order to review the local situation on how the market information had been applied. Existing and future producers of e.g. seedlings, apricot, cinnamon, ginger and bamboo were interviewed in the Ngoc Phai, Dong Lac, Dai Sao and Bang Lung communes. The major observations made during the visits were the following:

2.1. Dissemination of the market studies results:

- dissemination of the information from two previous consultancies has not been sufficiently done
- the flow of information tends to stop to the commune leader level
- there were farmers that had never heard of the marketing consultancies
- extensionists' price leaflets have been well received by farmers
- essential oil distillation technology is not properly transferred to farmers

2.2. Benefits to the farmers:
farmers feel they have had very little benefit from the marketing consultancies so far
the marketing information - together with other Programme activities - has encouraged some farmers to increase agroforestry practices and diversify their production
more firewood is being sold in the villages
price information has been useful to those farmers who have obtained it

2.3. Recommendations for current marketing consultancy:

- more precise information on the final consumption markets (potential buyers)
- price information system should be made operative (especially richer farmers support the system)
- organising of producers’ groups should be supported
- practical linkages with potential buyers should be organised through visits or study tours

3. RECOMMENDATIONS ON HOW TO APPLY MARKET STUDY INFORMATION IN PRACTICE

3.1. Dissemination of the Report Main Contents

It appeared that the farmers are not well informed of the key information on the previous market study reports and their recommendations. It is therefore advised that the extension network should distribute this data for the needing farmers e.g. through the Farming News newsletter or separate leaflets.

This work has actually been started by the provision of price information. Additional leaflets could be given selectively to farmers according to their specific products and needs. The key data would include e.g. changes in demand patterns, prices, end use markets, quality aspects and distribution channels and contacts to buyers.

The extensionists are the key agents not only in disseminating the existing information on markets but also in surveying new clients and industries for the future marketing of crops. During this consultancy, a small survey on bamboo mat markets was organised as an example and training of this aspect.

3.2. Price Information System

3.2.1. Definition and Benefits to Farmers

The establishment of price information system (PIS) was basically agreed upon already during the second marketing consultancy in May 1997. However, it had not been operationalized yet as it typically requires some external guidance and objective support. Especially some better-off farmers have expressed their interest towards the PIS as a tool to reap bigger benefits of product value to farmers in Cho Don.

Price information system can be defined as a method of organising the continuous collection and transfer of price information from the markets to the primary producers. Advantages of such system are:

- enable farmers to be aware of price changes in the distant markets δ improves market transparency and the general knowledge on markets
- helps identifying the most lucrative market areas
- strengthens the bargaining power of farmers with the middlemen
- increases the share of revenue accruing directly to farmers δ higher family income and profitability

3.2.2. Proposal for Establishment of Price Information System

Establishment of the PIS needs decisions on at least eight matters. The proposed system to be applied in Cho Don is described in Table 3.1.
3.2.3. Discussions on Price Information System in the Workshop

The proposed price information system was discussed in a detailed manner in the dissemination workshop. Most comments received were strongly supporting its immediate implementation. Some alterations were also suggested to the system accordingly:

- system should also include several potential products on top of the existing ones
- forecasting element is necessary for the utilisation of the system
- some linkages could be established with the middlemen
- short-term cash products like bamboo shoots and styrax logs are to be included
- producers’ prices are equally important to farmers for comparisons
other issues such as consumption volumes, buyers, sources of supply and quality issues should also be dealt with

It has to be noted that if all these alterations are made, the system expands way out of its proportions and becomes a complex marketing information system. However, as the target has all the time been a simple and easily operable price information system, the Consultants suggest that only the most realistic workshop suggestions are to be followed, as already indicated in Table 3.1.

3.2.4. Discussions with Vietnam Financial Times on Price Information System

The original proposal recommended the use of the Vietnam Financial Times newspaper in the collection and transfer of price information. The vice-editor and first deputy general editor were met in Hanoi on May 29th for discussions. The summary of discussions is given below:

- Vietnam Financial Times can now supply the required price data for six major cities, other regions could be included later on
- they propose that prices for Bac Kan and Thai Nguyen would be collected by the Programme itself
- price basis is consumer prices on free markets, producers’ prices are very difficult to collect
- send every Monday by Telefax the prices of the previous week (Monday-Friday)
- forecasts could be produced on a weekly, monthly or three-month basis
- they could also provide volumes of consumption and quality data
- for collection, they use Financial Department and correspondents, also buy data from outsiders and carry out surveys
- they were not interested in obtaining producers’ prices from Bang Lung in exchange
- they would like to have a written proposal from the Programme defining exactly what needs to be delivered
- estimated establishment cost: minimum USD 3 000 for one year, operating costs only post-office charges
- costs are based on employing ten staff members in the system for one year time
- new products could be included free of charge into the system

3.2.5. Conclusions

The conclusion of the Consultants was that Vietnam Financial Times can not provide a suitable solution to the establishment of the PIS because of the high costs involved. It is therefore suggested that the Programme should put the system in practice along with principles agreed in the workshop. The Programme should cooperate directly with the Department of Agriculture and Rural Development of Bac Kan and the Financial Departments of the various provinces in the collection and transfer of price data.

3.3. Organizing the Producers’ Groups

Producers’ groups should be established to sell larger volumes of products in a centralised manner to middlemen or directly to processing companies. Together the farmers in those groups would exercise a stronger bargaining power over middlemen. Group action would also alleviate fears of individual risk-taking and marketing costs.

Based on the previous workshop response, the farmers in Cho Don have a strong desire to establish producers’ groups for the (i) production, (ii) harvesting, (iii) processing, and (iii) marketing of non-wood forest products. The same group would naturally cater for all the activities from production to marketing and even transports to special collection points (if possible).
If such producers’ groups are to be established, there are some key factors ensuring their success:

1. co-operative discipline among members and conflict management
2. credible, experienced leadership
3. clearly defined agenda and work plan
4. appropriate technical support
5. institutional support
6. demonstrable success
7. efficient marketing system

It is possible to incorporate all these factors successfully into the local conditions in Cho Don. This form of action also fits well to the existing political structures of the rural communes. The commune leaders or other prominent farmers would be best capable of forming and leading the groups with their authority.

It is also expected that the groups would strengthen the efficiency of dissemination within the Programme. It is therefore recommended that producers’ groups should be integrated to the extension strategy of the Programme.

The size and composition of the groups would be determined by the number and location of the farmers who produce the same product (e.g. various cinnamon products). A suitable group size would be the leader plus 5-10 farmers. All the group members should be in the position to truly benefit from the membership. Costs of processing, transportation and marketing should be divided between individual members based on their shares of harvest volume.

### 3.4. Practical Training in Marketing of Products

It is advised that the Programme should help the farmers and producers’ groups to establish the first contacts with processing companies and other buyers in Hanoi. This could be achieved through following action:

- at minimum one farmer (preferably leader) of the producers’ group, one extensionist and one facilitator from e.g. Forest Science Institute or other institutions should make visits to the potential buyers and processors in Hanoi (study tours)
- product samples should be presented for buyers and price quotations asked
- knowledge on supply potential in Cho Don should be increased among buyers by providing contact lists of farmers, details on areas of production, yields, etc. on each product

The idea is to train farmers to take initiative in marketing and provide them with adequate information on buyers so that they gain confidence to act on their own in the future.

In practice, one such study tour on cinnamon marketing and processing has already been planned for Yen Bai and Hanoi. It will be implemented after the study tour to China, also partly dealing with these issues.

### 3.5. Practical Solutions for Current Marketing Problems

#### 3.5.1. Short-term Products

It has been noted during the various consultancies that mainly apricots, ginger, cinnamon and cassava are becoming harvestable in the demonstration farms in the short term. Other current products include e.g. canarium fruit. These products therefore require immediate action when putting the marketing knowledge into practice. Experiences obtained from these priority products can be later on applied to other crops.

The following chapters describe the action proposals for these species, including possible new consumption markets and technological solutions to add product unit value.
3.5.2. Apricots

Apricot producers have experienced the following problems in 1997-1998 harvest seasons:

- 1997: big harvest and prices declined to 1 000-2 000 VND/kg
- farmers exploited by middlemen, not full harvest marketed
- farmers have generally poor knowledge on buyers outside Cho Don
- 1998: poor harvest but prices up to 5 000 VND/kg

As a typical one harvest season perishable product, apricot requires preservative processing because the consumption is year-round. A simple way of processing by drying is proposed for Cho Don. The drying and other processing of apricots is explained in the Technical Report No. 6 of the Programme. The Cho Don Forest Enterprise could act as a processor and stockist of that part of apricot harvest which is not sold fresh by farmers.

The annual harvesting volume is estimated at around 2 000 tons from the existing 300 hectares of apricot plantations in Cho Don. This is based on a following simple estimate:

- 200 hectares of the total area is productive
- there are on average 500 trees per hectare
- average crop 20 kg/tree

resulting in a total harvest level of 2 000 tons

Around 600-700 tons warehouse is needed to handle the apricot volumes left over from the Cho Don farmers after the marketable fresh fruit have been sold.

A new end use market for apricots may be created by the Vietnamese-Japanese joint venture liquor company in Thai Nguyen. At the moment, the liquor factory has started production and consumes 100 tons of fresh apricot per year, mainly from the surrounding areas. The liquor is being produced according to Japanese tradition and recipe and sold to the provincial markets.

The factory is also trying to sell a one ton load of salted apricots to Japan. If this trial volume is successfully sold, the company will start developing the market for salted apricots in Japan. They have indicated that they could make a supply agreement on fresh apricots with the Department of Agriculture and Rural Development of Bac Kan, which has established a company for the processing of forest products.

It is advised that the future raw material needs of the factory are surveyed with the view of supplying large volumes of apricots from Cho Don when the factory reaches full production and starts to sell the liquor to the national markets at large scale.

Contacts:

Thai Nguyen Pharmaceutical Company
(Vietnamese partner of the joint venture)

Phan Dinh Phung
Thai Nguyen
Tel: 0280-854202

Forprodex
6 Ngoc Khanh
3.5.3. Ginger

Ginger is a new product in Cho Don, but it is soon becoming harvestable in high volumes. The first larger areas will be harvested at the end of 1998 when around 100 tons will be reaped. The soils in Cho Don are found particularly suitable for ginger cultivation.

Ginger appears very profitable as the following example from the farm of Mr. Chanh from Bang Lung commune is suggesting:

- to plant one hectare with ginger requires 30 000 pieces of ginger root, on average weight of 150 grams
- price for root for planting is VND 8 000/kg
- planting cost is therefore VND 36 000 000/ha
- average yield is 3 kg/plant \( \Rightarrow \) total harvest is 90 000 kg/ha
- prices paid are around VND 1 200/kg

resulting in total sales revenue of VND 108 000 000

and profit margin (before any labour costs are deducted) of VND 72 000 000

End use markets can be found either from direct exports to China or from Hanoi-based spice processing companies like Vegetexco. This company was interviewed one year ago during the second marketing consultancy and they indicated a potential market of 200 tons of fresh ginger from Cho Don. The prices are negotiable at the time of harvest.

Most of the ginger is traded in fresh form without any processing. Reasons why unprocessed spices are being traded include e.g. the following:

- prevention of loss of essential aromatics by oxidation and volatilisation during transport
- assuring that the quality standards and health regulations are fulfilled in the importing countries (re-cleaning, grinding and mixing into blends is done according to country-specific standards)
- poor availability of spice processing technology and know-how in some producer countries
- for keeping the unit prices on low levels (prices paid by European consumers for packaged and ground spices are 15-20 times higher than the prices paid to primary producers in tropical countries)

In the export markets price variations can be extremely wide between different years, depending on e.g. supply constraints (crop yields) and stocking levels in the consuming countries. As an example, in 1997-1998 the prices of pepper have rocketed to the highest levels in ten years; black pepper at USD 5 000-6 000 per ton (normally USD 2 000-3 000/ton).

In the European market, (discussed in the Technical Report No. 10), Vietnam obtained higher than average price for its ginger, saffron and turmeric. In exports, dried ginger can fetch US$ 5.5/kg. In Cho Don, buyers pay only VND 1 200/kg for fresh ginger for farmers.

As a basic rule, the international consumption of ginger, pepper and other spices and flavours is growing due to the following driving forces:

- more highly spiced foods have become more popular in the European and North American markets
• ageing populations consume more pharmaceutical and cosmetic products
• Asian, Latin American and African urban populations with rising incomes diversify their diets and buy more industrially processed foods, containing more spices and flavours

Contacts:

Vegetexco
46 Ngo Quyen
Hoan Kiem district
Hanoi
Tel: 04-263159
Contact: Mr. Dang Duc Cuong (Director)

3.5.4. Cassava

Cassava has become a widely planted agricultural crop in the allocated and cleared forest lands around Cho Don district. So largely speaking it can be grouped as a non-wood forest product.

The Forest Science Institute has recently proposed a development project for CEMA (Committee for Ethnic Minorities and Mountainous Areas) on experimental processing of cassava. The main products would be starch used in glues for textiles. Up to 80% of the investment costs could be obtained in credit. This would be a valuable source of capital in Cho Don for primary processing. A first step would be to install a semi-mechanized bundling machine for fresh cassava.

The potential client companies could be found among textile and related industries, but it is premature to discuss them as they only buy starch for their products. So the main end use for unprocessed cassava is animal fodder in the local markets.

Currently, the fresh cassava for fodder sells only at 500-1 000 VND/kg, but in sliced and dried form it fetches 2 000 VND/kg. Cassava starch would be priced higher, estimated price in 1997 was around 4 000 VND/kg.

3.5.5. Cinnamon

Cinnamon is soon becoming a major crop for Cho Don district. Some farmers have already started harvesting but the larger volumes will be available only after about 4 years time. Cinnamon has become the most widely planted species in the district, accounting for 70% of the plantings made on the allocated forest lands. Around 700 ha will be planted in 1998.

Cinnamon tree provides several products during its life cycle. Timber and bark can only be harvested in the final felling, which can be done through selective cutting for 12-20 years old trees. As an example, eight big-diameter (35-45 cm) logs were recently sold in Yen Bai for VND 65 million (8.125 million each).

It has been observed already that the domestic markets alone are not sufficient to absorb all the cinnamon bark available. Its grinding into powder form needs to be done on industrial scale before exports. Vietnam has established itself as a long-term supplier of cinnamon powder in all the key international markets (Technical Report No. 10).

Prices of cinnamon bark in Vietnam have declined notably in one year; from 30 000 VND/kg to 13 000 VND/kg. Bark is a simple and easily harvested product so it is susceptible to oversupply. In the international markets, Vietnamese cinnamon has obtained better prices than other suppliers on average in Japan, China and USA.

Leaves and small branches from pruning can be utilised for oil distillation. The main product made available in the next years should be crude cinnamon oil. It is proposed that the simple distillation technology demonstrated in May-1997 workshop is transferred more effectively to the farmers who grow cinnamon. A new training course could be held for those farmers who start oil production in the next year.
Based on the farmer’s first attempts to distil cinnamon oil, there have been some technical failures to produce adequate quantity and quality. These failures can be overcome by proper training and more careful control over the distillation and cooling processes. Also the use of firewood should be reduced by burning the cinnamon waste instead of wood. This would improve the economy of the distillation and reduce the risk of forest fires due to less litter under the cinnamon trees.

It is also recommended that the distillation is done preferably in August when the oil yield is higher. In August around 0.3-0.5% oil content (of air-dry weight of leaves and branches) is achieved. The yield is only 0.1-0.3% in April which is the second harvest season of cinnamon. When trees mature, bark should produce much higher concentrations as it yields around 5% oil of its air-dry weight.

There is still time to prepare farmers and the marketing channels for the large-scale production phase and exports. Essential oils processing companies in Hanoi are the potential buyers of crude oils from Cho Don. Vegetexco has indicated that they are interested to buy even smaller quantities of cinnamon oil in the early phase of production. As the volumes grow in the future, Enteroil company becomes another potential client who also buys bark for grinding it into cinnamon powder. Contacts to the following four enterprises have already been established by the consultants:

**Contacts:**

**Vegetexco**  
46 Ngo Quyen  
Hoan Kiem district  
Hanoi  
Tel: 04-263159  
Contact: Mr. Dang Duc Cuong (Director)

**Forprodex**  
6 Ngoc Khanh  
Hanoi  
Tel: 04-8343117  
Contact: Mr. Trinh Kim Thanh (Director)

**Ninh Hiep Private Company**  
Gia Lam  
Hanoi  
Contact: Mr. Nguyen Van Thang (Director)

**Enteroil**  
Nghia Do town  
Cau Giay district  
Hanoi  
Tel: 04-345618
3.5.6. Canarium

Canarium is a multipurpose tree producing both edible fruit and good timber for plywood production. The fruit have usually been sold for local consumption but there is also a large export market for fresh fruit in China. This potential could be better utilised by Cho Don producers if the middlemen are by-passed. Currently part of the Cho Don canarium harvest goes to China through middlemen. The Cho Don variety of canarium fruit (black) is inferior to the white canarium which is generally preferred in China.

For canarium logs, the nearest large-scale end user is the Bac Kan Forest Products Company which has plywood mill specialising in canarium. Logs are purchased for around 300 000 VND/m³.

Contacts:

Dai Tu Forest Enterprise
Dai Tu district
Thai Nguyen Province
Tel: 0280-824214

Contact: Mr. Duong Van Thinh (Director)

Bac Kan Forest Products Company
Duc Xuan Quarter
Bac Kan town
0280-871072

Contact: Mr. Le Quang Dan (Director)

3.6. Survey on Bamboo Mat Markets Carried Out by Extensionists

Two-day survey was carried out by 3 Programme staff members (from the Cho Don Forest Enterprise) on Bamboo market in Cao Bang and Bac Kan Towns in order to review the consumption of raw bamboo mat and processed bamboo mat in these markets. The work was carried out by following steps:

- Preparation of questionnaire (Annex 2);
- Observations on the consumption and price of raw and processed bamboo mat in Cao Bang and Bac Kan markets;
- Carried out fact findings on the establishment of the agents of bamboo mat market.

The working group carried out survey on 6 wholesalers in Cao Bang Town and 3 wholesalers in Bac Kan Town. Results of the survey are given in the following tables:

Table 3.2: Result of the survey on bamboo mat market in Cao Bang town

<table>
<thead>
<tr>
<th>Bamboo mat of 0.8x3m</th>
<th>Price of bamboo mat</th>
<th>Selling volume of bamb. mat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Buying price</td>
<td>Selling price</td>
</tr>
<tr>
<td>Processed bamb. mat</td>
<td>5.000 VND/m²</td>
<td>5.500 VND/m²</td>
</tr>
</tbody>
</table>
Table 3.3: Result of the survey on bamboo mat market in Bac Kan town

<table>
<thead>
<tr>
<th>Bamboo mat of</th>
<th>Price of bamboo mat</th>
<th>Selling volume of bamb. mat</th>
</tr>
</thead>
<tbody>
<tr>
<td>dimension</td>
<td>Buying price</td>
<td>Selling price</td>
</tr>
<tr>
<td>Processed bamb. mat of 0.8x3m</td>
<td>5.000 VND/m²</td>
<td>5.800 VND/m²</td>
</tr>
<tr>
<td>Raw bamb. Mat of 0.85x2.5m</td>
<td>2.600 VND/m²</td>
<td>3.000 VND/m²</td>
</tr>
</tbody>
</table>

It can be seen from the Table 3.2 and Table 3.3 that in Cao Bang market the selling price of bamboo mats in last year was higher than this year, because the construction volume in this year is lower than this year. Selling price of bamboo mat in Bac Kan market of this year is higher than in Cao Bang market, because Bac Kan province has just been re-established, so the construction volume is bigger. Selling volume of bamboo mat in Bac Kan Town lower than in Cao Bang Town, because many construction contractors in Bac Kan Town have bought a big volume of bamboo mat straight from Thai Nguyen market.

The final conclusions of the survey bamboo market are the following:

- The consumption of the bamboo mat in Cao Bang and Bac Kan towns is estimated at 7.000m² - 8.000m² of processed bamboo mat per month; and at 8.000m² - 10.000m² of raw bamboo mat per month.

- The average selling price of processed bamboo mat in free market is 5.500 VND/m² (Producer’s price is estimated in Cho Don at 4.000 VND/m²), of raw bamboo mat is 2.500 VND/m² (Producer’s price in Cho Don at 1.500 VND/m²).

- Simple basic technology can be applied for processing of bamboo products in Cho Don Forest Enterprise with capacity of 6.000m² processed bamboo mats per month. The weaving of raw bamboo mat can be organised through farmers in order to supply raw material for producing of processed bamboo mat in Cho Don. Raw bamboo mats are to be sold to Cao Bang and Bac Kan markets.

Annex 1

PROGRAMME FOR WORKSHOP
IN CHO DON, MAY 27, 1998

Title of the Workshop:

PRACTICAL APPLICATION OF MARKET INFORMATION IN CHO DON

1. Objectives

As a part of the third consultancy on marketing in the Vietnam-Finland Forestry Sector Co-operation Programme, this dissemination workshop is organised in order to:

- review the current level of utilisation of market information in Cho Don

- propose and discuss the establishment of a price information system and producers’ groups
• offer practical solutions for marketing of apricot, ginger, cassava, cinnamon and canarium fruit
• disseminate the results of a survey on bamboo mat markets in Bac Kan and Cao Bang carried out by extension workers

After the presentations of the consultant team, an open discussion part will be held for receiving the comments of farmers and other stakeholders.

2. Participants

The workshop is mainly targeted to the local farmers and village/commune leaders in Cho Don and the project staff. In addition, the staff from the Bac Kan Department of Agriculture and Rural Development and the extension workers in Cho Don will participate the workshop.

3. Proposed Programme of the Workshop

The workshop is scheduled to take place in the Cho Don People’s Committee meeting room on May 27th 1998. The workshop will run through the morning starting at 08.00 and ending at 12.00. A lunch will be served for participants after the workshop is closed.

Proposed Programme:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Title</th>
<th>Contents</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.5.</td>
<td>08.00- 08.15</td>
<td>Opening of the workshop</td>
<td>welcoming words&lt;br&gt;opening remarks&lt;br&gt;objectives of the workshop&lt;br&gt;day’s programme</td>
<td>Mr. Nguyen Van Viet&lt;br&gt;Mr. Petri Lehtonen</td>
</tr>
<tr>
<td></td>
<td>08.15- 08.30</td>
<td>Introduction of the objectives and methodology of the consultancy</td>
<td>background&lt;br&gt;objectives&lt;br&gt;tasks carried out</td>
<td>Mr. Jukka Tissari</td>
</tr>
<tr>
<td></td>
<td>08.30- 08.45</td>
<td>Survey carried out among farmers</td>
<td>observations on the application of market information in practise&lt;br&gt;major problems of farmers&lt;br&gt;major benefits obtained&lt;br&gt;farmers’ recommendations</td>
<td>Mr. Jukka Tissari</td>
</tr>
<tr>
<td></td>
<td>08.45- 09.15</td>
<td>Practical solutions for current marketing problems in Cho Don</td>
<td>problems in marketing of priority products (apricot, ginger, cassava, cinnamon)&lt;br&gt;recommendations on marketing and technology</td>
<td>Dr. Tran Tuan Nghia</td>
</tr>
<tr>
<td></td>
<td>09.15- 09.30</td>
<td>Survey carried out on bamboo mats in Bac Kan and Cao Bang</td>
<td>activities done&lt;br&gt;major observations</td>
<td>Mr. Dong Khanh Hung&lt;br&gt;Mr. Truong Quoc Tu</td>
</tr>
<tr>
<td></td>
<td>09.30- 09.45</td>
<td>Tea break</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>09.45- 10.15</td>
<td>Proposals on the establishment of a price information system and producers’ groups</td>
<td>reasons for establishment&lt;br&gt;benefits to farmers</td>
<td>Mr. Jukka Tissari</td>
</tr>
</tbody>
</table>
## Annex 2

### QUESTIONNAIRE FOR SURVEY ON BAMBOO MAT MARKETS

<table>
<thead>
<tr>
<th>Name of wholesaler or retailer:</th>
<th>Contact Person:</th>
<th>Address:</th>
<th>Tel:</th>
<th>Fax:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Prices:

<table>
<thead>
<tr>
<th>Bamboo mats by dimension:</th>
<th>Buying price</th>
<th>Selling price</th>
<th>Price change over a year</th>
<th>Per month</th>
<th>Per year</th>
<th>Main origin of bamboo mats</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Selling Volume of Bamboo Mats:

<table>
<thead>
<tr>
<th>Bamboo mats by dimension:</th>
<th>Per month</th>
<th>Per year</th>
<th>Main origin of bamboo mats</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NAME OF INTERVIEWER: