

**THE SLOVAK  
NATIONAL MARKET REPORT 2011**

**PRESENTED TO  
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**Market Report 2011  
Slovak Republic**

# MARKET STATEMENT OF THE SLOVAK REPUBLIC

## 1. General economic trends affecting the forest and forest industries sector

### 2010 FIGURES

Gross domestic product (GDP) of Slovakia in current prices was increased to 65.6 billion Euro, i.e. by 2.8%, compared with 2009. GDP per capita at constant prices was 12.1 thousand Euro and its growth was 2.5% compared to the previous year. GDP in the agricultural sector and forestry reached 293.21 million Euro and an annual increase was 2.5%. The GDP in industry was 15 412.8 million Euro with an annual increase of 5.6% and in construction industry 5 557.82 million Euro, representing the growth of 4.1%.

Population in the SR reached 5.431 thousand and was increased by 14 thousand. Registered unemployment rate was 12.5%, compared with the previous year it has increased by 1.1%. Total employment was 2 154.4 thousand and an annual decrease of 1.37% was reported. In the sectors of agriculture and forestry worked 61 730 people in 2010, which was 7.5% less than in the previous year.

Exports of goods and services represented the value of 53 292 million Euro and in comparison with 2009 it has increased by 19.7%. Import of goods and services made an amount of 53 964 million Euro and grew annually by 20.5%.

Slovakia is an open economy and its development depends on demand in foreign markets, especially the EU market. This fact was the reason for economic growth in 2010.

Development of the Slovak economy in 2011 will depend on the development of demand in the markets of major trading partners and on the ability to soften the continuing critical effects in the world and Europe's economy. These factors will also affect the area of production and wood processing.

## 2. Recent policy measures

### *Economic stimulus policies and forest products markets*

National Forest Programme of the Slovak Republic (NFP SR) is a basic document for securing sustainable forest management. It was discussed and approved by the Government of Slovakia in May 2007 and by the National Council of Slovakia in September 2007. It was worked out for the period by 2020 by formulating five strategic goals, 18 priorities and 52 general objectives. General objectives were worked out into more details on regular basis and updated through measures formulated in the Action Plan of the National Forest Programme of the Slovak Republic.

Since 2008 strategic instrument for implementation of forestry policy in Slovakia is the Vision, Prognosis and Strategy of Development of Forestry in Slovakia. In January 2009 it was approved.

Administration of wood-processing industry is from 2009 under Ministry of Agriculture and Rural Development together with forestry and agriculture. Until 2009 its administration was under Ministry of Economy.

Programme of Rural Development in Slovakia for the period 2007-2013 was adopted to use EAFRD funds; following measures were proposed: increase economic value of forests; forestry-environmental payments; restoration of forest management potential; payments within NATURA 2000; professional education and consultation.

Based on current status and priorities of forestry and wood processing industry in Slovakia, in the next year (2012) will be elaborated the basic document of the uniform state policy in

the wood processing industry, "National Programme for use of the wood potential in SR", which task will be primary addressing the actual issues in the forest-wood processing complex and setting the targets for the next period (time horizon 5-7 years).

#### *Climate change and forest-related markets*

Slovakia monitors all issues of environmental policy and global climate changes. Basic political material is National strategy of biodiversity protection in Slovakia. Also NFP SR and The Vision, Prognosis and Strategy of Slovak forestry development have in strategic objective: *Improvement and protection of the environment* priority aimed at mitigation consequences of climate change and the support adaptation of forests to climate change. Slovakia regularly submits:

- National reports on climate change in SR - they are prepared approximately every 4 years with regard to of our commitments under paragraph 4 and 12 of the UN Framework Convention on Climate Change and Kyoto Protocol
- National inventory report on greenhouse gas emissions in SR
- Annual reports submitted by SR to the European Commission (Annual Report)

Carbon stocks in forest ecosystems, aboveground and ground biomass are increasing, which is related to and influence the increase in timber growing stock. Carbon stocks in above ground and ground wood biomass grew in the period 1990-2010 from 162.7 million tons to 211.2 million tons and carbon stocks in dead wood and humus from 29.2 to 37.8 million. tons.

#### *Trade policy issues affecting markets*

In Slovakia there are measures in place for achieving effectiveness in various fields of the economy, which would lead to an increase both in business, e.g. exchange of products, and in the business activities or in the development of small and medium sized enterprises, rural areas and sustainable forest industry. These measures are always adopted with regard to the EU guidelines. These are the operational programmes effective for a certain period, such as operational programme for business development, for support of small and medium sized enterprises, for rural development and multi-functional agriculture or the programme for rural development in the Slovakia 2007-2013. They really increase the effectiveness of the entire economy; they provide new know-how, new technologies, implementing new and efficient production and other factors in order to achieve higher performance and higher level of national economy.

#### *Corporate social responsibility*

Year 2010 can be considered as the beginning of a gradual recovery in Slovak economy. GDP increases. This recovery is also reflected in the forestry, which contribution to national GDP and investments (particularly in non-state forest sector) has increased. The employment rate has remained at the same level as in the previous year. This is mainly due to recovery of demand for wood, which manifests itself as an increase in the volume of supplies and the average price of raw wood assortments.

Average wage per month in forestry has increased with index 1.1 compared to 2009 (in the national economy with index 1.03). Recovery in the forestry is also characterized by an increased volume of forestry activities.

### Trends of selected indicators in forestry and its comparison with Slovak national economy

Indicator	Unit	Year			
		2007	2008	2009	2010
GDP in current prices	mld. EUR	61,48	67,32	63,33	65,91
Forest Sector		<b>0,28</b>	<b>0,29</b>	<b>0,21</b>	<b>0,22</b>
Increment of GDP	%	10,4	6,4	-4,7	4,0
Investments in current prices	mil. EUR	16 715	17 465	14 943	13 390
Forest Sector		<b>38</b>	<b>42</b>	<b>10</b>	<b>32</b>
Employment	thous.	2 357	2 434	2 366	2 154
Forest Sector	persons	<b>12</b>	<b>12</b>	<b>9</b>	<b>9<sup>1)</sup></b>
Average monthly earnings	EUR	668,72	723,03	744,50	769,00
Forest Sector		<b>612,59</b>	<b>632,14</b>	<b>612,00</b>	<b>676,42</b>

#### *Research and development policies*

The key responsibility for forest research in Slovakia resides on National Forest Centre – Forest Research Institute Zvolen and the Research Station of the State Forests of Tatra National Park, both established by the Slovak Ministry of Agriculture. Other research bodies outside the sector are the Faculty of Forestry of Technical University in Zvolen and the Institute of Forest Ecology of the Slovak Academy of Sciences Zvolen.

All above-mentioned bodies are involved in a number of international cooperation programmes through the European Forest Institute and International Union of Forest Research Organizations.

At present, forest research primarily concerns multiple aspects of silviculture, forest protection, forest ecology and monitoring, genetics and breeding, forest management planning, inventories and forest policy and economics. Research priorities for 2009 included mass decline of spruce forests and elimination of forest sector impacts of economic crisis.

Much of the research is funded by the Ministry of Agriculture, the Agency for Research and Development Support, the Scientific and Grant Agency, the Ministry of Education, the Cultural and Educational Grant Agency, and developmental projects of the Ministry of Education. A number of research projects were funded by the Agency for Structural Funds of the Ministry of Education. More projects are being funded from the FP7. No funding was provided last year from various government programs on research and development. Private investments into forest research remained largely unavailable.

### 3. Market drivers

Timber felling has an increasing trend. In 2010, it reached 9 859.7 thousand <sup>3</sup>, the second highest volume of timber felling in the history of forestry in Slovakia (in 2005, it was 10.2 million <sup>3</sup> due to processing of calamity wood after windstorm in November 2004).

The current volume of felling is the result of large-scale incidental felling due to the action of harmful agents. The proportion of incidental felling in coniferous forest stands is in the long term around 80% of the total coniferous wood felling. In 2010, it reached 80,6%.

Income and economic potential of forestry has an increasing trend, but exceeding the planned volume of production diminishes the future felling opportunities.

The most important source of income in forestry is sale of timber, which comprises 78.7% of total sales in forestry in 2010. Economic result of forestry reached 18,1 million Euro in 2010.

Arrangement of forest ownership under restitution laws has not been completed. The highest proportion of not-restituted forests remains in the use of state enterprise Lesy SR, š.p. In particular, these are forest lands of small individual ownership, respectively tenancy in common, which can not be identified in the field.

The main problem in the mechanical wood processing is a low rate of domestic valuation of broad-leaved roundwood assortments. The efficiency of wood-processing industry is negatively affected by the low rate of production added value. It was caused among other factors by difficult direct access of domestic producers to foreign markets. The consequence of this is a relatively large export of roundwood mainly to EU markets.

Production of wood-based buildings is growing slowly also with respect to the relatively small domestic demand. Most of production is exported abroad.

Rising prices of fossil fuels and growing support for use of renewable energy have increased demand for wood fuels, which are used to produce energy in the wood processing and pulp and paper industry apart from the population, central heat sources in cities and municipalities and regional power plants.

Wastes from wood processing industry are used in the form of chips and residues of wood chips from forestry and tree species growing on non-forest land.

It is necessary to design and implement a system of measures to optimize the production and use of wood that will be a part of state policy in the areas of forestry, wood processing industry, environment and rural development in the near future.

Company based in pulp and paper industry in ownership of concern Smurfit Kappa Group in Štúrovo was closed due to relocation of production abroad (Finland), domestic consumption of the company is covered by import. Other production capacities remain unchanged.

#### **4. Developments in forest products markets sectors**

##### **A. Wood raw materials**

In 2010, removals reached 9599 thous. m<sup>3</sup> of wood that was by 5.6% more than in 2009. Removals of coniferous wood increased by 1.7% to 6383 thous. m<sup>3</sup> and removals of broad-leaved wood by 14.4% to 3216 thous. m<sup>3</sup>.

Removals of wood fuel, including wood for production of charcoal were 510 thous. m<sup>3</sup> an compared to 2009 it decreased by 13%.

Removals of industrial roundwood reached 9089 thous. m<sup>3</sup> and increased annually by 6.92%. Removals of coniferous industrial roundwood were 6090 thous. m<sup>3</sup> with an annual growth of 2.8% and broad-leaved industrial roundwood 3000 thous. m<sup>3</sup> which was 16.4% more.

Removals of sawlogs and veneer logs reached 5590 thous. m<sup>3</sup> and increased annually by 17.8%. Removals of coniferous sawlogs and veneer logs increased by 13.2% to 4316 thous. m<sup>3</sup> and broad-leaved sawlogs and veneer logs increased by 36.7% to 1274 thous. m<sup>3</sup>.

Removals of pulpwood were 3469 thous. m<sup>3</sup> what designates an annual decrease of 6.8%. Coniferous pulpwood removals decreased by 16.2% to 1744 thous. m<sup>3</sup> and removals of broad-leaved pulpwood increased by 5.2% to 1725 thous. m<sup>3</sup>.

Removals of other industrial roundwood reached 31 thous. m<sup>3</sup>, which was 13.9% less than in the previous year.

In 2010, import of roundwood was 650 thous. m<sup>3</sup>, which was 15% more than in 2009. Import of industrial roundwood increased (582 thous. m<sup>3</sup>) by 15%, wood fuel (68 thous. m<sup>3</sup>) by 15.2% and wood chips and particles (108 thous. m<sup>3</sup>) increased 54-times.

Roundwood exports reached 2,564 thous. m<sup>3</sup> with an annual decrease of 4.4%. Export of industrial roundwood decreased to 2434 thous. m<sup>3</sup> by 4.4%, wood fuel to 130 thous. m<sup>3</sup> by 11.6% and wood residues to 60 thous. m<sup>3</sup> and 3-times. Export of wood chips and particles reached 198 thous. m<sup>3</sup>, which was 2-times more than in the previous year.

In 2011 and 2012, supply of coniferous sawlogs and veneer logs is expected to decrease to the level of 3670 or 3600 thous. m<sup>3</sup>, export in volume of 1350 thous. m<sup>3</sup> and domestic consumption to 2420 - 2350 thous. m<sup>3</sup>. The annual import will reach 100 thous. m<sup>3</sup>.

Supply of non-coniferous sawlogs and veneer logs will grow annually from 1380 to 1400 thous. m<sup>3</sup> year and the annual export to 150 thous. m<sup>3</sup>. Domestic consumption will reach 1255 to 1275 thous. m<sup>3</sup>.

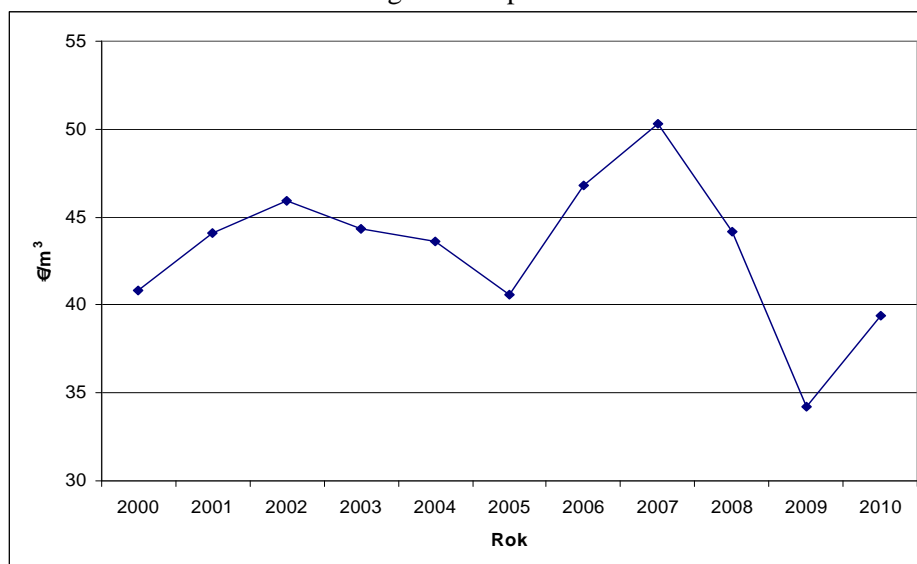
Supply of coniferous pulpwood will reduce to the annual volume from 1480 to 1500 thous. m<sup>3</sup>, resulting in export decline. Domestic consumption remains at the level as in 2010.

Supply of non-coniferous wood pulp will be reached from 1870 to 1895 thous. m<sup>3</sup> a year, what will be reflected particularly in the growth of domestic consumption, which will increase from 2120 to 2145 thous. m<sup>3</sup>.

The expected reduction in annual timber felling and its supply should be reflected mainly in the area of production of chips, wood residues and particles. Annual supply of wood fuel will remain at the level as in 2010.

Trends of average prices of timber in the period 2000 to 2010 is provided in the chart below. In 2010, the increase in average price of timber in forestry by 15% was reported compared to 2009, when there was an annual decrease of 22%, mainly due to the continuing negative impacts of global economic and financial crisis. Based on the above-mentioned situation, it is possible to conclude that there has been a shift and improvement in trends of average prices of wood in the market, which had already occurred in the third quarter of 2009.

Trend of average timber prices in 200-2010



## B. Wood energy

Due to rising prices of fossil fuels in recent years and also due to promotion of use of renewable energy sources in Slovakia there has been an increasing interest in use of wood for energy purposes. Wood biomass is the most important renewable energy source in Slovakia and is used to heat and in a lesser extent for power generation.

People living in rural areas and smaller cities use wood as a fuel for heating their houses. For this purpose, also a part of wood residues from wood processing industry is used. In 2010,

the population consumed for this purpose approx. 850 thousand. tons of wood fuel. Consumption of pellets and briquettes is because of their high price very limited and reaches about 30 thous. tons.

The largest user of wood fuels in the form of solid and liquid wastes from the own production is pulp and paper industry with an annual consumption of 1.1 million. tons for heat and power generation. Wood processing industry consumes annually nearly 400 thous. tons of wood waste and chips from its own production to produce technological heat and in small-scale to power generation.

Approximately, 500 thous. tons of chips and wood residues were used in central heat sources and regional plants supplying cities and industrial enterprises. Forestry provided 240 thous. tons of fuel chips to these consumers.

Faster and more efficient development of use of wood for energy purposes is limited by high investment costs, lack of financial sources and lack of coordination in promotion of production and use of wood for power generation.

In 2010, we imported a small amount of pellets from Ukraine. Wood chips and wood residues for energy are not imported in the current time because of their relatively high prices in neighbouring countries. Most of the production of pellets is exported, but only to EU countries.

### C. Certified forest products

The aim of forest certification is to promote sustainable forest management, consumption of wood as an environmentally renewable resource, wood products, conservation and sustainable development of society.

In Slovakia, two certification schemes are used:

- Programme for the Endorsement of Forest Certification schemes (PEFC)
- Forest Stewardship Council (FSC)

In 2010, two associations carry out certification of forests in Slovakia:

1. Slovak Forest Certification Association as the national regulatory authority of PEFC in the Slovak Republic.
2. Association FSC Slovakia

In 2010, the following (cumulative) numbers of subjects and hectares of forest by the individual certification schemes were certified in Slovakia:

Numbers and area of certified subjects: PEFC, FSC and total

	PEFC	FSC	Total
Number (n)	296	6	302
Area (ha)	1 262 505	140 105	1 402 610

Source: Slovak Forest Certification Association. [www.fsc-info.org](http://www.fsc-info.org)

#### *Forestry technical standardization*

In 2010, there has been addressed the issue of implementing the European standard EN 1315 Sorting roundwood according to the dimensions of the Slovak Technical Standards (STS) by the translation of the English original. The implemented standard STS EN 1315 (48 0054) - replaces the existing standard BS EN 1315-1 Dimensional Classification. Part 1: Broad-leaved roundwood from December 2000 and BS 1315-2 Dimensional Classification. Part 2: Coniferous roundwood from December 2000.

## **D. Value-added wood products**

In 2010, trade in secondary processed wood in the assortment monitored by the ECE Timber Committee, i. e. in “Further processed sawnwood”, rose by 4% at imports and 11,1 % in export. “Wooden wrapping and packing equipment”, “Builder’s joinery and carpentry of wood” rose year-on-year by 7,2% in imports and 12,1 % in exports. “Wooden furniture” rose by 9,58% in import and by 10,6% in export.

## **E. Sawn softwood**

Production of coniferous sawnwood was 1 779 thous. m<sup>3</sup> and increased annually by 10,8 % in 2010. Import of sawnwood reached 236 thous. m<sup>3</sup>, what was more than 4-times increase than in the previous year 2009. Export of sawnwood increased by 51,7 % to 537 thous. m<sup>3</sup>. Domestic consumption of sawnwood increased by 13,2 % to 1 478 thous. m<sup>3</sup>.

The highest volumes of coniferous sawnwood were imported from the Russian Federation and the Ukraine. Exports were mainly directed to EU.

In comparison with 2010, the year 2011 is anticipated to see the slightly decrease in production and domestic consumption and the same level in imports and exports.

## **F. Sawn hardwood**

Production of non-coniferous sawnwood in 2010 was 797 thous. m<sup>3</sup> and increased annually by 22,8 %. Import of sawnwood reached 59 thous. m<sup>3</sup>, which was almost 3-times increase compared with 2009. Export of sawnwood was increased 7-times to 359 thous. m<sup>3</sup>. Domestic consumption of sawnwood has fallen by 20% to 497 thous. m<sup>3</sup>. Import and export of sawnwood realizes mainly in EU markets.

In 2011, non-coniferous sawn wood production, imports, exports and domestic consumption are expected slightly increase than in the previous year.

In 2012, it is assumed approximately the same level of production, imports, exports and domestic consumption than in 2011.

## **G. Wood-based panels**

### ***Veneer sheets***

In 2010, production of veneer sheets was 190 thous. m<sup>3</sup> and grew annually by 16 thous. m<sup>3</sup>. The reason for the increase was opening the enterprise Swedwood Majcichov, which processes mainly broad-leaved timber.

Import of veneer sheets increased to 20 thous. m<sup>3</sup>, what represents by 33,3 % more than in the previous year. Export increased by 81,8 % to 8 thous. m<sup>3</sup>. Domestic production was 31 thous. m<sup>3</sup> and grew annually by 17 thous. m<sup>3</sup>. In 2011 and 2012 is expected the annual production at the level of 16 to 20 thous. m<sup>3</sup>, imports 20 to 25 thous. m<sup>3</sup>, exports 10 to 12 thous. m<sup>3</sup> and domestic consumption 26 to 33 thous. m<sup>3</sup>.

### ***Plywood***

In 2010, plywood production was 20 thous. m<sup>3</sup> and grew by 4600 thous. m<sup>3</sup>. Plywood is produced mainly from coniferous wood.

Import of plywood increased to 29 thous. m<sup>3</sup>, which was 38.8% less than in the previous year. Export grew by 15.9% to 16 thous. m<sup>3</sup>. Domestic consumption was 33 thous. m<sup>3</sup> and decreased annually by 16 thous. m<sup>3</sup>. In 2011 and 2012, the annual production is expected at



the level 22 to 24 thous.<sup>3</sup>, imports 30 to 32 thous. m<sup>3</sup>, export from 18 to 20 thous. m<sup>3</sup> and domestic consumption from 34 to 36 thous. m<sup>3</sup>.

### ***Particleboard***

In 2010, particleboard production was 561.5 thous. m<sup>3</sup> and decreased annually by 143.5 thous. m<sup>3</sup>. Import of particleboard increased by 34.6% to 311 thous. m<sup>3</sup> and exports by 6.5% to 345 thous. m<sup>3</sup>. Domestic consumption was 527.5 thous. m<sup>3</sup> and decreased annually by 83.5 thous. m<sup>3</sup>.

In the companies Swedspar Malina and Kronospan Zvolen, the annual production of particleboards increases but there is a gradual loss of production in the company Kronospan Prešov. Slovakia does not have production capacity for the production of OSB and MDF.

In 2011 and 2012, annual production is expected at the level 550 to 600 thous. m<sup>3</sup>, imports 300 to 310 thous. m<sup>3</sup>, export 340 to 350 thous. m<sup>3</sup> and domestic consumption from 510 to 560 thous. m<sup>3</sup>.

### ***Fibreboard***

In 2010, production of fibreboard was 88 thous. m<sup>3</sup> and decreased annually by 52 thous. m<sup>3</sup>. Import of fibreboard decreased to 126 thous. m<sup>3</sup>, which was 10.6% less than in the previous year. Exports decreased by 35.8% to 86 thous. m<sup>3</sup>. Domestic consumption was 128 thous. m<sup>3</sup> and was reduced annually by 19 thous. m<sup>3</sup>.

The reason for decrease in production was a large-scale fire in the company Hofatex Banská Bystrica. Export is mainly oriented to German and Austrian market.

In 2011 and 2012, annual production is expected at the level 95 to 110 thous. m<sup>3</sup>, imports 120 to 140 thous. m<sup>3</sup>, exports from 90 to 95 thous. m<sup>3</sup> and domestic consumption from 125 to 155 thous. m<sup>3</sup>.

## **H. Pulp and paper**

The overall development of paper and pulp industry is influenced by several negative factors. They are mainly:

- Closure of production facilities Smurfit Kappa Štúrovo, a. s.; production of semi-cellulose and fluting was stopped, i. e. paper for corrugated layer into packaging materials; this caused a reduction in the total annual production of paper, paperboard and cardboard by 15, 3%. Production of packaging papers was reduced at the level of 36%. Smurfit Kappa Štúrovo a.s. was also the largest processor of waste paper in Slovakia;
- Decreased production of packaging paper, paperboard and cardboard must be replaced by reinforced import.
- The continuing impact of economic crisis, connected with an increase in production costs (energy, raw materials, transport).
- Positive factors include, in particular:
  - Recorded annual growth in production of graphic and sanitary paper,
  - Recovery of mostly own wood raw material,
  - Sorting and processing lines remained in Smurfit Kappa Štúrovo even after the closure and can be used in paper and pulp industry.

In 2010, production of wood pulp 637 thousand tones was lower than in previous year (689 ths.). Production of paper recovered for pulp manufacture was 204 thousand tones in 2010. Production of paper and paperboard of 780 thousand tones in 2010 is considerably lower as compared to 2009 (921 ths.). Therefore their imports increased by 22 % to 435 thousand tones and exports dropped down by 5 % to 740 thousand tones. The production is forecasted to rise in 2010 to 800 thousand tones and to 820 thousand tones in 2011.