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ENGINEERING  
MANAGEMENT

**INNOVATIVE  
SOLUTIONS TO  
ENSURE THE  
SUSTAINABILITY  
OF YOUR BUSINESS**





# STCP



## EXPERTISES

CONSULTING  
ENGINEERING  
MANAGEMENT

Almost **USD 2.0 billion** of infrastructure investments managed by STCP

More than **750 thousand m<sup>2</sup>** of engineering projects being  
**more than 50 thousand m<sup>2</sup>** compatibilized in BIM

Over **50 million hectares** of natural and planted forests inventoried

Over **1,000 clients** in **45 countries**, on **5 continents**

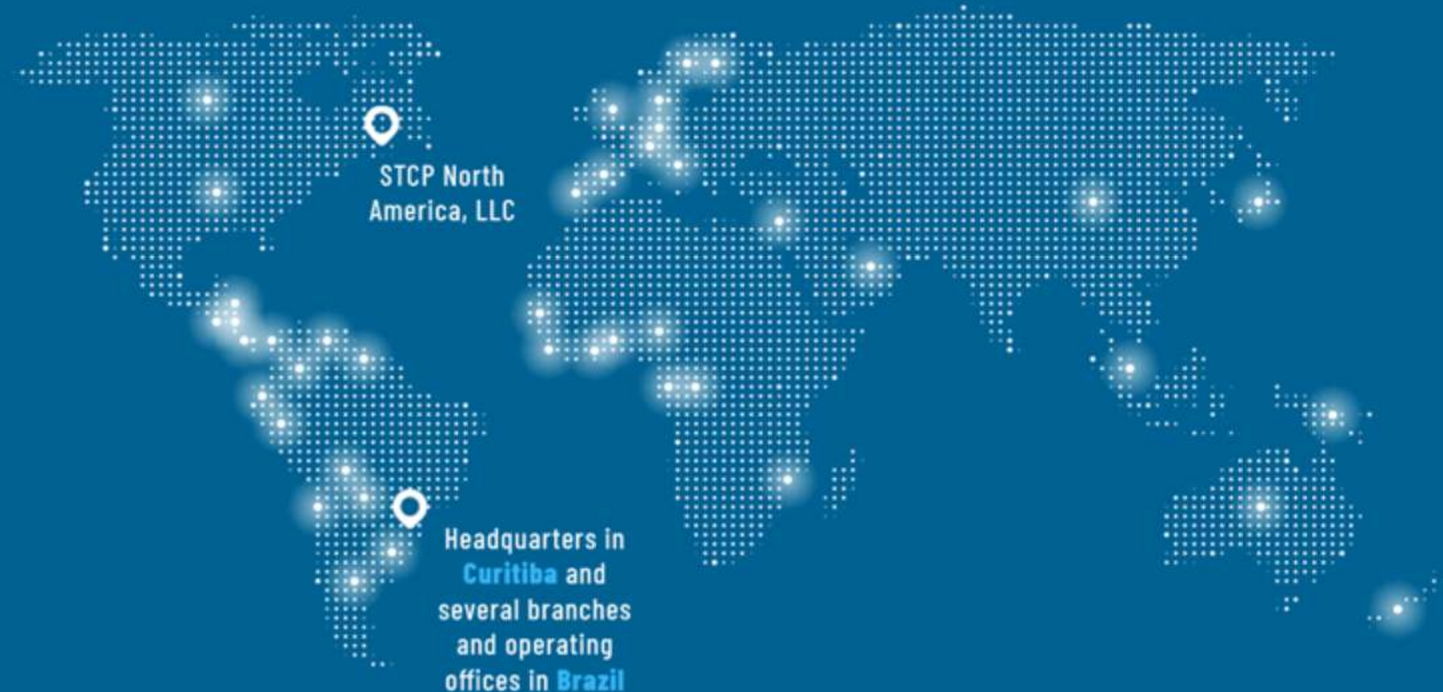
Capacity to **mobilize more than 150 external consultants** and specialized partners

Support on land acquisition of **+ than 400 thousand hectares** in Brazil

More than **5,000** projects and studies

Multidisciplinary team  
**400 employees**

Created in 1981, STCP has been seeking for intelligent and innovative solutions, especially in environmental, forestry, engineering, bioenergy, geotechnology, infrastructure, development, market, socioeconomic, agribusiness and information technology areas.







CONSULTING  
ENGINEERING  
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INNOVATIVE  
SOLUTIONS  
TO ASSURE YOUR  
**BUSINESS**  
SUSTAINABILITY



60<sup>th</sup> session of the  
International Tropical Timber  
Council (ITTC)

**MARKET DISCUSSIONS**

# PAST AND FUTURE OF TROPICAL TIMBER

**Ivan Tomaselli**  
ABIMCI- BRAZIL

December, 2024  
Yokohama - Japan

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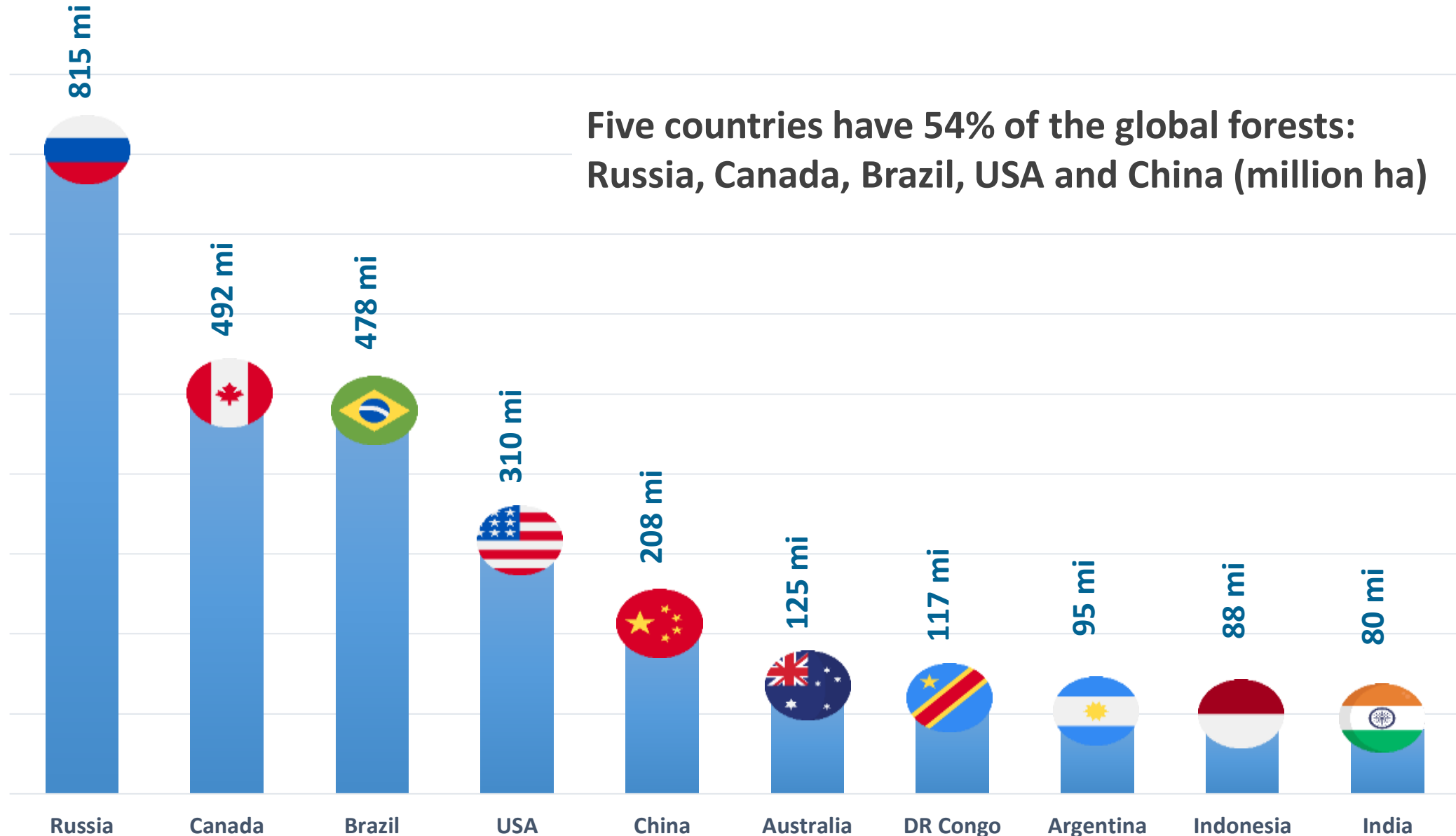


# 1. WORLD FORESTS

**Total - 4.06 billion ha**  
**1/3 of the global lands**  
**3.75 billion ha are natural forests**  
**310 million ha of forest plantations**

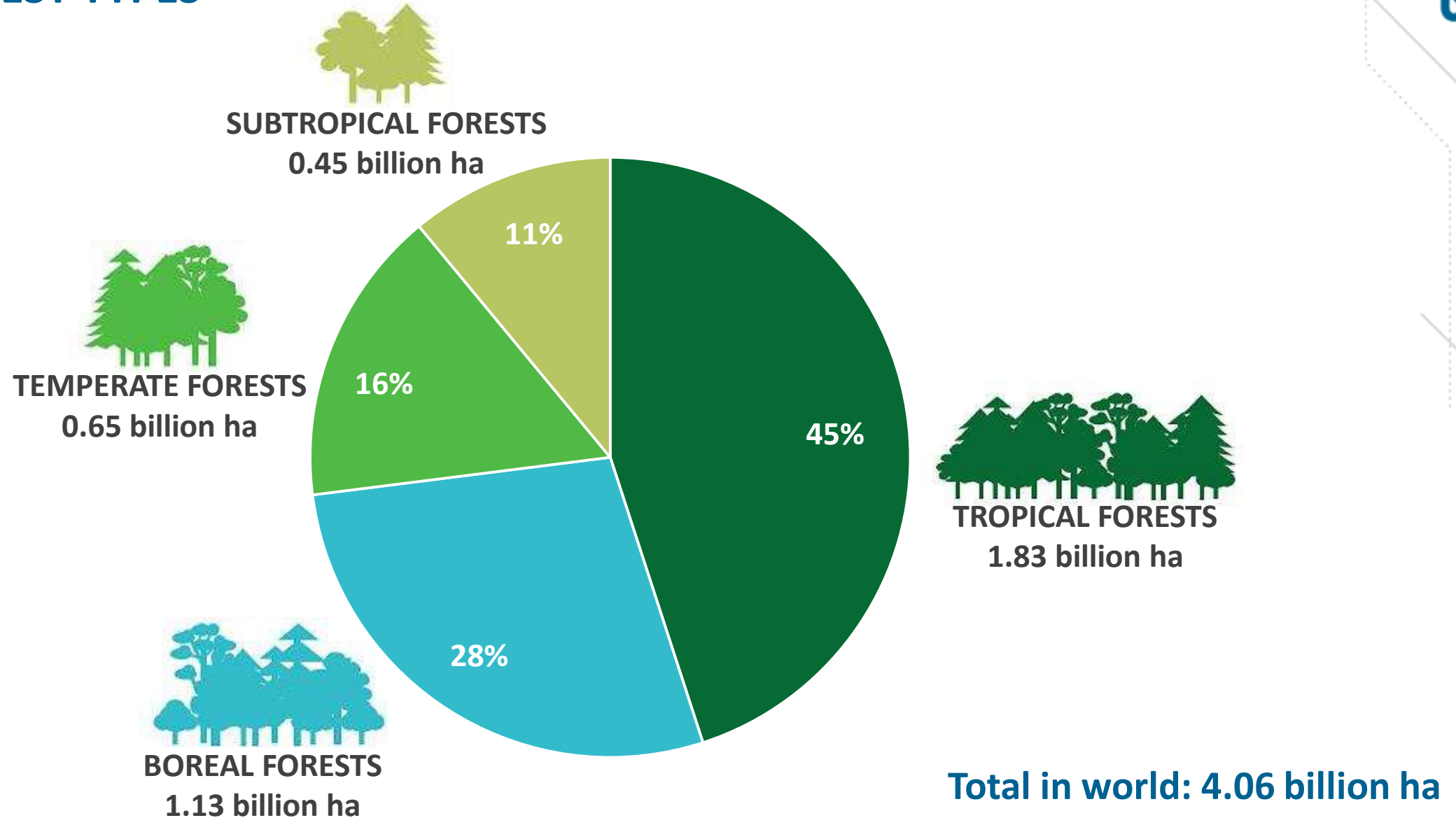


# 1. WORLD FORESTS



Source: <http://ourworldindata.org/forests> (2024), compiled and adapted by STCP (2024) [www.stcp.com.br](http://www.stcp.com.br)

## 2. FOREST TYPES





### 3. TROPICAL FOREST AND TIMBER IN THE PAST



The first evidence of TEAK dates back to the year 1495, when shipwrecks were found off the coast of the island of Tilos in Greece, suggesting that its wood has been used for centuries in shipbuilding.

The first TEAK plantation was established in Sri Lanka at the end of the 17th century.



### 3. TROPICAL FOREST AND TIMBER IN THE PAST

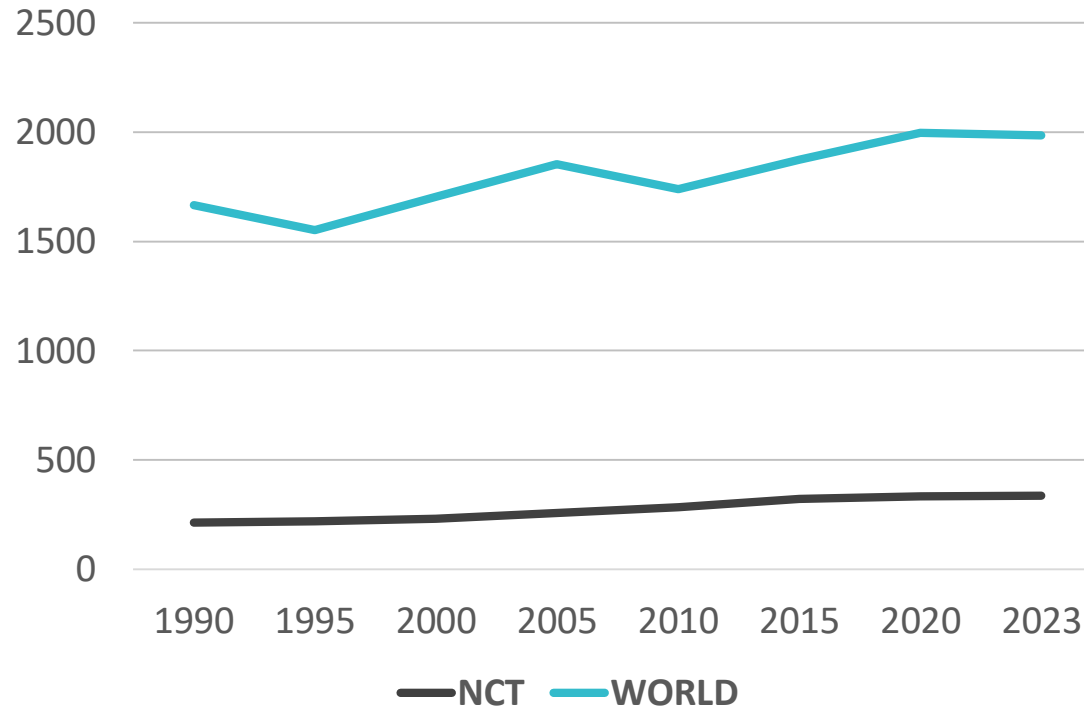
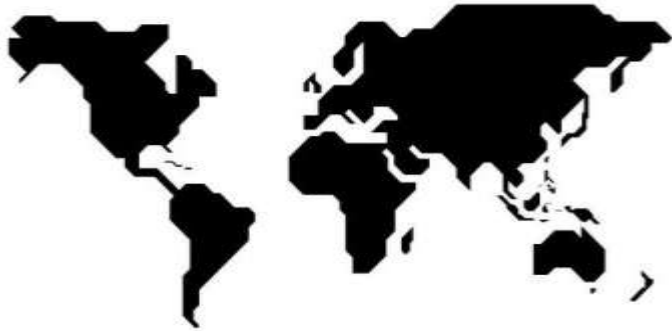
#### COLONIAL TIMES: BRAZIL

In 1511, the first export of Brazilwood to Portugal took place when 5,000 logs were shipped to Portugal on a vessel called Bretoa.

From 1513 onward, anyone interested in harvesting Brazilwood could do so, provided they paid the required taxes to the Crown (20%).

## 4. TROPICAL TIMBER IN THE LAST DECADES

### World and Non-Coniferous Timber (NCT) Industrial Roundwood Production



#### INDUSTRIAL ROUNDWOOD

	NCT	WORLD
1990	213	1667
1995	218	1553
2000	232	1704
2005	256	1853
2010	284	1740
2015	321	1874
2020	333	1996
2023	336	1985

Million m<sup>3</sup>

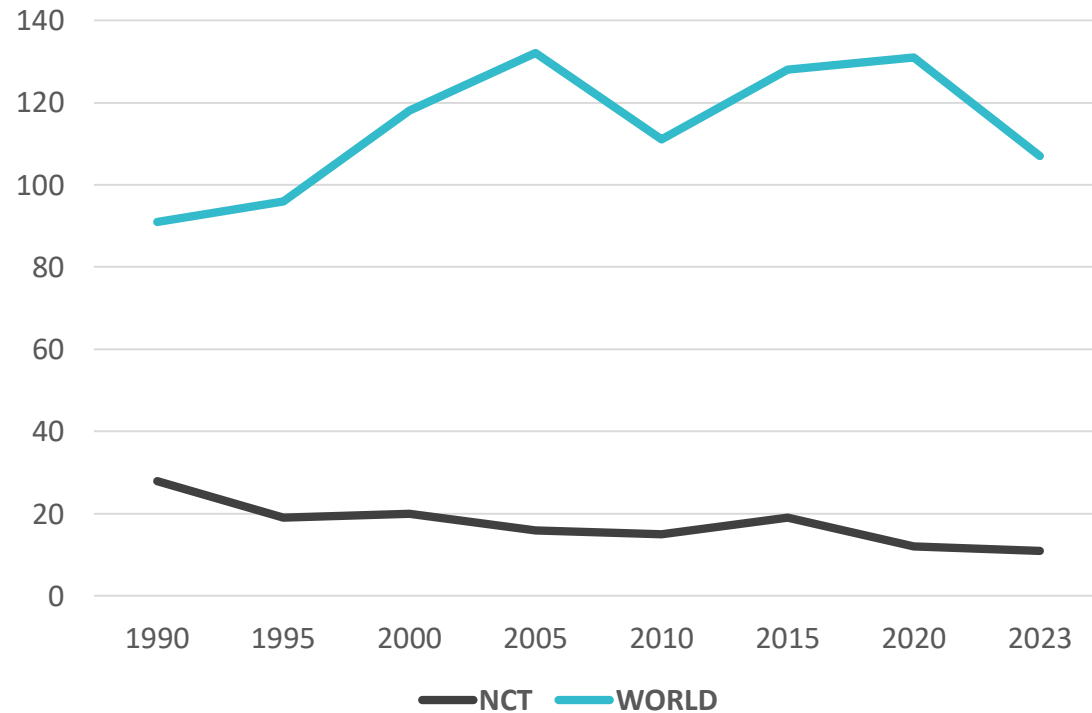


# 4. TROPICAL TIMBER IN THE LAST DECADES

## World and NCT Industrial Roundwood Exports

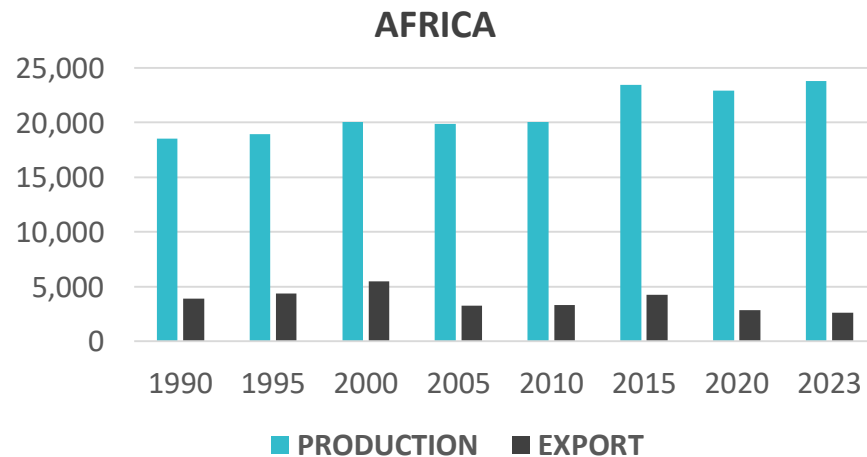
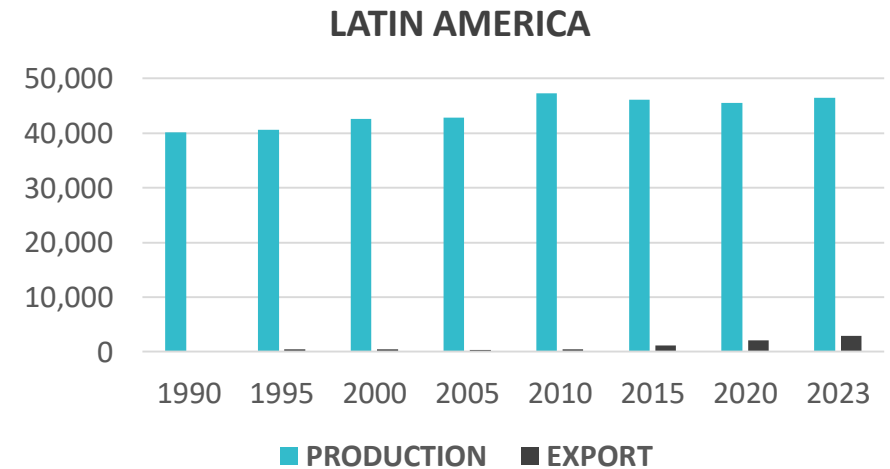
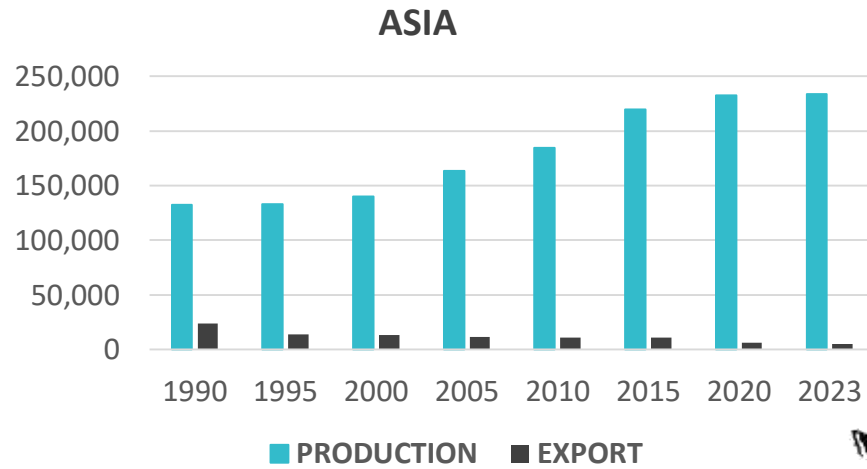
ROUNDWOOD		
	NCT	WORLD
1990	28	91
1995	19	96
2000	20	118
2005	16	132
2010	15	111
2015	19	128
2020	12	131
2023	11	107

Million m<sup>3</sup>



# 4. TROPICAL TIMBER IN THE LAST DECADES

NCT Industrial Roundwood Production (blue) and Exports (black) by Tropical Region (1000 m<sup>3</sup>)



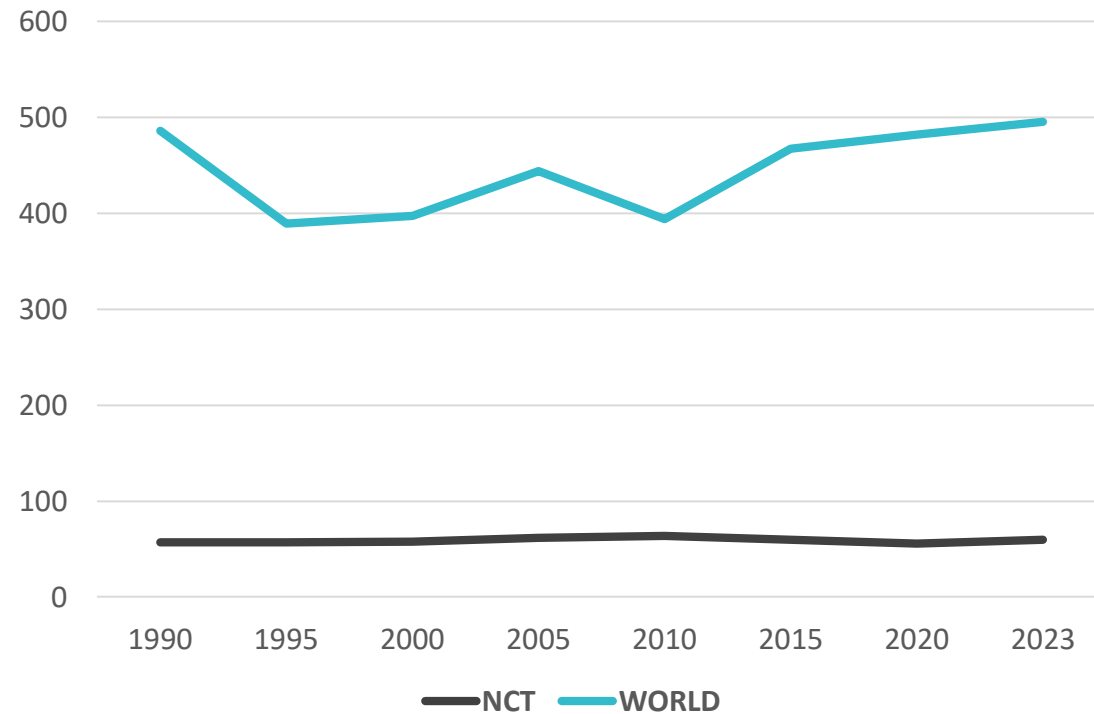


# 4. TROPICAL TIMBER IN THE LAST DECADES

## World and NCT Sawnwood Production

SAWNWOOD		
	NCT	WORLD
1990	57	486
1995	57	389
2000	58	397
2005	62	444
2010	64	394
2015	60	467
2020	56	482
2023	60	495

Million m<sup>3</sup>

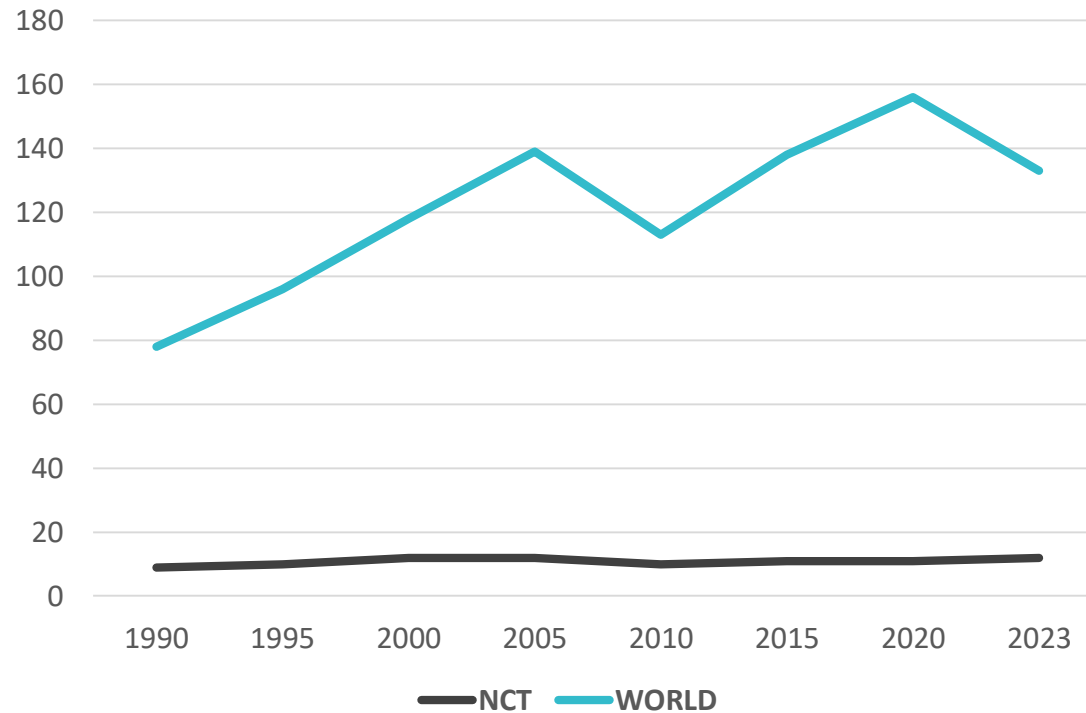


# 4. TROPICAL TIMBER IN THE LAST DECADES

## World and NCT Sawnwood Exports

SAWNWOOD		
	NCT	WORLD
1990	9	78
1995	10	96
2000	12	118
2005	12	139
2010	10	113
2015	11	138
2020	11	156
2023	12	133

Million m<sup>3</sup>



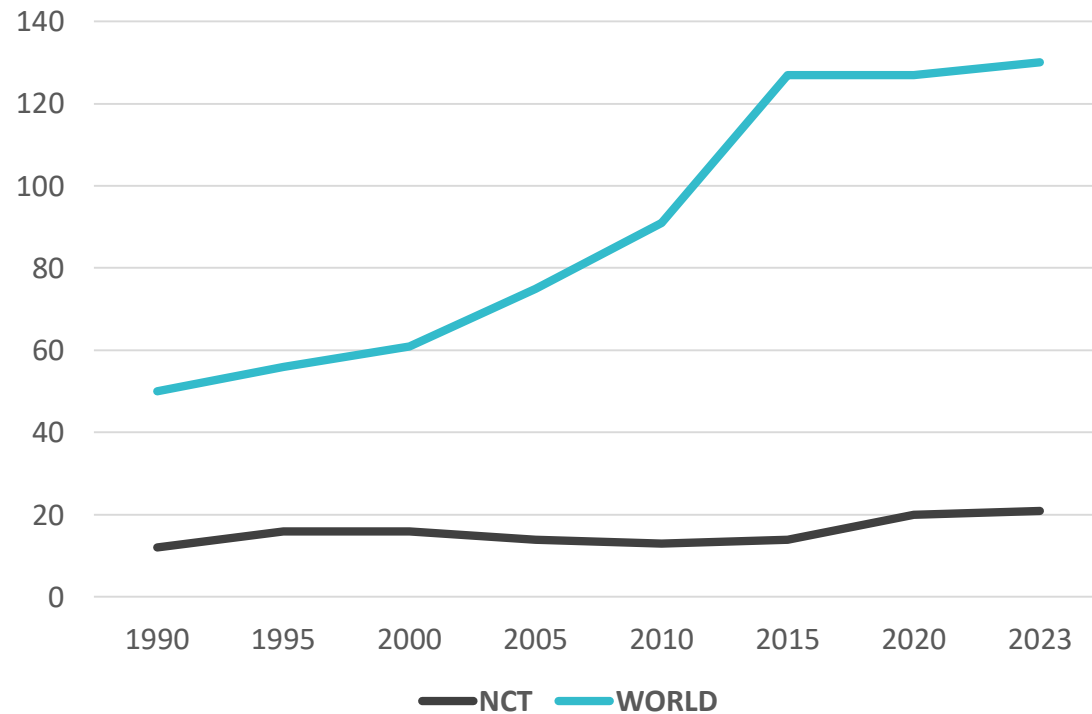


# 4. TROPICAL TIMBER IN THE LAST DECADES

## World and NCT Plywood Production

PLYWOOD		
	NCT	WORLD
1990	12	50
1995	16	56
2000	16	61
2005	14	75
2010	13	91
2015	14	127
2020	20	127
2023	21	130

Million m<sup>3</sup>

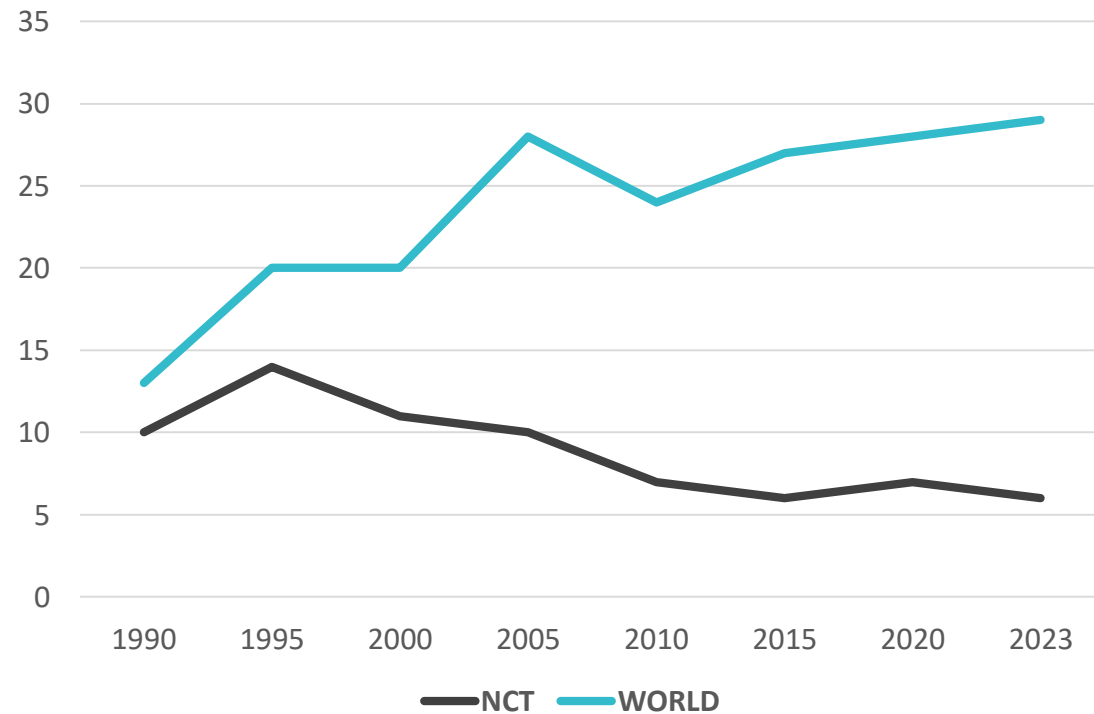


# 4. TROPICAL TIMBER IN THE LAST DECADES

## World and NCT Plywood Exports

PLYWOOD		
	NCT	WORLD
1990	10	13
1995	14	20
2000	11	20
2005	10	28
2010	7	24
2015	6	27
2020	7	28
2023	6	29

Million m<sup>3</sup>





# 4. TROPICAL TIMBER IN THE LAST DECADES

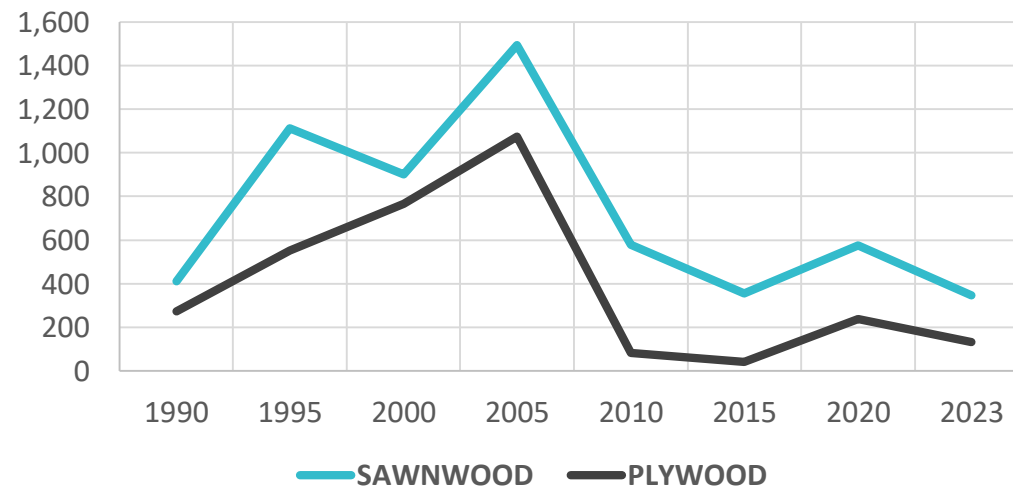
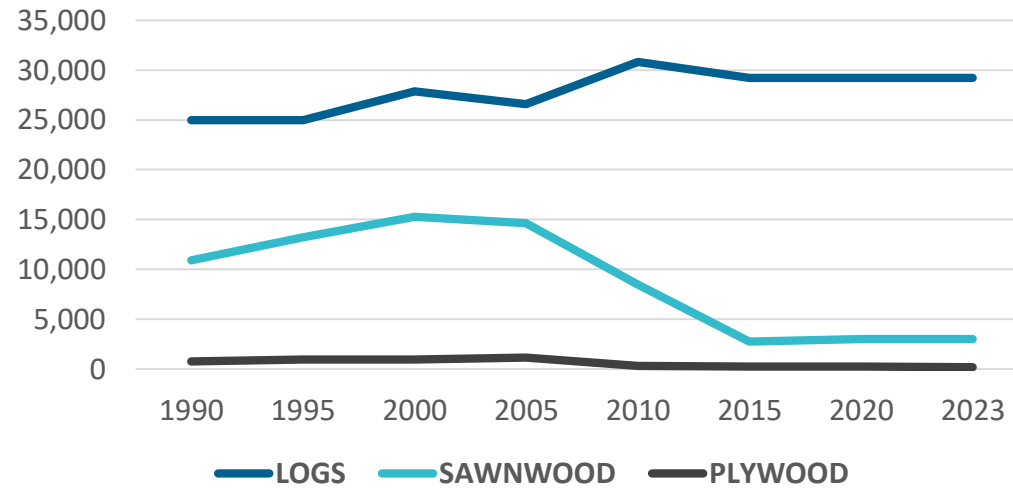
## Some Losers - Brazil

PRODUCTION			
	ROUNDWOOD	SAWNWOOD	PLYWOOD
1990	25.000	10.930	741
1995	25.000	13.230	930
2000	27.850	15.300	980
2005	26.600	14.622	1.125
2010	30.816	8.480	330
2015	29.200	2.730	264
2020	29.200	3.000	264
2023	29.200	3.000	200

**1000 m<sup>3</sup>**

EXPORT		
	SAWNWOOD	PLYWOOD
1990	411	272
1995	1.111	551
2000	901	766
2005	1.495	1.073
2010	578	83
2015	354	42
2020	575	237
2023	347	131

**1000 m<sup>3</sup>**



# 4. TROPICAL TIMBER IN THE LAST DECADES

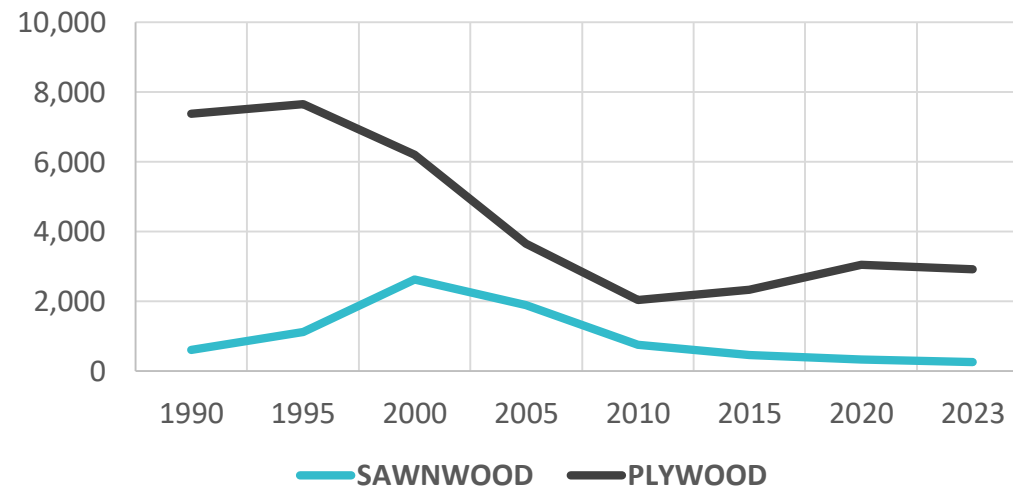
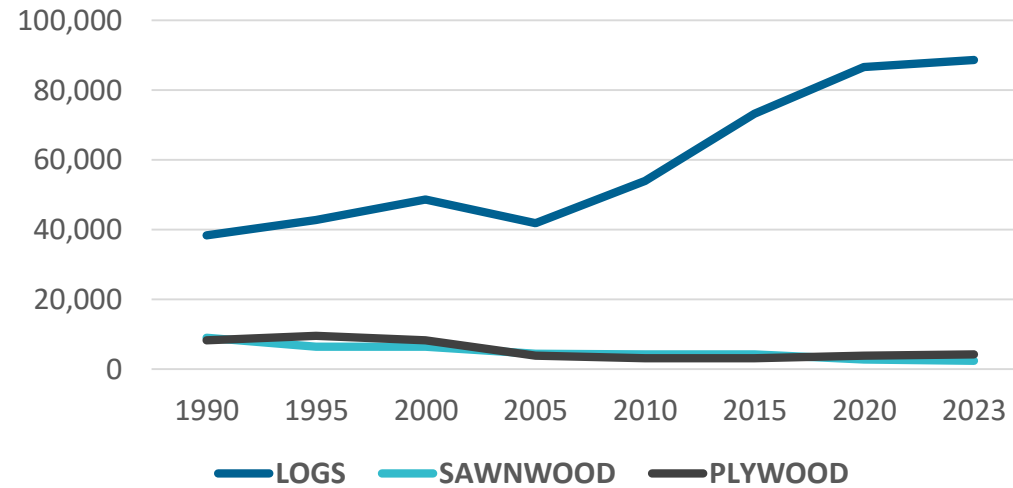
## Some Losers - Indonesia

PRODUCTION			
	ROUNDWOOD	SAWNWOOD	PLYWOOD
1990	38.365	9.002	8.250
1995	42.664	6.500	9.500
2000	48.643	6.500	8.199
2005	41.866	4.330	3.820
2010	53.900	4.169	3.200
2015	73.240	4.169	3.200
2020	86.664	2.717	3.905
2023	88.600	2.300	4.200

**1000 m<sup>3</sup>**

EXPORT		
	SAWNWOOD	PLYWOOD
1990	614	7.383
1995	1.115	7.650
2000	2.615	6.210
2005	1.892	3.654
2010	756	2.035
2015	453	2.338
2020	333	3.051
2023	261	2.912

**1000 m<sup>3</sup>**





# 4. TROPICAL TIMBER IN THE LAST DECADES

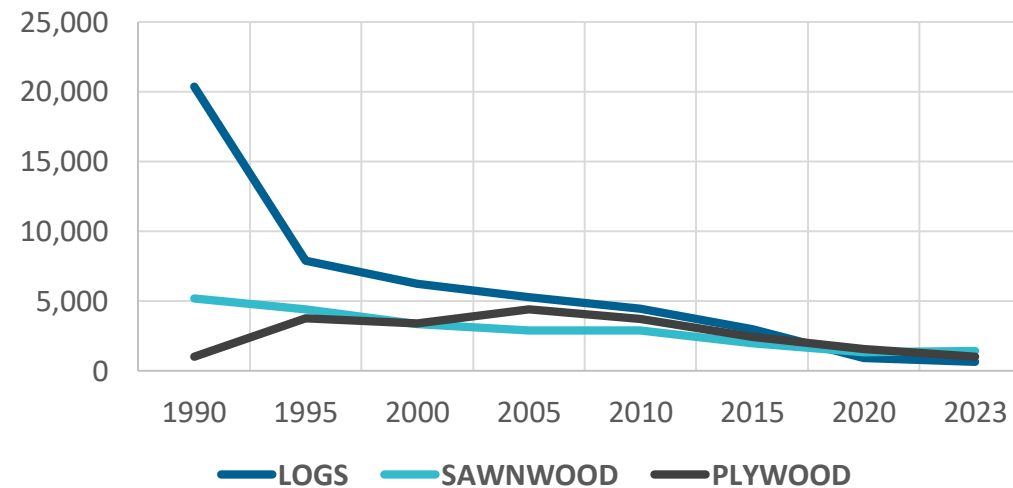
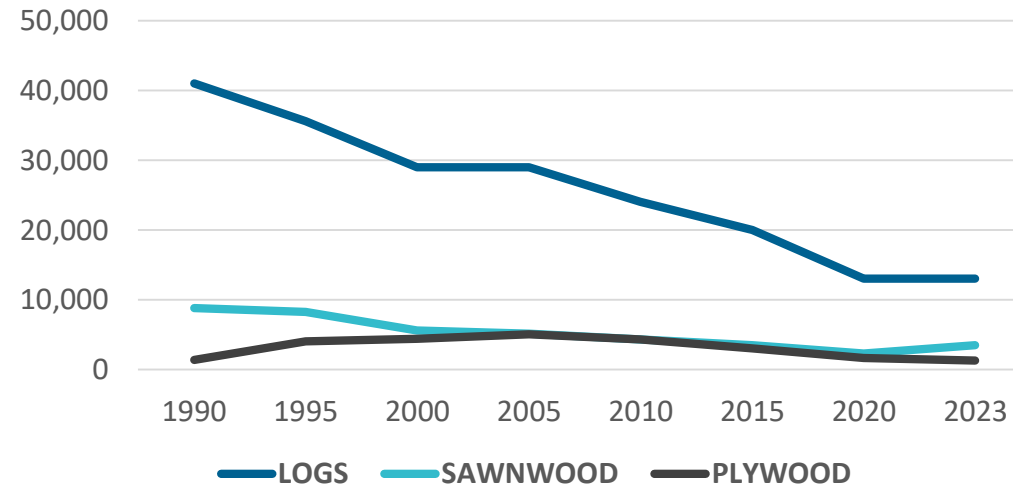
## Some Losers - Malaysia

PRODUCTION			
	ROUNDWOOD	SAWNWOOD	PLYWOOD
1990	40.960	8.780	1.365
1995	35.546	8.232	3.996
2000	29.000	5.589	4.434
2005	29.000	5.173	5.006
2010	24.000	4.301	4.285
2015	20.000	3.501	2.995
2020	13.000	2.275	1.675
2023	13.000	3.485	1.244

1000 m<sup>3</sup>

EXPORT			
	ROUNDWOOD	SAWNWOOD	PLYWOOD
1990	20.361	5.194	987
1995	7.864	4.409	3.752
2000	6.230	3.337	3.405
2005	5.255	2.899	4.405
2010	4.435	2.888	3.724
2015	2.975	1.982	2.406
2020	916	1.325	1.532
2023	644	1.392	1.018

1000 m<sup>3</sup>

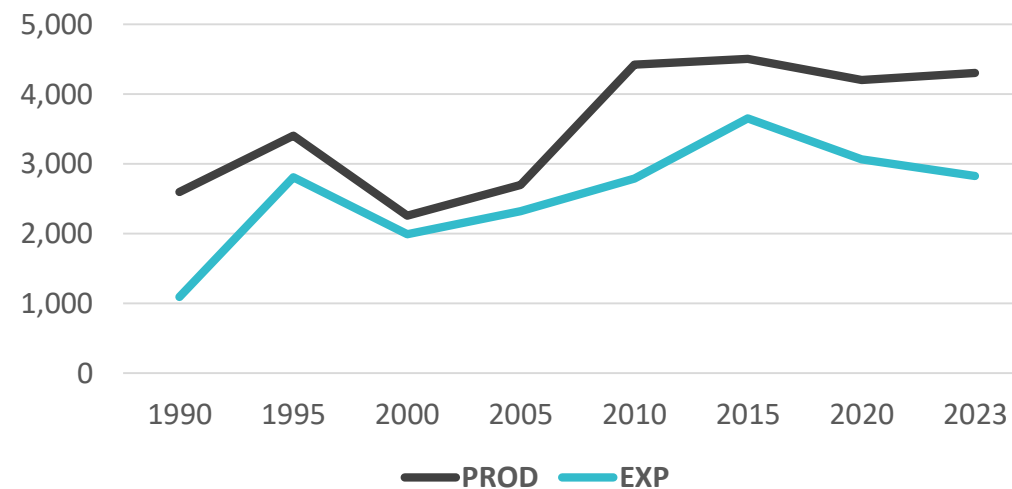


## 4. TROPICAL TIMBER IN THE LAST DECADES

### Some Winners – Papua New Guinea

ROUNDWOOD		
	PRODUCTION	EXPORT
1990	2.591	1.091
1995	3.400	2.810
2000	2.255	1.993
2005	2.700	2.316
2010	4.418	2.784
2015	4.500	3.648
2020	4.200	3.064
2023	4.300	2.822

1000 m<sup>3</sup>



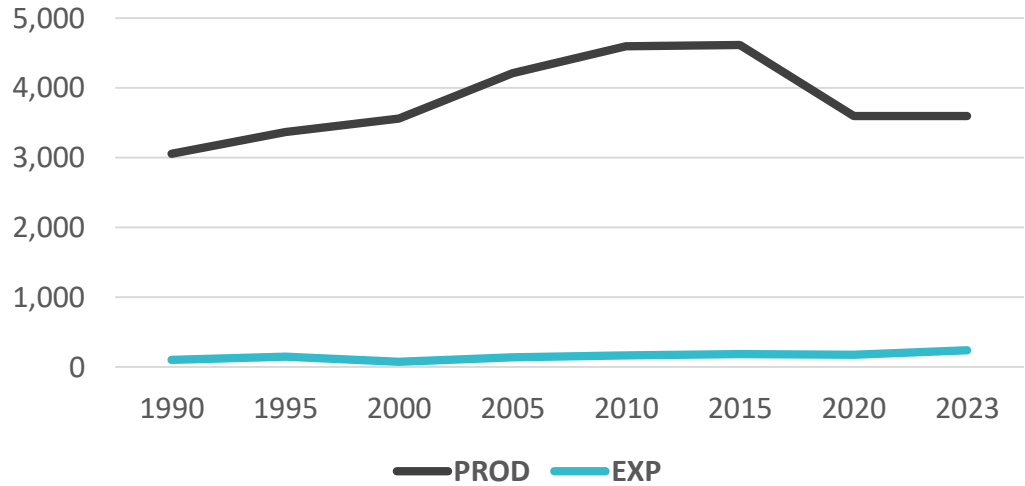


# 4. TROPICAL TIMBER IN THE LAST DECADES

## Some Maintained Position – Democratic Republic of Congo and Ghana (logs)

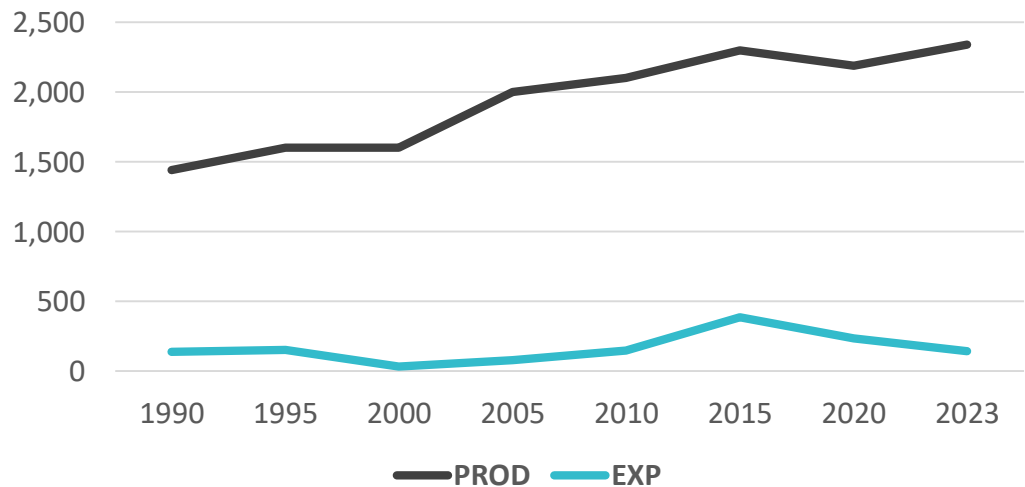
D.R. CONGO		
	PRODUCTION	EXPORT
1990	3.053	105
1995	3.369	152
2000	3.564	70
2005	4.208	138
2010	4.592	163
2015	4.611	181
2020	3.600	173
2023	3.600	236

1000 m<sup>3</sup>



GHANA		
	PRODUCTION	EXPORT
1990	1.440	140
1995	1.600	153
2000	1.600	32
2005	2.000	80
2010	2.100	148
2015	2.300	387
2020	2.190	235
2023	2.342	143

1000 m<sup>3</sup>

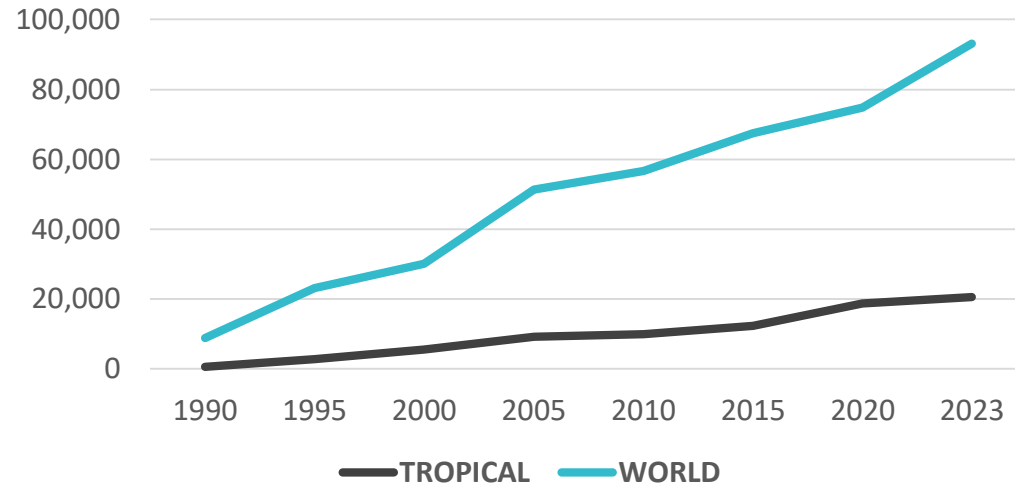


# 4. TROPICAL TIMBER IN THE LAST DECADES

## World and Tropical Countries VAP (Value Added Products) Exports

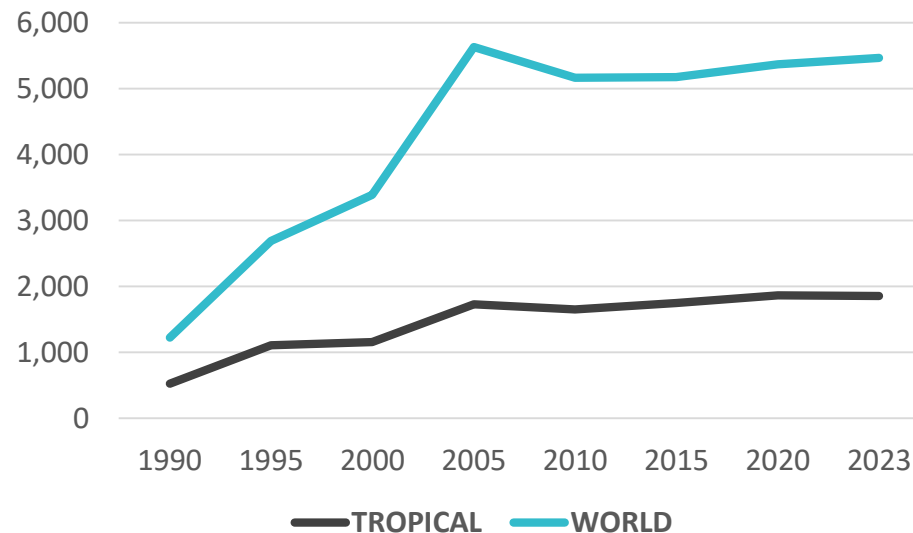
WOODEN FURNITURE		
	TROPICAL	WORLD
1990	492	8.799
1995	2.689	23.009
2000	5.354	30.030
2005	9.057	51.285
2010	9.849	56.704
2015	12.205	67.497
2020	18.696	74.858
2023	20.475	93.129

Million US\$



MOULDINGS		
	TROPICAL	WORLD
1990	525	1.225
1995	1.108	2.687
2000	1.151	3.384
2005	1.729	5.628
2010	1.647	5.165
2015	1.749	5.172
2020	1.861	5.371
2023	1.856	5.460

Million US\$



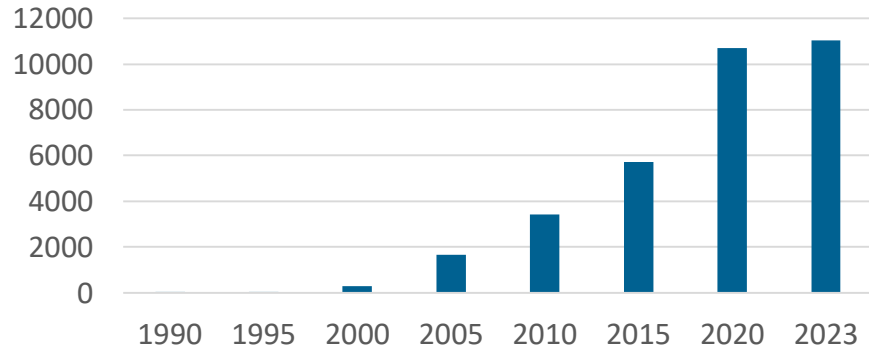


# 4. TROPICAL TIMBER IN THE LAST DECADES

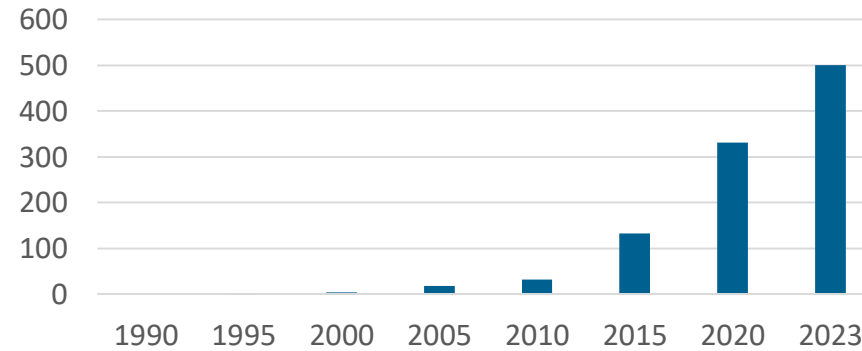


## Successful Case – Vietnam (Million US\$)

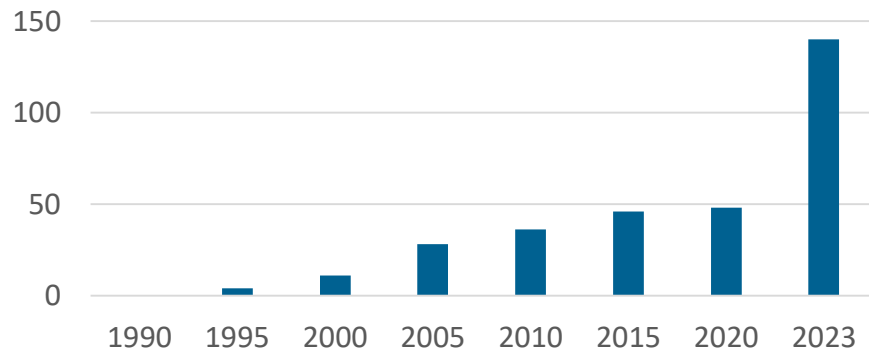
### FURNITURE



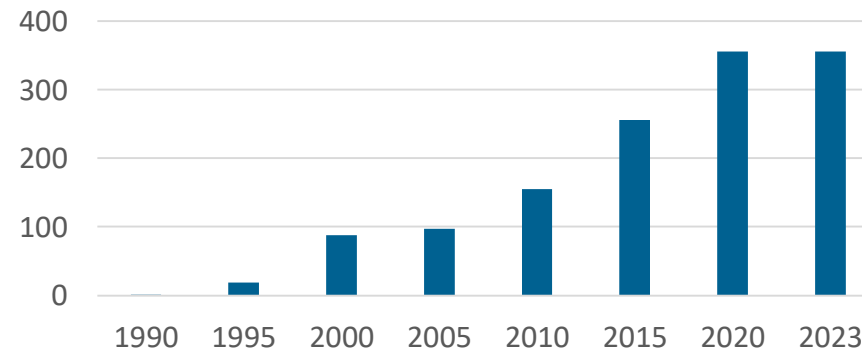
### BUILDER WOODWORK



### MOULDINGS



### OTHER SPWPs



## 5. INTERNATIONAL TROPICAL TIMBER AGREEMENT



### The Agreement

- Promoted by the United Nations Conference on Trade and Development (UNCTAD) - 1983.
- Ratified in 1985.
- Renewed in 1994 and again in 2006.

### The ITTA Aims

“To promote **sustainable management and legal harvesting** of forests that produce tropical timber, and to promote **expansion and diversification of international timber trade** from these forests.”

### The ITTO

An Intergovernmental Organization responsible for implementing the ITTA.



## 6. INTERNATIONAL TROPICAL TIMBER ORGANIZATION

### Has ITTO Fulfilled the Two Overarching Objectives?

- To promote the **expansion and diversification of international trade** in tropical timber from sustainably managed and legally harvested forests;
- To promote **sustainable management** of tropical timber-producing forests.

### ITTO Has a History of Remarkable Developments

- It is the international forum for discussions on tropical forests and tropical timber;
- Developed criteria and indicators for SFM;
- Influenced the discussions on SFM certification;
- Carried out missions to support countries to implement SFM;
- Provided support and funding for country and regional projects;
- Made available market and statistics information;
- Promoted cooperation with other international organizations - CITES, FAO, UNFF, etc.
- Facilitated the consultations - TAG, CSAG, etc.



## 7. ASSESSING THE PROGRESS MADE



### Are We Failing?

#### No, We Are Not Failing

- We have made great progress in the sustainable management of tropical forests in the last few decades.
- Sustainability is part of the discussion and guides the actions of the tropical timber industry and trade.

#### Yes, We Are Failing

- Tropical timber has been replaced by other woods and products.
- We have lost market share in the last few decades.



## 7. ASSESSING THE PROGRESS MADE



### Why Are We Failing?

#### Costs Are Rising and Affecting Competitiveness

- High forest management standards, certification, market impediments, social and environmental demands, needs of reporting, logistics, government policies and other priorities, and other issues are increasing costs.

#### Lack of Investments is Also Affecting Competitiveness

- Risks associated with poor investment climate is a limitation for investments in modernization of processing lines, product innovation, gaining scale, improving distribution and services, communication and marketing, and other issues are affecting competitiveness.



## 8. OPTIONS FOR THE FUTURE



### Maybe We Should Think About Improving Communication?

“Consumers (buyers of tropical timber) in our traditional markets **are not receiving information about the progress** tropical timber producers have made and are continuing to make...”

— Dr. Kwame Asumadu





## 8. OPTIONS FOR THE FUTURE



### But There Are Other Options to Consider

#### PLANTATIONS

- Larger productivity (forest and operations).
- Smaller working area.
- Technology available to continue to further improve productivity.
- Uniform industrial raw material.
- Improved logistics.
- Reduced costs.
- Lower operational risks.
- Investors and funding options available.
- Less environmental pressure.





## 8. OPTIONS FOR THE FUTURE



### But There Are Other Options to Consider

#### TEAK PLANTATION IS AN EXAMPLE

- Knowledge in silviculture and management available.
- Elastic species, adaptation to different tropical climates and soils.
- There are plantations in 73 countries.
- Total planted area - almost 7 million ha.
- Mean annual increment up to 20 m<sup>3</sup>/ha/year.
- Sustainable timber production capacity of existing plantation - 31.3 million m<sup>3</sup>/year.
- Expanding market share, but logs and blocks are still the main part of the international trade.



## 8. OPTIONS FOR THE FUTURE



### Brazil and Forest Plantations

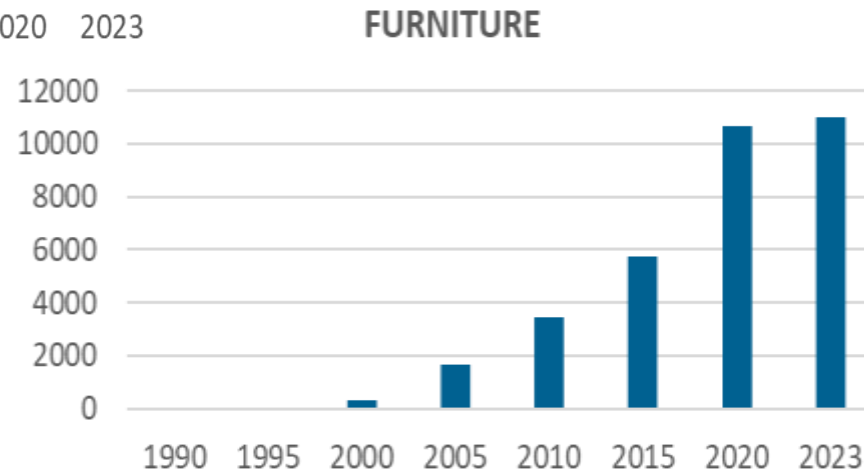
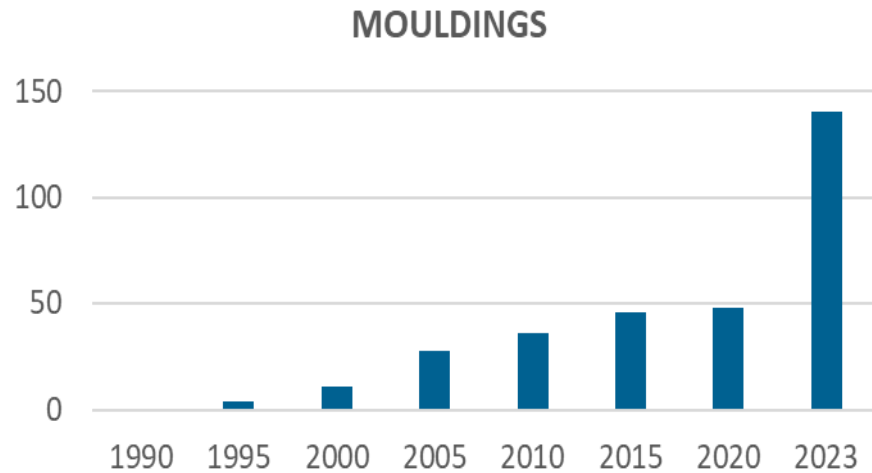
- 300 million ha of native forests.
- The 10 million ha of plantation with a sustainable production capacity of 300 million m<sup>3</sup>/year.
- More than 90% of industrial roundwood comes from plantations.
- All produced wood pulp is based on plantations.
- The country is the largest world wood pulp exporter.
- More than 90% of the plywood and sawnwood production is based on plantation.
- 100% of particleboard and MDF produced is based on plantation.
- VAP mostly based on plantation wood.



## 8. OPTIONS FOR THE FUTURE

### VAP (Value Added Products)

- Follow Vietnam Strategy (million US\$)





## 9. THE FUTURE



**Tropical Timber will continue in the market if the Tropical Timber business continues to be attractive.**

**Tropical Timber business is a pillar to promote sustainable management of Tropical Forests.**





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# THANK YOU

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