

the market of planting production forest products in the northern mountainous provinces and development policies

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I. Background

The Northern mountainous region comprises 14 provinces located in three sylvi-ecological zones: the Northwest, Northeast and North Center. This region has a significant strategic position in terms of national defense security and a potential for both socio-economic development and environment protection. However, the Northern mountain is an underdeveloped region of Vietnam with poor infrastructure, complex natural conditions and highly sloping mountain topography, especially in the Northwest. Socio-economic and human factors are further constraints to the economic developments of the region.

Aiming at boosting the economic growth rate in the Northern mountainous region, the Government, in past years, has issued many policies, implemented various programs and projects, and simultaneously applied several solutions involving forestry development. Examples include program 327 and the 5-million hectare reforestation program. As a result, forest cover increased to 35% in 2002. However, attention has mostly focused on forest protection and special-use forests; planting forests has not received much attention. Many problems remain unanswered, notably with respect to marketing. Many paper-mills and artificial plank manufacturing factories, etc. have been planned and built in recent years; but material redundancy and shortage still persist, with direct impacts on forest planters.

To solve some of the above problems, under the science and technology research program for agricultural development in the Northern mountain region in the period 2002-2005, the Ministry of Agriculture and Rural Development has entrusted the Vietnam Forestry Science Institute with research into and development of “*Effective and sustainable planting of production forests in the Northern mountainous region*”. This paper provides some initial results from surveys on the marketing of products from such forests in the Northern mountainous provinces.

II. General characteristics of production forests in the Northern mountain provinces

- *Capital investment in planting forests:*

Results of the surveys in some provinces showed the main sources of capital investment in planting forests as follows:

- + Budget before the 327 program
- + Budget from the 327 program (first period) and 661 program (loans)
- + PAM project (every period)
- + Provincial capital for basic construction
- + Provincial material forestation projects (mainly loans)
- + Other foreign projects (KFW, EU...)
- + Individual capital

It can be seen that the capital sources for planting forests are quite diversified in the Northern mountain provinces. The most concentrated and largest source of capital is from provincial planting forest material projects. Additionally, some provinces have other foreign projects such as the PAM project in Cao Bang, Bac Kan, etc. the Vietnam – German planting forest project (KFW) in Lang Son, Bac Giang, Quang Ninh, etc.

- Objectives of planting forests:

The objectives of planting forests depend much on the natural and social-economic conditions and forest product processing factories of each province. The results of surveys show that such objectives have a direct connection with the categories of product provided by planting forests and are divisible into two major groups:

- A group provides timber forest products, including
 - + Construction materials, casing, pillars/stakes, posts, etc.
 - + Furniture materials
 - + Paper materials, shavings, etc.
- A group provides non-timber forest products, including:
 - + Bamboo poles
 - + Bamboo shoots
 - + Bitter tea-leaves
 - + Turpentine
 - + Skin and leaves of cinnamons
 - + Essential oil of anise, etc.

- Development level of planting forests in the Northern mountainous provinces

Currently, the development of planted forests in the Northern mountainous provinces is proceeding unequally and can be divided into three groups as follows:

- **Group 1:** This group comprises such provinces as Phu Tho, Tuyen Quang, Yen Bai, Thai Nguyen, Quang Ninh that have strongly developed production forests. These provinces have already or are located near paper-mills, artificial plank manufacturing factories and large-scale industrial zones (coal), etc. Therefore, production forests enjoy already planned in central areas, planted species have been sustainable development, forest planting models have been successfully developed, and policies that encourage plant forests have been proposed and adopted. The characteristic of this group is not only forest that companies and forestry factories have been developed, but also individual entrepreneurs, especially the creators of forestry farms with a scale of from some tens to some hundreds hectares.

- **Group 2:** This groups includes provinces Hoa Binh, Lang Son, Bac Can, etc., where infrastructure has been forming for building paper-mills, artificial plank manufacturing factories. Concentrated planting of forests in large areas has developed only during the past 3-5 years. Forest models, planted varieties, investment policies, extended reforestation and marketing policies are all undergoing experimentation.

- **Group 3:** This group consists of underdeveloped planting of production forests; in Cao Bang, Son La, Lao Cai, etc.

- Some potential planting production forest models:

The planting of production forests in Vietnam has kept pace with developments. However, in general forestation planting models have not been diversified, but include mainly short-growing trees for constructor materials and a poor range of indigenous trees on an experimental basis. Some models with higher potential for the future can nonetheless be designed:

***Timber supplying models:**

1. Models of domesticated *Pinus Massoniana* supply timber for pillars, building, household and resin in Lang Son, Quang Ninh, Bac Can, Cao Bang,...
2. Models of domesticated *Manglietia Glauca* supply small size trees, timber for basic construction, woodwork, etc. in Bac Can, Cao Bang, Yen Bai, Phu Tho, etc.
3. Models of *Acacia Auriculormis* supply timber for pillars, timber for basic construction and artificial planks in Phu Tho, Tuyen Quang, Bac Can, Bac Giang, etc.
4. Models of hybrid *Acacia Auriculormis* and eucalyptus provide paper materials in Phu Thi, Tuyen Quang, Hoa Binh, Yen Bai, Son La, Bac Giang, etc.
5. Models of naturally reforested snowbell and models of snowbell grown by sowing seeds supply paper materials in Yen Bai, Phu Tho, Bac Can, Ha Giang, Hoa Binh, etc.
6. Models of domesticated Caribbean pine in Vinh Phuc, Thai Nguyen, Lang Son, etc.
7. Models of indigenous trees, for example, *Cinnamomum Obtusifolium*, *Phoebe Cuneata*, *Lithocarpus Ducampii*, *Quercus platicalyx*, *Canarium Album*, etc. with other trees in Phu Tho, Yen Bai, Vinh Phuc, etc.

*** Non-timber product supplying models:**

1. Trunks of bamboo poles are used as exports in Cao Bang, Bac Can.
2. Leaves and buds of bitter tea are goods in Cao Bang.
3. Fruits and attar of anises in Lang Son, Cao Bang, and Bac Can.
4. Peels and leaves of persimmons in Yen Bai, Lao Cai, etc.
5. Bamboo shoots in Hoa Binh, Ha Giang, Phu Tho, etc.

III. The market for planted production forest products in the Northern mountain provinces

The market for planted forest timber in the Northern mountain provinces can be divided into 5 following categories:

- The market for materials for paper and pulp production
- The market for pillars and posts
- The market for manufacturing artificial planks
- The market for civil construction
- The market of woodwork for domestic consumption and export

In addition, the market for non-timber forest products is dynamic and subject to rapid change in the case of turpentine/oil of turpentine, the bark and attar of cinnamons, star anis, bitter tea leaves, bamboo shoots, etc.

3.1. Categories of material and products in terms of markets

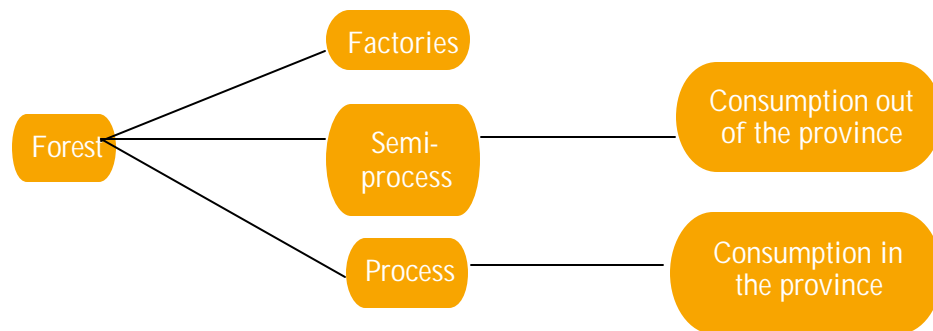
Materials	Consumption places	Products	Markets	Consumption methods
I/ Timber				
1.1. Small timber (<i>Acacia Confusa</i> , <i>Eucalyptus</i> , <i>Snowbell...</i>)	Plantations, large-size farms, traders	Pillars/stakes, posts, paper materials...	In and out of the province	According to the plan, economic contracts, free markets
1.2. Large timber (<i>Pinus Massoniana</i> ,, <i>Manglietia Glauca</i> , <i>Cunninghamia Lanceolata</i> <i>Acacia Auriculformis</i>)	Plantations	Timber for basic construction	In the province	According to the plan, economic contracts
	Plantations, processing companies and factories	- Timber for basic construction - Woodwork	Out of the province	Intermediary companies and factories
II. Non-timber				
2.1. Cinnamon	Traders	- Skin	China	Theo tiÓu ng'ch
2.2. Small bamboo	Local companies + foreign companies	-Bamboo screens, mats -furniture -Chopsticks	Domestic market, Taiwan	According the market mechanism, Intermediary companies,
2.3. Bitter tea	Local companies	Boxed products	Domestic market	According the market mechanism, having agents everywhere
2.4. Turpentine	- Plantations - Traders	Raw or semi- processed turpentine	China, Domestic market	- Small border gate
2.5. Anise	Traders	Star aniseed	China, Domestic market	- Small border gate
2.6. Bamboo shoots	Traders	Bamboo shoots	Domestic market	According the market mechanism
2.7. Bamboo	Plantations, Traders	Trunks, shavings, mat	Domestic market	According to the economic contracts, market mechanism

The above table shows that the market for planted production forest products may be divided into three categories in terms of produced products and materials:

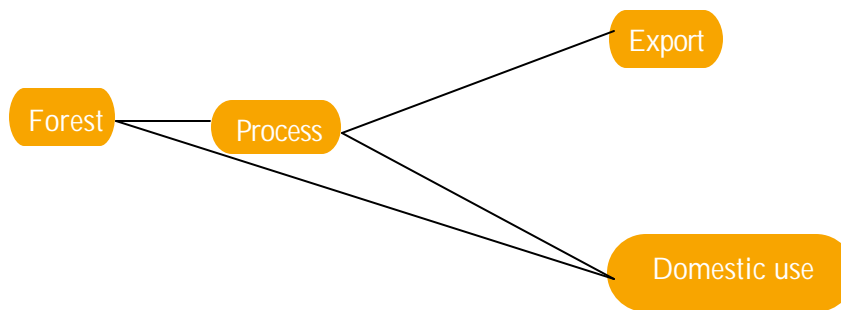
i) Raw materials (small timber and non-timber forest products such as cinnamon, anise, and turpentine): Domestically used by plantations and traders, or exported to China

ii) Semi-processed materials for basic construction used in and out of the province by plantations and traders, respectively.

iii) Refined materials (woodwork, bamboo poles and bitter leaves) directly used and exported by companies and factories and intermediary companies, respectively.



Graph 1: Consumption channels of planted forest products in the Northern mountainous provinces



Graph 2: Consumption channels for non-timber forest products

3.2. General characteristics of the market for planted production forest products in the Northern mountain provinces of Vietnam

- The market for planted production forest products in the Northern mountain provinces shows unequal development by region. The market is mainly controlled by forest product processing factories and large-scale industrial zones, including for example paper-mills, artificial plank manufacturing factories and coal exploiting factories. Factories already have their own supply base; therefore, types of products in each zone are becoming more specialized. The market for paper materials, artificial planks (the center North) and posts (the North-west) is more concentrated; while the market for lumber and woodwork is dispersed and often controlled by traders and small-size processing establishments.

- The market for planted forest products depends much upon the potential for processing forest products in each area, especially those far from large-scale processing factories. In recent years, the extension of area planted to forests has led to an increase in the number of small- and medium sized processing establishments at the commune level. These processing plants, which make a great contribution to the marketing of planted forest

products, create more jobs for local people, and promote forestation, are actively encouraged by the government.

- The market for non-timber forest products also depends much upon the ability to process products. While raw materials, for example, bamboo shoots, bitter tea and star aniseed are domestically consumed; semi-processing and refined products such as bamboo poles, bamboo screen, mats and turpentine can be exported, especially to China.

- Both forestation and forest product processing were previously carried out by plantations. Since 1986, more rigorous management rules for state-owned plantations have forced many to stop processing forest products. Some other processing factories still exist but have only perfunctory operations on order-forms of traders. Recently, some effective models combining forestation and product processing appear to be emerging, for example, at Doan Hung plantation in Phu Tho province. This plantation made a courageous decision to invest, sought partners and consumption markets; and most importantly, diversified product sales.

- The price of timber from planted forests is affected by many factors. One is the distance from forest to factories. For instance, the Bai Bang paper-mill buys timber near the mill at 400000 VND per ton; meanwhile, farmers in Tuyen Quang and Yen Bai sell at only 200000 VND per ton. Therefore, instead of selling timber to the paper mills, many households sell to traders as construction materials or to local carpenter shops. This situation, however, completely depends upon conditions in each area.

IV/ Some suggestions to develop the market for planted production forest products in the Northern mountain provinces

- It is necessary to build a clear product strategy for producing forests in each province and to locally tailor that strategy to the reality of each forest. Strategies can be classified into three major categories: i) Forest for large timber; ii) Forest for small timber (materials) and iii) Forest for non-timber products.

- Decrease the preferential interest rate from 5.4% to 3% per year in remote areas with difficulties in production and processing, and low education levels.

- Currently, the market for timber and forest products in the provinces where processing factories are being planned and built is still spontaneous, self-regulating and unstable. It needs leadership from the government so that forest planters may feel assured of production.

- The trade automation policy and the policy of benefits from planting forest products should be clarified, providing an incentive to develop the forest farm economy. The wealth of experience in planting forests in Phu Tho, Tuyen Quang and Yen Bai points to the great contribution that forest farms can make to the development of forest planting and product consumption.

- While exploitation, circulation and transportation of forest products are freely developing, negative elements still persist in all of these phases. It is necessary to simplify procedures.

- Product tax: As with agricultural commodities processing costs are a major expense. For firms which produce forest products from start to finish, product tax is rather high. We recommend that the government decrease the value-added tax for timber products planted and processed by planters.

- Stimulate multiple economic agents to enter the market, thus creating a sound competitive environment and avoiding a situation of monopoly.

- Encourage forest planters to sell forest products directly to processing factories instead of to middle organizations. Farms and forestry companies should sign contracts or vertically integrate with households to consume products.

- Establish economic organizations to enhance cooperation among forest product producers, collectors and transporters.

- Implement a commercial promotion campaign to seek and open markets for forest products: diversify products, enhance and develop processing technology. The experiment in planting forests linked to processing and marketing by the Doan Hung plantation in Phu Tho province has been highly effective.

- The government should forecast forest product indicators, especially the relationship between supply and demand, price fluctuations, the competitive situation and so on.

List of references

1. Nguyen Thi Lai et al, 2003: Research on the development policies on the market of materials for paper and artificial plunk. The report of research results, Vietnam Forestry Science Institute, 2003, 85 pages.
2. Pham Xuan Phuong, 2003: An overview on forestry policies relating to the development of material forests in Viet Nam. The presented report in the workshop “Enhancing the ability and the effect on industrial forestation” held in Hoa Binh 22nd-23rd December, 2003, 14 pages.
3. Nguyen Xuan Quat, Nguyen Hong Quan and Pham Quang Minh, 2003: The real situation of material forestation for timber and forest product process during five past years. The presented report in the workshop “Enhancing the ability and the effect on industrial forestation” held in Hoa Binh 22nd-23rd December, 2003, 20 pages.