



DEPARTMENT OF FORESTRY

**Market Trend Reference Book**  
**on wood-based and agroforestry products**

**Book 7: Market Trend**



THE DEVELOPMENT STUDY ON CAPACITY BUILDING  
FOR PREPARING FEASIBILITY STUDIES AND IMPLEMENTATION PLANS  
FOR AFFORESTATION PROJECTS IN THE SOCIALIST REPUBLIC OF VIETNAM

---FICAB---



# Preface

“Market Trend Reference Book on wood-based and agroforestry products (Book 7: Market Trend)” is part of the training package prepared under the development study on capacity building for preparing feasibility studies (F/S) and implementation plans (IP) for afforestation projects in the Socialist Republic of Vietnam (hereafter referred to as “FICAB”).

The immediate objective of FICAB is to strengthen capacities for the preparation of afforestation projects through practical On-the-Job-Training (OJT), seminars, and workshops. Five provinces have been selected as targeted provinces for FICAB (Thai Nguyen, Son La, Quang Nam, Lam Dong, and Long An Provinces).

FICAB was divided into two phases. Phase I was to prepare Model F/S and IP as well as other training materials in Thai Nguyen, a Core Province (CoP). The second phase was to implement technical training to staff members of four other provinces as Participating Provinces (PPs), i.e. Son La, Quang Nam, Lam Dong, and Long An Provinces. The training was implemented using Model F/S, IP and other training materials.

Through conducting FICAB, four outputs are to be generated. The first output is an enhanced capacity for MARD personnel. Selected staff members of MARD develop administrative and coordination capacities for supervising the quality of F/S and IP. The second output is an enhanced capacity for CoP and PPs personnel. Selected staff members of the CoP and PPs enhance the capacity for preparing F/Ss and IPs. The third output is development of a monitoring and evaluation method for the technical training for preparation of F/S and IP. The fourth output is development of a training package for conducting the technical training on preparing F/S and IP for afforestation projects.

The training package is prepared as one of the four above outputs of the FICAB. The entire training package comprises the following nine (9) Books:

Book 1: Training plan

Book 2: Manual for preparation of feasibility study reports for production forest / agroforestry development projects in Vietnam

Book 3: Manual for preparation of implementation plans for production forest / agroforestry development projects in Vietnam

Book 4: Model F/S of Thai Nguyen Province

Book 5: Model IP of Thai Nguyen Province

Book 6: Monitoring and evaluation report on technical training of PPs

Book 7: Market trend reference book on wood-based and agroforestry products

Book 8: F/S reports of Son La, Quang Nam, Lam Dong, and Long An Provinces

Book 9: IPs of Son La, Quang Nam, Lam Dong, and Long An Provinces

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## Abbreviations

5MHRP	Five Million Hectare Reforestation Programme
ASEAN	Association of Southeast Asian Nations
ARDD	Agriculture and Rural Development Division
B/C ratio	Cost-Benefit ratio
CBO	Community-Based Organization
CoP	Core Province
CCM	Communal Consultation Meeting
DAF	Development Assistance Fund
DARD	Provincial Department of Agriculture and Rural Development
DoF	Department of Forestry
DOF	Department of Finance
DPI	Department of Planning and Investment
EIRR	Economic Internal Rate of Return
FAO	Food and Agriculture Organization of the United Nations
FICAB	The Development Study on Capacity Building for Preparing Feasibility Studies and Implementation Plans for Afforestation Projects in the Socialist Republic of Vietnam
F/S	Feasibility Study
FIPI	Forest Inventory and Planning Institute
FIRR	Financial Internal Rate of Return
FSDP	Forest Sector Development Program
GOV	Government of Vietnam
IP	Implementation Plan
IRR	Internal Rate of Return
JICA	Japan International Cooperation Agency
JST	JICA Study Team
LUR	Land Use Right
LUC	Land Use Right Certificate
MARD	Ministry of Agriculture and Rural Development
MPI	Ministry of Planning and Investment
NPV	Net Present Value
NTFPs	Non-Timber Forest Products
PAM	WFP's Programme Alimentaire Mondial
PC	People's Committee
PFA	Production Forest Association
PFD	Production Forest Development
PFEP	Production Forest Establishment Project
PIP	Project Implementation Plan
PIU	Project Implementation Unit
PMB	Project Management Board
PMME	Project Management, Monitoring and Evaluation
PPs	Participating Provinces
PSIA	Poverty and Social Impact Analysis
PST	Provincial Study Team
RRA	Rapid Rural Appraisal
SFFD	Support for Production Forest Development
SIA	Social Impact Assessment
Sub-DoF	Sub-Department of Forestry at province level
SWOT	Strengths, Weaknesses, Opportunities, and Threats
VBARD	Vietnam Bank for Agriculture and Rural Development
VBSP	Vietnam Bank for Social Policies
VDB	Viet Nam Development Bank
WTO	World Trade Organization



# SUMMARY

## 1. Objective of Market Trend Book

Market Trend Book (Book 7) is one document of training package and is intended to introduce, for the purpose of preparing the Feasibility Study, how the Markets for Wood-based and Agroforestry Products is moving, also how Market Information can be applied to the Feasibility Study. It is also intended, by the use of this Market Trend Book, to contribute for the selection of target market in the Feasibility Study.

## 2. Users of Market Trend Book

The main users of this Market Trend Book are who plan to prepare the Feasibility Study. They may be staff member of provincial government who has experiences in the project formulation in the forestry sector. Other users include Management Boards or Local Consultants etc.

The user is suggested not to see what they can do, but to select the economically viable project, focusing on the Market Trend when conducting the Feasibility Study.

## 3. Structure and Contents of Market Trend Book

### Introduction

This will provide the general outline of the Market Trend Book.

### Part I. Market Trend for Wood and Agroforestry Products in Vietnam

#### Chapter 1: Current Market Trend

Outlines Wood-based Product Market in Vietnam and clarify the position of Wood-based Product Trade in the Local Market. The production competitiveness of each Wood-based Product is evaluated. Agroforestry Product market is also evaluated though the data is quite limited. Wood-based Product is active in export but it is to note that such active area is relatively limited in Vietnam.

The Chapter includes the following sub-chapters:

#### 1.1 Domestic Wood Product Market

1.2 Export/Import Wood Product Market

1.3 General Trend for each main Wood Products

1.4 Agroforestry Product Market

## Chapter 2: Factors for Market Changes

Basic Factors for the production of Wood-based Products (such as Forest Coverage, Forest Resources and Afforestation Activities), Wood Processing Industry and Economic Viability are evaluated.

Outside Factors such as ASEAN or WTO are evaluated and it is not easy for Vietnam to maintain its competitiveness in the long run.

The Chapter includes the following sub-chapters:

2.1 Forest Resources

2.2 Wood Processing Industry

2.3 Economic Forecast

2.4 Wood Supply & Demand

2.5 External factors (WTO, ASEAN, etc)

2.6 Factors for Agroforestry Products

## Chapter 3: Market Trend in Future

Vietnamese Wood-based Products is booming in both export and local market and such situation may lead further increase in the demand of Wood Materials. On the other hand, there is a clear indication that such Wood Materials is supplied from overseas sources. Wood-based Product Market in Vietnam may have a tough competition for several years with imported Wood-based Products as well as Wood Materials, as it is generally known that local Wood Processing Industry is rather small scale and is technically weak. Agroforestry Products such as coffee, cashew, tea, etc may actively be marketed due to its character.

The Chapter includes the following sub-chapters:

- 3.1 Supply Factor
- 3.2 Demand Factor
- 3.3 Price Factor
- 3.4 Application of New Technology
- 3.5 Factors for Agroforestry Products

#### Chapter 4: Policy Support for Afforestation and Wood Processing Industry

Introducing Policy Support implemented by Vietnamese Government for afforestation as well as Wood Processing Industry and how Government has been working. Also introduced Vietnam Paper Corporation (VINAPACO) for Paper from Wood Materials and Vietnam Forest Corporation (VINAFOR) for Wood-based Products.

The Chapter includes the following sub-chapters:

- 4.1 Policy for Afforestation
- 4.2 Policy for Wood Processing Industry
- 4.3 Policy for Agroforestry

#### Part II. Application to Feasibility Study (Production Forest)

##### Chapter 5: Policy Rationale

Summarized why Feasibility Study is necessary at National and Provincial level, while Vietnam is targeting the reduction of the poor. Also clarified that active participation of local people may lead Political target successful. Further suggested Export Promotion Policy to cope with increasing import demand of Wood Materials and increasing financial needs for such import. Reviewed booming export of Furniture, Wood Chip and import of Wood Materials, MDF, Pulp & Paper, etc.

The Chapter includes the following sub-chapters:

5.1 Relevance of Feasibility Study with National and Provincial policy

5.2 Competitiveness of Wood products

## Chapter 6: Evaluation and Selection of Project Option (Production Forest)

To carry out a realistic Afforestation project, it is necessary to clarify what Target Product to go and how to evaluate from several project options, together with local people. Unless there is a basic agreement with local people, realistic implementation of the Project may not be smooth. The book introduced several ways of the selection.

The Chapter includes the following sub-chapters:

6.1 Method of Project Option Evaluation

6.2 Project Option Evaluation conducted in the Province of Thai Nguyen

## Chapter 7: Preparation of Feasibility Study (Production Forest)

Introduced in this Chapter how to carry out Feasibility Study. It is necessary for the Study to clarify what will be a target of the Project, if technically feasible, if financial arrangement is secured and if economically feasible. Finally if it is not economically feasible, then the Project must be reviewed.

The Chapter includes the following sub-chapters:

7.1 General Concept of the Feasibility Study

7.2 Market Information for the Feasibility Study

7.3 Sample of Data Summary for Wood Materials

7.4 Sample of the Interview at the Factory

7.5 Contribution to Economic and Financial Analysis

7.6 monitoring & Evaluation

# **Introduction**

The Market Trend Reference Book consists of Part I and II. Part I focuses on market trends related to wood products, including several typical wood-based and agro-forestry products. Part II mainly focuses on the application of market information to the F/S as well as IP to be conducted.

There were several difficulties in preparing this market trend Reference Book. These relate to the collection of economic data, import/export statistics and domestic trade information. Some data obtained was rather old and looks inaccurate.

Vietnam has been increasing its importance in the ASEAN. It became the 150th Member of World Trade Organization (WTO) in January 2007. The economy of Vietnam will face various challenges from all categories of overseas markets. Vietnam needs to be well prepared for such a situation.

We hope this Market Trend Reference Book will be of assistance.

**PART I. MARKET TREND FOR WOOD  
AND AGRO-FORESTRY PRODUCTS  
IN VIETNAM**



# CHAPTER 1: CURRENT MARKET TREND

The timber industry in Vietnam has been showing a remarkable level of achievement for both domestic and export markets, contributing greatly to the national economy. It is intended, in this chapter, to clarify how such development was realized.

## 1.1 Domestic wood product market

a) Paper related products, such as wood chip (for export), pulp and paper are showing steady growth in the national economy, while particle board, MDF and plywood contribute at a smaller scale.

Also milled timber is showing rather constant growth, following the expansion of the National economy. Further growth in furniture is reflecting the rapid increase of export to overseas markets.

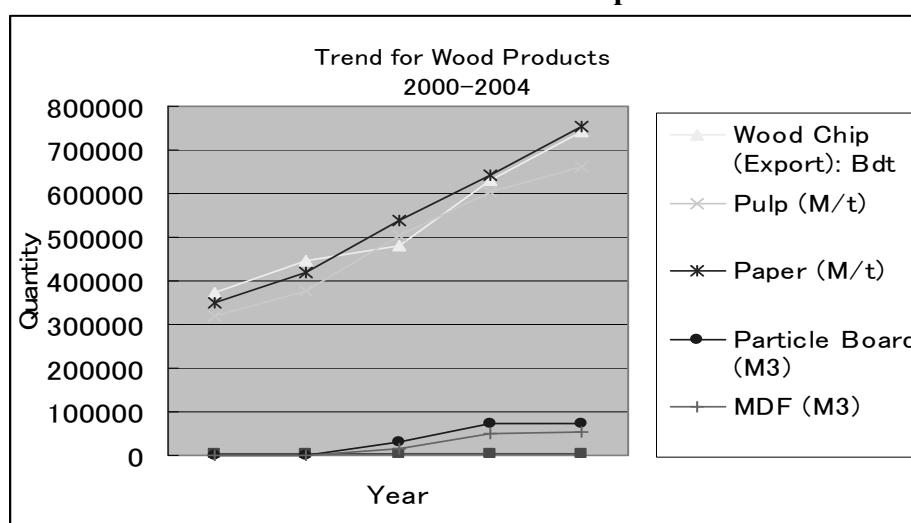
**Table 1.1: Trend for wood products**

Year	2000	2001	2002	2003	2004
Wood Chip (Export): Bdt	373,988	445,865	482,091	631,049	742,243
Pulp (M/t)	317,500	377,112	505,143	602,000	661,400
Paper (M/t)	350,000	420,107	538,231	642,000	753,719
Particle Board (M <sup>3</sup> )	-	-	29,549	72,309	74,000
MDF (M <sup>3</sup> )	-	-	17,187	48,897	55,754
Plywood (M <sup>3</sup> )	-	-	7,526	14,050	15,000
Sawn Timber (M <sup>3</sup> )	-	-	-	2,165,000	2,185,304
Furniture (M <sup>3</sup> )	-	-	-	1,125,000	2,220,000

Sources: MoT, VINAFOR, VINAPACO

(Data for Particle Board, MDF, Plywood, Sawn Timber Furniture in 2004 is estimated)

**Table 1.2: Trend for wood products**



b) Due to the lack of data for both domestic and international trade markets, it is not easy to create an overview or general trend but the following summaries are a realistic indication.

**Table 1.3: Summary of the trend in the industry 2000 - 2005**

product	industry Growth against DGP <sup>1</sup>	General trend of industry
wood chip (Export)	Growing constant	Up-trend with care
pulp	Growing steady	Up-trend
paper	Growing steady	Up-trend
particle board	Growing but slow	Down trend / Up in future
MDF	Growing but slow	Down trend / Up in future
plywood	Not growing	Down trend
sawn timber	Growing steady	Steady trend
furniture	Growing but too fast	Up-trend with care

Source: Study Team

- The following observations should be kept in mind;
- i) Wood chip (export) was quite constant business but its profitability may be dependant on the export market. While the resources for wood chip production depend on domestic markets, which may also compete with domestic paper production.
  - ii) Pulp resources will be competing with wood chip (export) from limited forest resources and there is a high possibility of importing pulp from overseas markets to cover the strong demand from the domestic market.
  - iii) The paper situation is similar to Pulp and the production of paper is still short of the supply level needed to meet the needs of the domestic market.
  - iv) Particle board and MDF will be utilizing the same raw materials, mostly from the new forest, but it is still short for the industry. Increased afforestation is strongly recommended, before the industry gets in a chaotic situation.
  - v) Plywood normally consumes timber from larger diameter trees for its production but it is in very short supply in Vietnam, and imported plywood may be dominating the market. The industry may have to wait for the harvesting of larger diameter trees from the afforestation.
  - vi) Sawn timer seems to have a very stable domestic market but the import of sawn timber is growing.
  - vii) Furniture production is active for both domestic and export markets, but the raw materials are mainly supplied by overseas markets.

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<sup>1</sup> GDP Growth of Vietnam during 2000 – 2005 was recorded about 7.5% average

## 1.2 Export / Import wood product market

a) Vietnam has trade relations with over 120 countries and territories, but it is in a position of “Trade Deficit”, in other words, importing more than it exports. The promotion of export trade is strongly suggested to maintain a healthy trade balance. At the same time, Vietnam needs to continue its active import of various materials to ensure the export of manufactured products.

General trends for export/import markets, several important export / import products, (focusing furniture, wood chip (Export), pulp, paper, particle board, MDF and plywood) and respective markets for products are outlined in this section:

**Table 1.4: Vietnam wood product Export markets**

*Unit: FOB US\$1,000*

market	2001	2002	2003	2004	2005
Total Export	335,090	435,481	567,197	1,139,090	1,562,533
EU-15	119,528	98,152	155,786	370,207	441,886
Japan	100,391	128,396	137,913	180,016	240,873
USA	16,111	44,707	115,468	318,856	138,072
UAE	528	566	1,255	2,421	121,526
China	8,373	11,317	12,388	35,077	60,341
Australia	7,184	13,659	21,788	38,001	41,865
Taiwan	55,780	53,781	45,553	56,631	40,627

Source: General Department of Customs 2005

**Table 1.5: Main import products in Vietnam**

*Unit: US\$ million*

Import products	2001	2002	2003	2004	2005
Total Import	16,162	19,733	25,226	31,953	36,978
wood and materials	158	179	273	538	650
Equipment + Machinery	2,741	3,793	5,359	5,248	5,280
Petroleum	1,827	2,017	2,433	3,574	5,024
Textile materials	1,589	1,710	2,033	2,252	2,281
Steel and Billet	964	1,334	1,657	2,572	2,930
Fertilizer	404	477	628	823	640
Motorbike	669	422	328	452	541
material Plastics	494	616	784	1,190	1,455
Other	7,316	9,185	11,731	11,004	18,117

Source: General Department of Customs 2005

A detailed breakdown of timber and materials that are being imported has not yet been published. Considering rapid growth in the export of wood products in the last 5 years, it may be understood that imported wood materials have been supporting the export of wood products, especially for the furniture export industry.

### ***1.3 General trend for each main wood products***

#### **1.3.1 Wood chip (Export)**

**Table 1.6: Vietnam wood chip export quantity**

*Unit: Dry M/t*

<b>market</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Japan	346,843	391,626	531,563	606,302	644,149
China	0	0	0	52,527	405,160
Korea	30,757	32,732	52,945	44,698	65,327
Taiwan	68,265	57,733	46,541	38,716	42,667
<b>Total</b>	<b>445,865</b>	<b>482,091</b>	<b>631,049</b>	<b>742,243</b>	<b>1,157,303</b>

Source: World Trade Atlas/JETRO 2006

Vietnam wood chip export has a clear growth trend in the Asian market, due to its cost competitiveness and stable supply.

The timber most often used is Acacia or Eucalyptus, which are also used for Vietnam's production of paper and particle board or MDF. Authorities should consider adjusting this use of resources.

Photo No. 1.1: Wood chip export loading at Cai Lan Port



Japan's wood chip import ranking in 2005 indicates Vietnam wood chip shares 5% in value, and No.4 in quantity but Brasil is approaching very close to Vietnam, though there is a huge difference in freight cost.

**Table 1.7: Japan import of wood chip top 10 in 2005**

*(Source: Japan Custom)*

Ranking	Quantity (Dry Ton)	CIF Value (US\$ million & Shares)	
Australia	3,702,935	569.65	43%
South Africa	3,186,804	469.09	28%
Chile	1,627,976	247.54	15%
Vietnam	644,149	87.43	5%
Brasil	613,163	96.15	6%
Others	1,710,835	228.02	12%
Total import	11,485,862	1,697.88	100%

**1.3.2 Pulp (Import)**

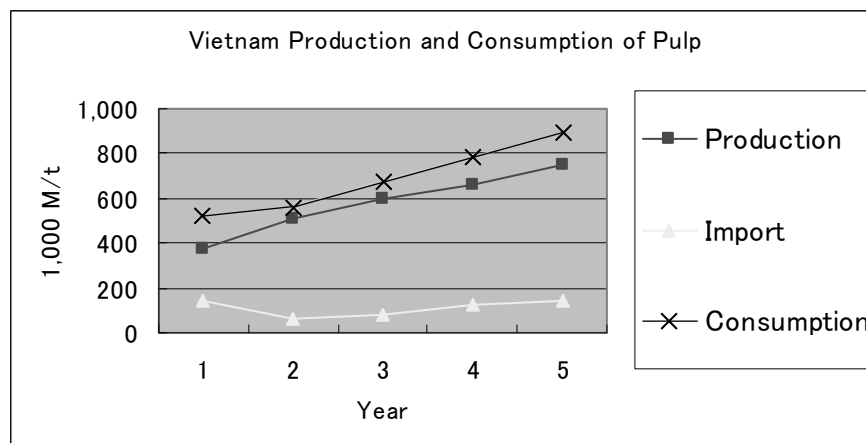
Pulp is one of the strategic wood products in Vietnam for the daily life of the people and pulp has the following historical trend in the country.

**Table 1.8: Vietnam production and consumption of pulp**

*Unit: M/t*

Item	2000	2001	2002	2003	2004	2005
Production	317,500	377,112	505,143	602,000	661,400	746,000
Import	55,000	141,026	60,000	80,000	128,000	145,000
Unbleached fibre (Soft wood)	0	0	0	0	8,000	13,000
Bleached fibre (Hard wood)	55,000	141,026	60,000	80,000	120,000	132,000
Consumption	372,500	518,138	565,143	682,000	789,400	891,000

Source: Vietnam Paper Association, VINAPACO



Vietnam has been showing a clear trend for consuming more pulp for paper and paperboard it is inevitable this will lead to greater imports of pulp from overseas supply sources.

With a growing economy with increases of more than 7% in GDP, the requirement for more paper will also be inevitable, requiring further imports of pulp. The use of imported pulp will be dominant in the domestic paper production market.

**Reference: Wood – Pulp – Paper**

At a pulp & paper factory, wood is chipped into smaller pieces, then it is sent for cooking (with Chemicals), becoming wood paste (pulp) and then it is finally sent to the screening process to form various types of paper

**1.3.3 Paper (Import)**

Paper is produced from pulp with a certain screening system is used for daily life for news paper, printing paper or packaging paper. The volume of paper consumption indicates the living condition of the people.

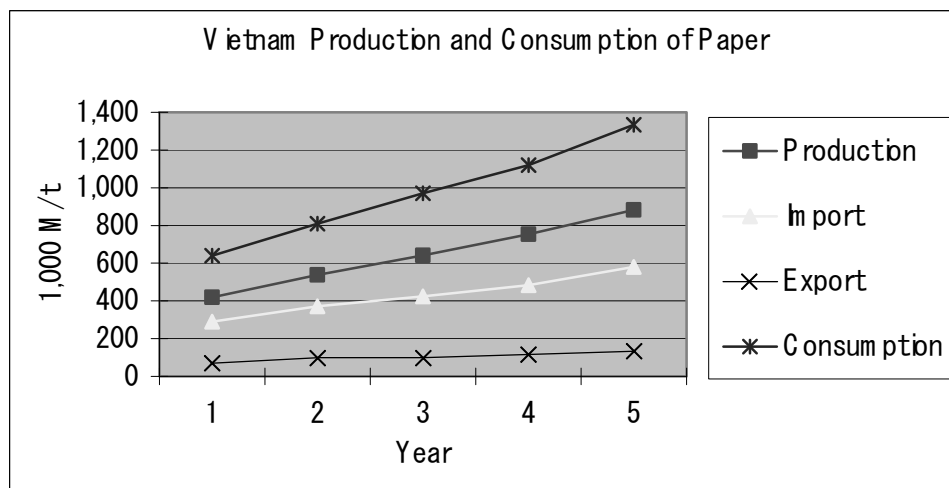
In the following Table, Vietnam is showing a clear trend in increasing consumption of paper, and with the growing economy, the consumption may increase further. The consumption of paper is expected to reach over 30 Kgs/person in the year 2010.

**Table 1.9: Vietnam production and consumption of paper**

*Unit: M/t*

	2000	2001	2002	2003	2004	2005
Production	350,000	420,107	538,231	642,000	753,719	883,000
Import	213,000	290,000	371,554	425,000	484,000	580,000
Export	59,000	70,000	98,878	96,426	117,100	130,000
Consumption	504,000	640,107	810,907	970,574	1,120,614	1,333,000
Kg per capita	6.55	8.19	10.21	12.04	13.70	15.28

Source: Vietnam paper Association



Then who will be responsible to assure the supply of paper? Overseas suppliers, especially neighboring countries like Indonesia, have quite competitive suppliers both in scales as well as cost, while Vietnam's paper industry, including pulp industry are operating at a smaller scale. The materials required for paper production are in a competitive position the materials required for particle board production, which is resulting in a higher production cost.

Since it is not easy to increase paper supply capacity in a short period for competitive volumes and costs, the trend for the import of paper will be constantly strong until the paper industry develops a competitive position against overseas suppliers.

#### **1.3.4 Particle Board (Import)**

There are many particle board factories in Vietnam, while the followings are principal manufacturers in the country. Headed by a factory in Thai Nguyen, the volume of production is generally small and the particle board manufactures are competing with the paper manufacturing industry for raw materials.

**Table 1.10: Particle board factories in Vietnam**

No	Factory name	Location	Capacity (m <sup>3</sup> /year)	Production in 2005
1	Viet Tri	Phu Tho	4,000	4,000
2	Tan Mai	Dong Nai	1,000	1,000
3	Son La	Son La	2,000	2,000
4	Thai Nguyen	Thai Nguyen	16,500	9,900
5	Dak Lak	Dak Lak	1,000	1,000

Source: VINAFOR

Overseas manufacturers of particle board seem to have production volumes of over 5,000 m<sup>3</sup>/month and since this type of product requires volume efficiency, no Vietnamese manufacturer is competitive in the market.

And for the same reason, there is no competitiveness in export markets.

**Table 1.11: Import quantity and value of particle board**

Particle Board	2002	2003	2004	2005
Quantity	11,848	20,000	25,000	31,500
Value	1,954,920	2,280,000	2,850,000	3,591,000

Source: General Department of Customs, MARD

It is also clear that particle board is not yet common in the domestic market as seen in the Table 1-9, while there seems to be much low quality manufacture, utilizing old imported machinery, while the final product sells at cheap prices with poor quality.

Until the industry is in a position to procure sufficient quantity and at competitive cost, there may be no future for the industry.

Photo No. 1.2: Particle Board from Thai Nguyen



Particle board is a board, made of small sizes of wood chip with adhesives. The board is formed using both heat and pressure..

Main raw materials are Acacia and Eucalyptus, which are used by both pulp & paper factories.

### **1.3.5 MDF (Import)**

MDF (medium density fiberboard) is similar to particle board. MDF producers are competing against the paper industry for raw materials, as they are principally using the same material. Also the scale of production in Vietnam is far smaller than overseas, which is normally over 300,000 – 500,000m<sup>3</sup>/year. The production of MDF started in Vietnam from the beginning of 2000. This means that Vietnamese manufacturers have no possibility of being competitive.

The following table indicates the scales of production in Vietnam;

**Table 1.12: MDF manufactures in Vietnam**

No	factory name	Location	Capacity (m <sup>3</sup> /year)	production in 2005 (m <sup>3</sup> )
1	Hoanh Bo	Quang Ninh	5,000	5,000
2	Viet Tri	Phu Tho	2,000	2,000
3	Gia Lai	Gia Lai	54,000	51,000
4	Hiep Hoa	Nghe An	25,000	18,000

Source: VINAFOR



The volume of imported MDF seems to be occurring at a lower level as shown in the Table 1-11, but there is a strong demand for MDF as it is useful for production of furniture for export, since MDF provides a good smooth finish for the furniture.

**Table 1.13: Import quantity and value of MDF**

<b>MDF</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Quantity (m <sup>3</sup> )	16,492	34,280	34,500	35,000
Value (CIF Vn, US\$)	3,133,480	6,753,160	6,796,500	6,895,000

Source: General Department of Custom

As indicated, the raw materials are almost same as particle board or those used by the paper industry. This is mostly young trees from the afforestation. The trend for the future demand of MDF may continue to be strong due to its applicability to furniture manufacture.

**REFERENCE:**

**MDF (Medium Density Fiberboard);**

MDF is wood fiber panel or hard wood board, made of wood fibers mixed with adhesives or glues and it is processed through (1) chipping wood / logs (of hardwood or softwood), (2) separated into “fibers”, (3) mixed with adhesives or glues, (4) heated and Pressed to 350-800 Kg/m<sup>3</sup>, according size requirement and (5) The final products have the advantage of a smooth surface, suitable for use on the interior of housing.

China (capacity 7 million tons), Malaysia (capacity 1.4 million tons) and Korea (capacity 1.0 million tons) are most competitive supply sources in Asia, while Vietnam has a capacity of about 80,000M<sup>3</sup> and imports Approximately 300,000 m<sup>3</sup>/year, according to Japanese industry sources.

**1.3.6 Plywood (Import)**

Plywood is a kind of wood panel but is sliced from round logs and glued in several veneers in different directions. This ensures the product is durable against pressure from any direction.

It is quite useful for interior housing panels.

There is a rather long history for production but due to the scarcity of bigger trees in Vietnam’s native forest the plywood industry is presently fading out, while imports seem to have the major market.

**Table 1.14: Import of plywood**

Year	Import quantity (m <sup>3</sup> )	Import value (US\$)
2002	21,885	2,407,350
2003	15,097	1,660,670
2004	13,500	1,485,000
2005	12,904	1,419,440

Source: DoF, MARD

Most of the plywood factories in Vietnam have practically ceased operation since there is insufficient supply of raw materials, mainly larger diameter native tree species. This is compounded by a bigger in-flow of plywood to the domestic market from Asian countries, such as Malaysia and Indonesia at competitive prices.

<b>REFERENCE:</b>	
<b>Plywood</b>	= wood panel, glued in several veneers (2 ply, 3 ply, etc) in different directions for high durability as a construction material.
<b>Veneer</b>	= wood sheet sliced generally from round logs of softwood or hardwood with a thickness of about 1.0 mm.
<b>Round wood</b>	= To ensure the most effective productivity for the manufacture of good veneer, large diameter trees or logs are preferable.

Photo No. 1.3: Da Lat, December 2005



### **1.3.7 Construction Woods (Import)**

The current demand for construction timber is approximately 2.2 million m<sup>3</sup>/year, while domestic production is approximately 2 million m<sup>3</sup>/year, creating a shortfall of approximately 200,000 – 300,000m<sup>3</sup> /year, which is filled by import markets.

There is a trend toward strong demand for construction timber due to strong housing demand and the scarcity of domestic resources. This may mean that market for imports will continue to increase. The following indicates recent import trends for construction timber in Vietnam;

**Table 1.15: Import of sawn construction woods**

*Unit: m<sup>3</sup>*

<b>Construction Sawn Woods</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
	417,532	201,220	210,000*	220,165	318,990	350,000*	385,000

Source: General Department of Customs (\* indicates Estimated Figures)

Photo No. 1.4: Construction sawn wood (Nghe An)



Photo No. 1.5: Construction sawn wood as above



### 1.3.8 Furniture (Export)

Furniture has been one of the main wood products for export for over 5 years. The export amount is considered to be over US\$ 1 billion but in spite of careful investigation, the study team was unable to obtain clear export data and it was not possible to provide a detailed analysis.

Through industry sources, Vietnam's production of furniture is equivalent to approximately 3.4 million m<sup>3</sup> of timber per year, approximately 2.2 million m<sup>3</sup> for the domestic market and approximately 1.2 million m<sup>3</sup> for production of furniture for export.

The study team, then, tried to obtain data from foreign sources to build the record of imports, which is indicated in the following Table;

**Table 1.16: Vietnam furniture by main marketplaces**

*Unit: CIF US\$ million*

Year	Market							Total
	EU	USA	Japan	China	South Korea	Taiwan	Malaysia	
1999	149.552	4.037	94.874	0.729	10.075	39.862	8.816	307.945
2000	207.288	9.903	108.040	0.803	13.220	39.520	8.536	387.310
2001	208.419	14.349	136.699	3.262	14.715	33.810	10.087	421.341
2002	241.487	81.766	143.468	5.925	21.999	36.409	15.558	546.612
2003	390.857	189.600	160.159	5.537	23.756	30.682	10.907	811.498
2004	429.943	388.643	186.141	4.500	27.964	29.683	13.485	1.082.659
Up in 5 years	287%	9.627%	198%	658%	278%	74%	153%	352%

Source: Customs at each Country

As indicated, these are records of import for each country, measured during customs import procedures, so that the "TOTAL" expressed here is not the total export from Vietnam but it is a total of the 7 countries listed here.

And as seen on the table, the export market has expanded every year and reaching over 3.5 times the original size in the 6 years from 1999.

With a rapid increase in the market volumes, there is a good trend for having larger scale furniture factories throughout the country; however the majority are still medium and small scale.

The key issue for the industry is that there is a scarcity in the supply of raw materials in the country and the most suitable materials are imported, which in turn supports the furniture export market.

There is tough competition for the export of furniture to major importing markets, such as EU, USA, Japan among others. The following Table shows how Vietnam is situated the market in Japan.

**Table 1.17: Japan import of wooden furniture \*top 10\***

*Unit: CIF Yen*

Year	2000		2001		2002		2003		2004	
1	China	34,662	China	50,736	China	61,158	China	69,437	China	75,169
2	Thailand	30,065	Thailand	33,847	Thailand	32,710	Thailand	28,929	Thailand	27,864
3	Malaysia	21,781	Malaysia	21,399	Malaysia	17,925	Malaysia	15,169	<b>Vietnam</b>	16,293
4	Taiwan	14,873	Indonesia	16,873	Indonesia	15,878	<b>Vietnam</b>	14,523	Malaysia	14,745
5	Indonesia	14,658	Italy	13,627	<b>Vietnam</b>	13,594	Indonesia	14,472	Indonesia	13,057
6	Italy	11,730	Taiwan	13,598	Italy	11,625	Italy	12,132	Italy	11,048
7	<b>Vietnam</b>	7,774	<b>Vietnam</b>	11,514	Taiwan	11,475	Taiwan	8,722	Taiwan	7,848
8	USA	6,719	USA	6,895	USA	4,364	Philippine	4,443	Philippine	3,887
9	Korea	3,728	Denmark	2,984	Denmark	3,153	USA	3,729	Denmark	3,578
10	Denmark	2,628	Germany	2,725	Germany	2,730	Denmark	3,197	USA	3,197
--	Others	6,041	Others	16,290	Others	15,460	Others	14,024	Others	14,116
Total	164,659		190,488		190,072		188,771		190,800	

Source: Ministry of Finance Japan 2004 and International Development of the Furniture Industry of Japan 2004

Furniture production is one of the key industries in the national economy, which in principal requires a sustainable level of the Afforestation to maintain its competitiveness in the world market.

### 1.4 Agro-forestry product market

Agro-forestry products, within the category of agriculture as well as non timber forest products (NTFP), are generally grown in a small scale farms, including home garden, for the purposes of having extra income and additional foods. These farming activities utilize extra yard area that is available. The exception is relatively large scale farming, such as tea, coffee or corn. The definition of agro-forestry seems too complicated as it may range from rubber tree growing to small scale fruit tree growing in the garden.

It is not easy to trace the trading of agro-forestry in the domestic market as it is not clearly indicated in the statistics and the market could be local, provincial, nation-wide or to export (or even just for household consumption).

The following data indicates some production volumes and values for agricultural and agro-forestry products, in Vietnam.

**Table 1.18: Production & value of major Vietnam agricultural products**

Product	2001		2002		2003		2004	
	Production	Value	Production	Value	Production	Value	Production	Value
Rice	3,729	625	3,241	726	3,813	721	4,070	947
Coffee	931	391	719	322	749	505	936	616
Rubber	308	166	449	268	433	378	485	565
Tea	68	78		83	60	60	96	92
Cashew nut	44	152	75	209	84	284	107	425
Peanut	78	38	62	51	83	48	45	27
Pepper	57	91	105	107	74	105	109	148
	-	330	77	201	-	151	-	170

Source: MARD (Unit: production: 1,000 M/t Value: US\$ million)

Rice, or rubber may not be agro-forestry products but tea, coffee, cashew, peanut or pepper may be, as such can rather easily be grown as a forestry project, if the available land is suitable for such products.

Some Images of Vietnam Agro-forestry products



Tea



Coffee

The following data displays the trend of production (and sales) in Vietnam;

**Table 1.19: Production of selected agro-forestry products**

Year	Tea		Coffee		Cashew	
	Quantity	Location	Quantity	Location	Quantity	Location
2000	314.7	Thai Nguyen	802.5	Dak Lak, Dak	67.6	Dak Lak, Dak Nong
2001	340.1	Tuyen Quang	840.6	Nong Gia Lai, Kon	73.1	Gia Lai, Kon Tum
2002	423.6	Ha Giang	699.5	Tum, Lam Dong	128.8	Lam Dong, Binh
2003	448.6	Son La	793.7	Son La, Dien Bien	164.4	Dinh, Da Nang
2004	487.6		834.6		206.4	Khanh Hoa

Source: Statistical Year Book 2004

It is clear that the markets for tea, coffee and cashew have been expanding slowly and are expected to have further diversification to various new products throughout the country.

Non timber forest products (NTFP) have also been contributing greatly to Vietnam's export market, though the supply and demand depends largely on climactic and environmental conditions.

**Table 1.20: Export of selected NTFP**

*Unit: US\$ million*

Product	2001	2002	2003	2004	2005*
I. Fiber products	77.84	96.37	108.57	148.13	67.93
1. Bamboo and rattan	4.63	7.62	8.83	9.91	4.07
2. Products from bamboo and rattan	73.22	88.75	99.74	138.22	63.86
II. Bee honey	5.67	16.54	18.69	17.93	8.04
III. Medicine material	6.16	6.47	6.75	6.58	2.37
IV. Extraction products	17.99	18.67	20.28	23.57	8.89
1. Illicium verim, Cinnamomum cassia	10.33	11.02	11.72	11.01	5.11
2. Resin and extraction from plant	4.70	4.17	4.94	5.65	2.11
Chemical products with origin from nature	0.05	0.04	0.29	0.86	0.49
Attar from plant	2.92	3.43	3.60	6.04	1.18
V. products from trees branches and buds	0.42	0.40	0.31	0.85	0.63
<b>Total</b>	<b>203.93</b>	<b>253.48</b>	<b>283.72</b>	<b>368.75</b>	<b>164.68</b>

Source: MARD(2005\* indicates First 5 months of 2005)

There is some import of Agricultural/NTFP but has no significant impact to the National Economy.