



# **Workshop on statistics of forest products in Viet Nam**

## **EFFICIENCY OF TIMBER USE AND CONVERSION COEFFICIENT**

HUỲNH VĂN HẠNH  
Vice Chairman of HAWA



# Introduction to HAWA

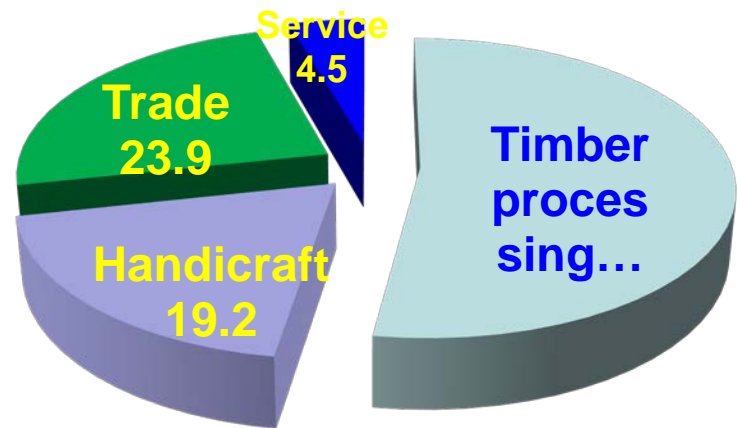
- The establishment of Handicraft and Wood Industry Association of Ho Chi Minh City (HAWA) :
  - 1990: Handicraft Association under Trade Association of HCMC
  - 1997 to present: Handicraft and Wood Industry Association of HCMC

## By operating field (%)

- A voluntary organization of enterprises
- 430 members

By geography:

- HCMC: 54%
- Other provinces, cities: 46%



Source: HAWA



# Viewpoints of enterprises on natural resources

- **Attitude to environment:**
  - Natural resources are limited
  - Forests are lungs of mankind, storehouse of water, shields to prevent sand, storms, walls to prevent floods, shelters of wildlife...
  - Love and respect nature, warn people about consequences of excessive use of natural resources.
  - Forests also have life and soul, and are the heart of the country
  - Trees are living beings that God has given to humans, thus they should be respected

# Actions by HAWA and enterprises

- **HAWA:**

- Help enterprises understand requirements of relevant domestic and foreign legal regulations, such as the Forestry Law, Lacey act, FLEGT, ...
- Provide information about market opportunities and trends
- Encourage afforestation and use of plantation timber
- Equip with advanced and new technologies in order to increase the proportion of timber utilization

- **Enterprises:**

- Strictly comply with domestic and foreign legal regulations
- Viet Nam currently has 732 enterprises with CoC/FSC certificates, in which 49 enterprises have FSC/FM certificate with area of 235,000 ha
- Cooperate with forest farmer to plant forests, certify sustainable forest management and increase age of plants



# Creating legal and sustainable timber source

- VN has over 2.8 mil. ha of plantation forests with growing stock of 117.3 mil m<sup>3</sup>, nearly 1.5 mil. households are participating in forest plantation
- **Roles of plantation timber:**
  - Creating a legal timber source for production
  - Motivation for rural development, a timber source in the supply chain
  - Helping increase forest cover, reduce emission, prevent erosion and natural disasters, reduce the stealing of natural timber
  - Changing the habit from using natural timber to using plantation timber
- **Linkage between enterprises and households:**
  - To maintain the harvesting age until the 10<sup>th</sup> year
  - To provide financial support and product consumption
  - To contribute to completion of supply chain of raw materials
  - To create a stable position for the timber industry



# Reasonable use of timber

- Raw timber material accounts for 35% of cost structure of products. Enterprises must use timber reasonably:
  - Using timber species for right purposes
  - Saving resources for next generations
  - Reducing costs
  - Increasing economic efficiency
- Intermediary processing at the planting sites helps:
  - Create more jobs
  - Reduce transportation cost by 75%
  - Make use of the most of raw materials (*big timber: sawn, dried, 4-side planed for furniture production; small timber: branches, roots are planed for making woodchip, MDF, paper pulp, pellets*).
  - Improve economic efficiency for forest farmers



# The using proportion of some plantation timber in Viet Nam

- The using proportion of Melaleuca timber, from round timber to sawn timber:
  - Depend on diameter and sawn method
  - $\phi$  from 15 – 20 cm, efficiency 50%, corresponding coefficient 2:1
  - $\phi$  from 20 – 30 cm, efficiency 53%, corresponding coefficient 1.8:1
  - $\phi$  from 30 – 40 cm, efficiency 60%, corresponding coefficient 1.6:1
- The using proportion of rubber wood, from round timber to sawn timber:
  - $\phi$  from 10 – 20 cm, efficiency 50%, corresponding coefficient 2:1
  - $\phi$  from 20 – 30 cm, efficiency 55%, corresponding coefficient 1.8:1
  - $\phi$  from 30 – 40 cm, efficiency 60%, corresponding coefficient 1.7:1
  - $\phi$  from 50 – 60 cm, efficiency 65%, corresponding coefficient 1.5:1<sub>7</sub>



# The using proportion of some imported timber

- The using proportion of Ash timber, Oak timber, from round timber to sawn timber:
  - $\phi$  from 30 – 39 cm, efficiency 50%, corresponding coefficient 2:1
  - $\phi$  from 40 – 49 cm, efficiency 56%, corresponding coefficient 1.8:1
  - $\phi$  from 50 – 60 cm, efficiency 60%, corresponding coefficient 1.65:1
  - $\phi$  from 60 cm, efficiency 65%, corresponding coefficient 1.5:1
  - From round timber to timber products: 45%= 2.23
- The using proportion of Ash timber, Oak timber from round timber with  $\phi \geq 50\text{cm}$  to timber products, efficiency 45%, corresponding coefficient 2.3:1
- In general, the bigger diameter of timber, the higher efficiency and vice versa





# Ratio of conversion from some production to round timber

| Product                           | HS code | Ratio of conversion |
|-----------------------------------|---------|---------------------|
| Round timber (m3)                 | 4403    | 1                   |
| Wood pellets (ton)                | 4401    | 1.8                 |
| Hoopwood (m3)                     | 4404    | 2.6                 |
| Wood wool, wood flour (ton)       | 4405    | 1.3                 |
| Sleeper (m3)                      | 4406    | 2                   |
| Sawn timber (m3)                  | 4407    | 1.43                |
| Sliced veneer, peeled veneer (m3) | 4408    | 3.3                 |



# Ratio of conversion from some production to round timber *(cont.)*

| Product                    | HS code | Ratio of conversion |
|----------------------------|---------|---------------------|
| Flooring panel (m3)        | 4409    | 2.5                 |
| Particle board (m3)        | 4410    | 2.3                 |
| Fibreboard (m3)            | 4411    | 2.6                 |
| Plywood (m3)               | 4412    | 2.5                 |
| Jointed board (m3)         | 4413    | 2.6                 |
| Joinery and carpentry (m3) | 4418    | 1.3                 |
| Chair (m3)                 | 9401    | 4                   |
| Furniture (m3)             | 9403    | 3                   |



# Conclusions

- Plantation forests not only provide timber to society but also contribute to changing consumption habits to responsible consumption.
- In order to maintain and sustainably develop plantation forests, actions of enterprises are as follows:
  - Developing big-diameter timber plantation forests
  - Improving quality of production, putting heart and soul into products
  - Effectively using plantation timber and legally imported timber
  - Renovating technology, enhancing management capacity to save raw timber materials



Thanks for your attention

