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Present and future role of forest resources in the socio-economic development of rural areas

PLENARY SESSION

23rd June 2011

Rural Development Policies and Forestry: the point of view of Eastern Countries

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I. South East Europe: main indicators



- » Albania
- » Bosnia and Herzegovina
- » Croatia
- » Macedonia
- » Montenegro
- » Serbia
- » Slovenia

I. South East Europe: main indicators



- » Total area: 283,178 km²
- » Inhabitants: 26.5 million
- » Total GDP in 2010: 189.1 billion USD
- » GDP per capita in 2010: from 3,616 to 23,009 USD

II. Forestry sector in SEEC: key figures

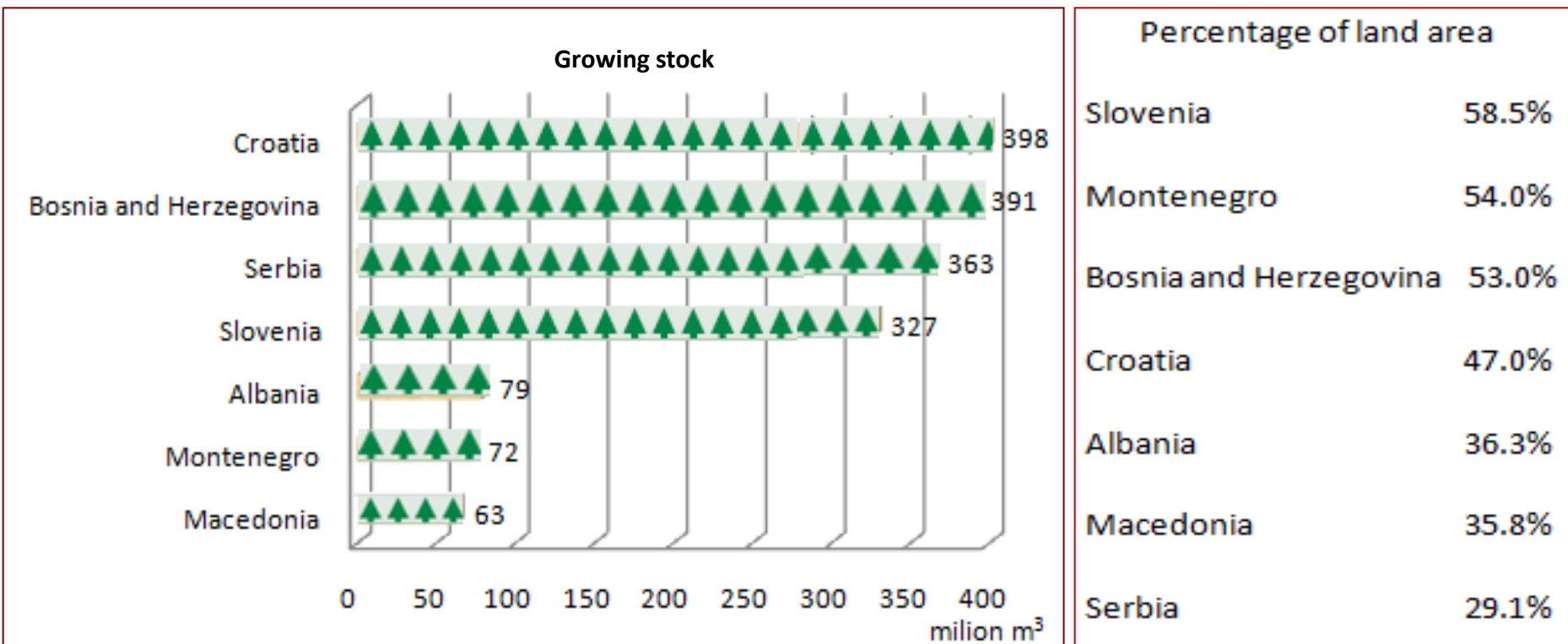
Forestry Data for the SEE Countries

| Country | Forest area | | Ownership | | Biomass | | Growing Stock |
|------------------------|-------------|----------------------|------------|-------------|-------------------------|------------------|------------------------|
| | 1000 ha | % of total land area | Public (%) | Private (%) | Per hectare (tonnes/ha) | (million tonnes) | Million m ³ |
| Albania | 1,044 | 36.3 | 99.1 | 0.9 | 131 | 104 | 79 |
| Bosnia and Hercegovina | 2,709 | 53.0 | 81.0 | 19.0 | 129.6 | 351 | 391 |
| Croatia | 2,689 | 47.0 | 78.4 | 21.6 | 143.2 | 385 | 398 |
| Macedonia | 906 | 35.8 | 78 | 22 | 45.3 | 41 | 63 |
| Montenegro | 744 | 54.0 | 67.3 | 32.7 | 27.8 | 20 | 72 |
| Serbia* | 2,252 | 29.1 | 53 | 47 | 87.9 | 198 | 362.5 |
| Slovenia | 1,186 | 58.5 | 24 | 76 | 233 | 294 | 327.5 |
| Total SEE (7) | 11,530 | / | / | / | 120.8 | 1,393 | 1,693 |
| TOTAL EUROPE | 1,001, 394 | 44.3 | | | 88 | 87,514 | 106,278 |

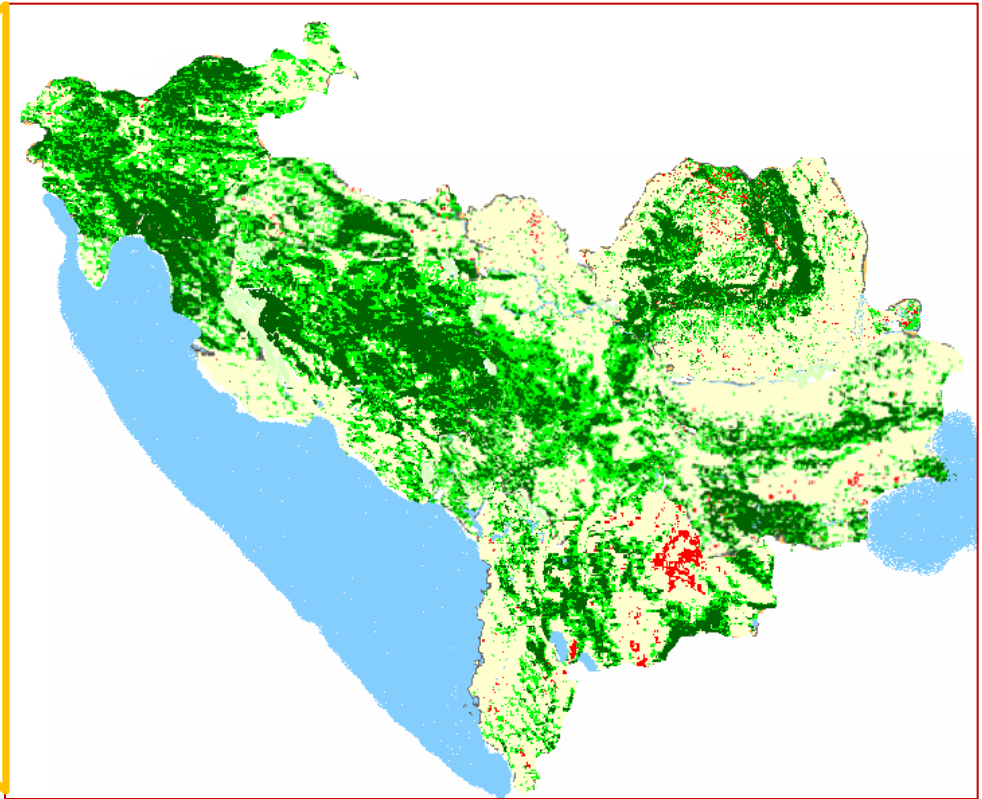
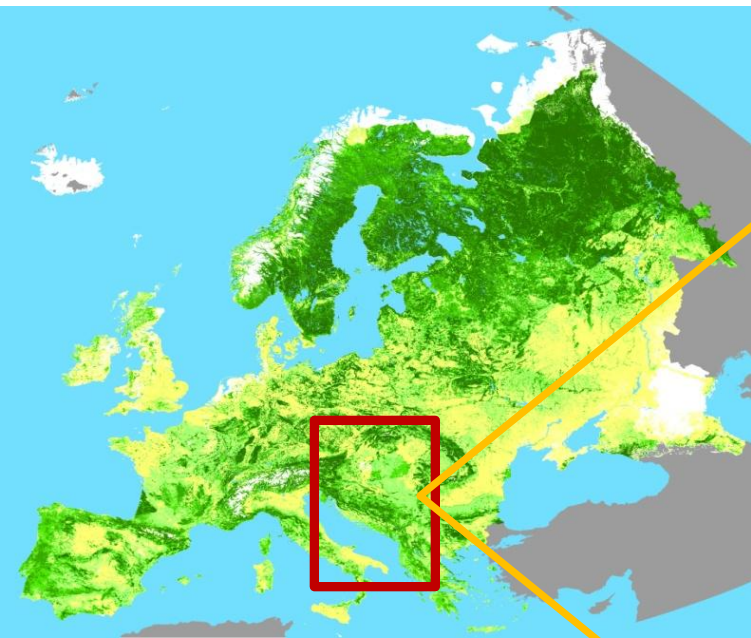
* Without Kosovo

Sources: State of the Worlds Forests 2009. and 2011., FAO, Ministry of Environmental, Forestry and Water Administration of Albania, Ministry of Agricultural, Forestry and Water Management of Montenegro, USIT Bosnia and Herzegovina, Croatia forests, Ministry of Agricultural, Forestry and Water Management of Serbia

II. Forestry sector in SEEC: key figures



II. Forestry sector in SEEC: key figures



Participation of forest of SEEC in
total forest in Europe: 1.15 %

Participation of growing stock of
SEEC in total growing stock in
Europe: 1.6%

II. Private forest property: key figures

Serbia:



- private forest area: 1,058,400 ha (47% of total forest area)
- **cca 900.000 forest owners**
- Forest property size per owner: 1.18 ha
- number of forest parcels: 3.9 million
- **average size of forest parcel: 0.37 ha**

Montenegro:



- Private forest area: 240,000 ha or 33%
- **forest property size per owner: less than 50 ha**

Croatia:




- 600.000 ha private forests**
- **average size of private forest land is 0,76 ha** (cca 2 cadastral plot)

Slovenia



- **314.000 forest owners**
- **485.000 co-ownership**
- Small scale property
- **Average property = 2,6 ha**

II. Certification in SEE countries-current situation (2011.)

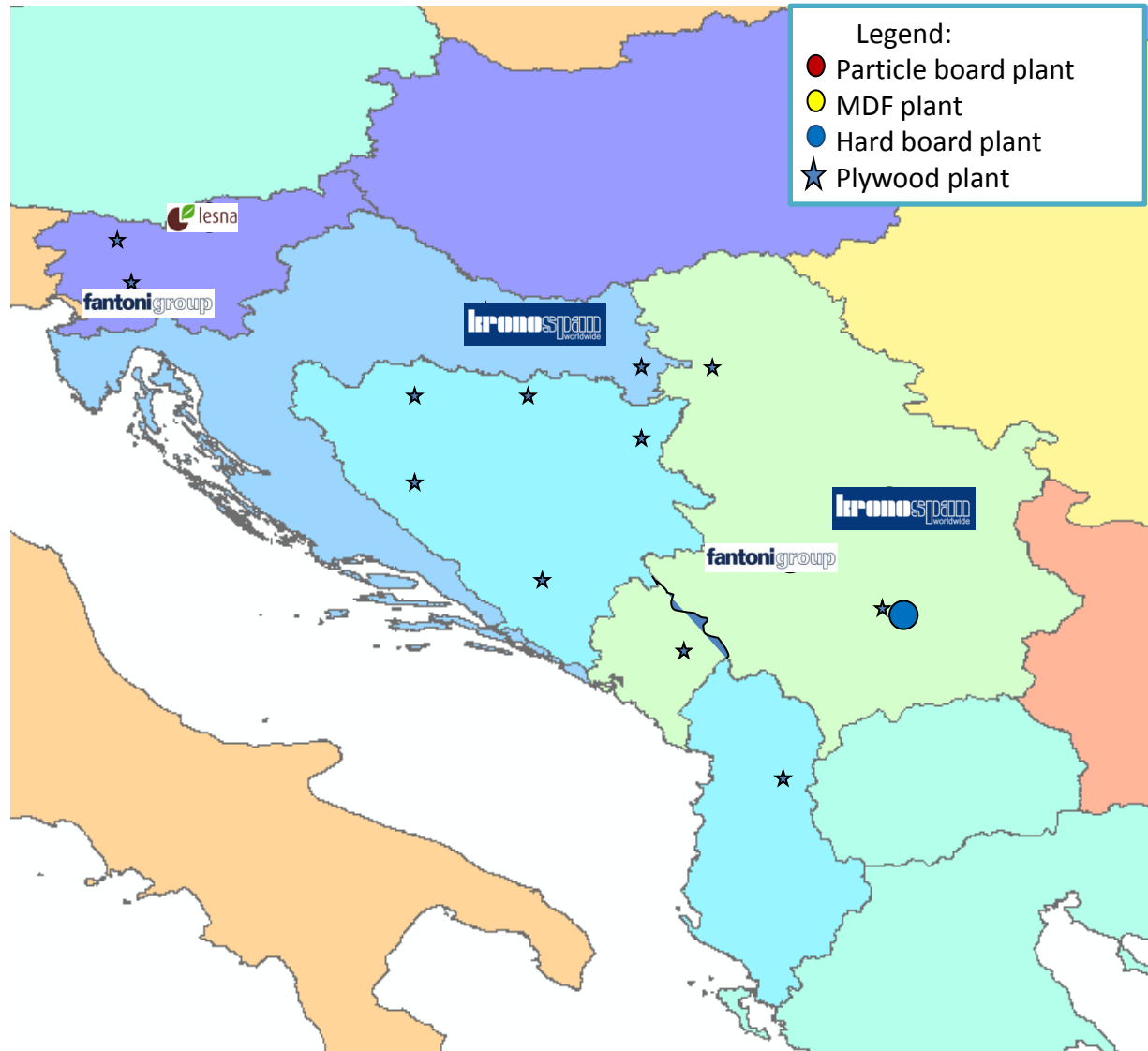
| Country | Certified forest area by FSC (ha) | % of the total forests area | CoC (No.) |  |
|---------------------------|--|--------------------------------|--------------|---|
| Bosnia and Herzegovina | 988,284.9 | 36,5 | 58 | |
| Croatia | 2,018,987 | 75.1 | 159 | |
| Serbia | 374,285 | 16.6 | 47 | |
| Slovenia | 321,849,92 | 25,7 | 126 | |
| TOTAL | 3.703.406,82 | 32.2 | 390 | |
| Western Europe | 85,000,000 | 51.2 | | |

Source: FSC database, May 2011

III. Rural development and wood products production in SEEC: key figures of sawmill industry

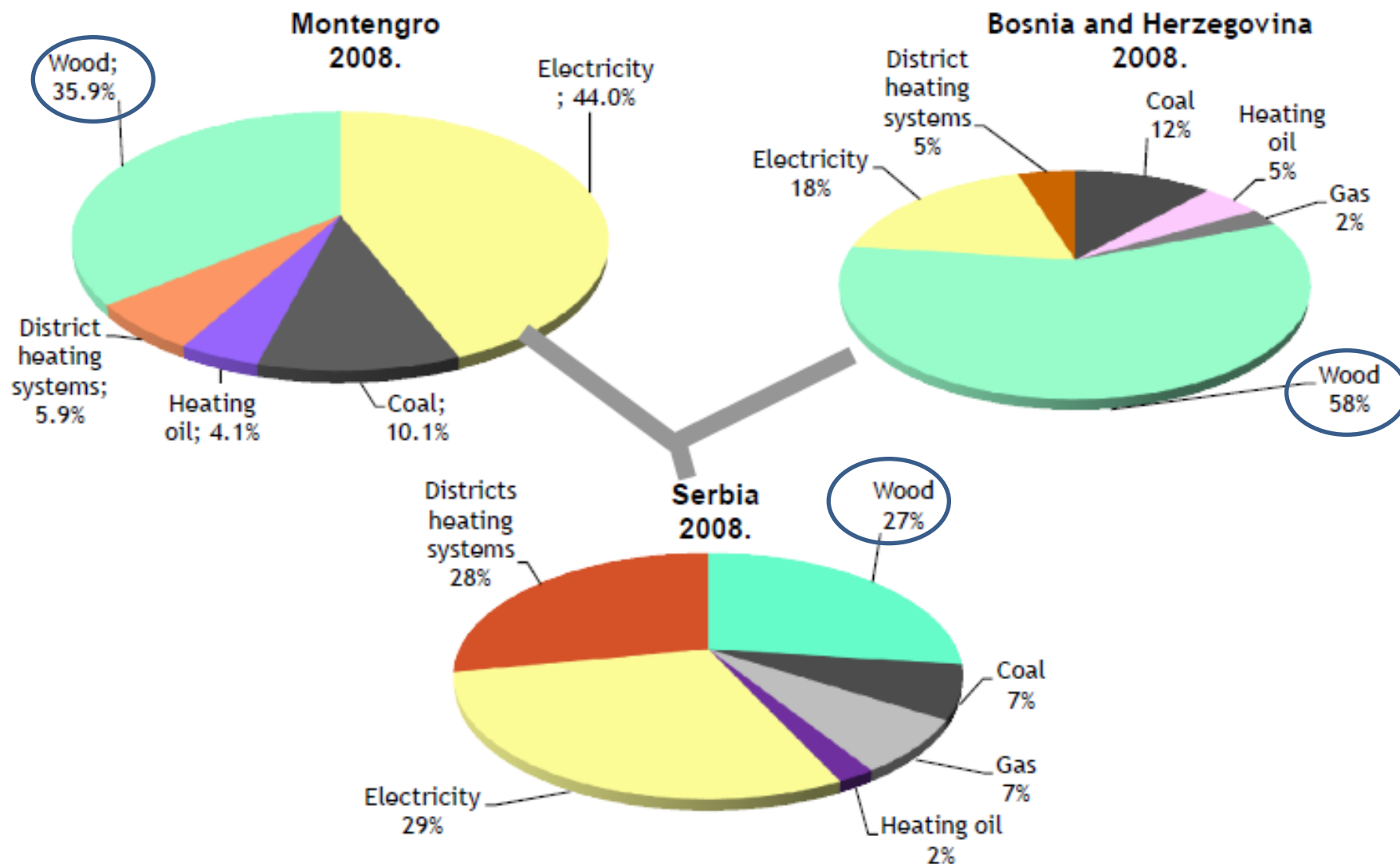
- » 3,389 companies = 20,000 employees
- » 57 % of the produced industrial roundwood is processed by the sawmill industry
- » 64.6% of the sawnwood production are exported. Slovenia and Bosnia and Hercegovina are leaders in the Region with 1.1 milion m³ and 629,000 m³ in 2009.
- » Mainly small and middium-sized companies with capacity from 2,000-5,000 m³ logs per year
- » The top 10 companies produce 65% of the total production
- » The most evident problem is the large capacity of sawmill industry, which is still 2.5-3 times greater than the annual roundwood production
- » The Region is classified in the group of ones which have excess of sawnwood, so its role is to export sawnwood, not the final products of wood.

III. Rural development and wood based panels industry

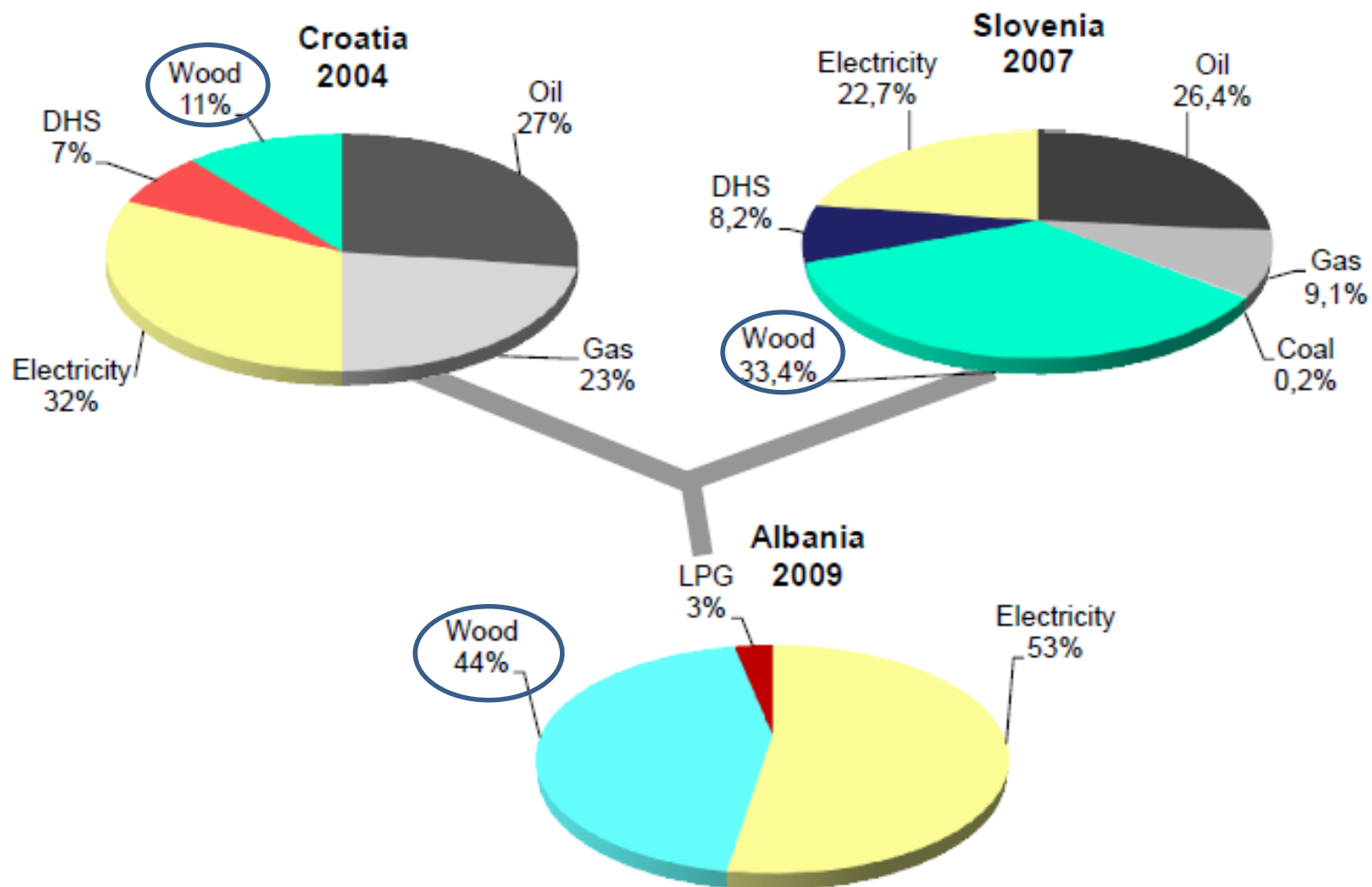


- » 18 companies = 2,000 employees
- » 43 % of the processed industrial roundwood is handled by the wood based panels industry, mainly for particle boards production
- » 44.4% of the wood based panels production are exported. Mostly from Slovenia
- » Mainly small and medium-sized companies in plywood production.
- » Three big particle board companies have capacity of 750,000 m³ annually (theoretical).
- » Overall production of particle boards in 2009 was 337,000 m³.
- » Overall production of the plywood in 2009 was 104,222 m³
- » Reconstructed hardboard plant in Serbia has restarted its work in April 2011. Capacity of this plant is 46,000 t/year.

The participation of singular fuels in total energy consumption for households heating in SEEC



The participation of singular fuels in total energy consumption for households heating in SEEC



III. Rural development and wood pellets industry



- » 32 plants
- » Capacities by countries:
- » Bosnia and Herzegovina: 142,000 t/y
- » Croatia: 211,880 t/y
- » Serbia: 104,500 t/y
- » Macedonia (Berovo and Ohrid) 5,000 t/y
- » Slovenia: 120,000 t/y
- » TOTAL: 583,380 t/y

III. One meter log wood production in rural area: case study in Serbia



IV. Rural development and Non-wood forest products in SEEC: key figures



- The majority of NWFP from the most of the countries is exported as a raw material

- Little number of enterprises which process NWFP

- Little number of enterprises which possess HACCP and EU BIO (EEC 2092/91) certificates.

- The equipment used by these enterprises is generally very old.

- Investments in new equipment are rare.

IV. Rural development policy and Non-wood forest products in SEEC: key figures



Many collectors and agents are not registered. It is assumed that a significant part of the exportation of NWFP is realised illegally.

Competent institution in the forestry are being not completely able to control these activities in this moment.

May 4th 2011: In one of countries of the Region the Inspection for environment protection temporarily confiscated 11.824 kg of illegally collected live snails.

IV. Rural households and their annual incomes-case study in Montenegro

| Average annual incomes of rural households realised from forest products sale | | | |
|---|------------------------------|--------------------------|------------------------------|
| Products | Average annual income in EUR | The number of households | % of total households number |
| Wood and firewood | 853 | 134 | 27.0 |
| Medicinal plants | 249 | 43 | 8.7 |
| Forest fruits | 435 | 116 | 23.4 |
| Mushrooms | 455 | 201 | 40.5 |

Source: ISSP and SNV 2008

IV. Rural development policy and Non-wood forest products in SEEC: key figures



Collecting prices of NWFP in MNE in EUR/kg

| | |
|------------------------------|-----|
| Forest fruits | 4 |
| Medicinal Plants | 8.6 |
| Mushrooms Boletus (wet) | 2.5 |
| Mushrooms Cantharellus (wet) | 2.0 |
| Mushrooms Morales (dry) | 100 |

Source: ISSP and SNV 2008

V. Rural development policy and environment: key figures



Problems:

- » Disorder
- » Problems of wooden rests postponement

Benefits

- » Satisfying of own necessities
- » Income from lumber sale

V. Rural development policy and environment: key figures



» SEEC: 2,500 charcoal kilns



» SEEC: charcoal dust and residues

V. Rural development policy and environment: key figures



V. Rural development policy and environment: key figures



V. Rural development policy and environment: key figures



- » Traditional food
- » Traditional drinks

V. Rural development policy and environment: key figures



» Traditional
accomodation

VI. Rural development policy and socio-economic importance: key figures

The assessment of total number of workers induced by business activities of company for the charcoal production in Serbia in 2009

| Type of fuel | Direct work | Indirect work | Induced work | Total (workers) | Total produced energy (GJ) | Produced energy per worker (GJ worker) |
|--------------|-------------|---------------|--------------|-----------------|----------------------------|--|
| Charcoal | 1.436 | 275 | 158 | 1.869 | 401.760 | 214,9 |

Source: Glavonjic and TCP/FAO 2011

VI. Rural development policy and socio-economic importance: key figures



VI. Rural development policy and socio-economic importance: key figures

Contribution of charcoal production in regional and national public revenues

| Type of energy product | Number of employees | Net income (€) | Contribution to regional public revenues (€) | Contribution to republic public revenues (€) | Gross income (€)** |
|------------------------|---------------------|----------------|--|--|--------------------|
| Charcoal | 762* | 1.463.040 | 507.236 | 933.273 | 2.903.549 |

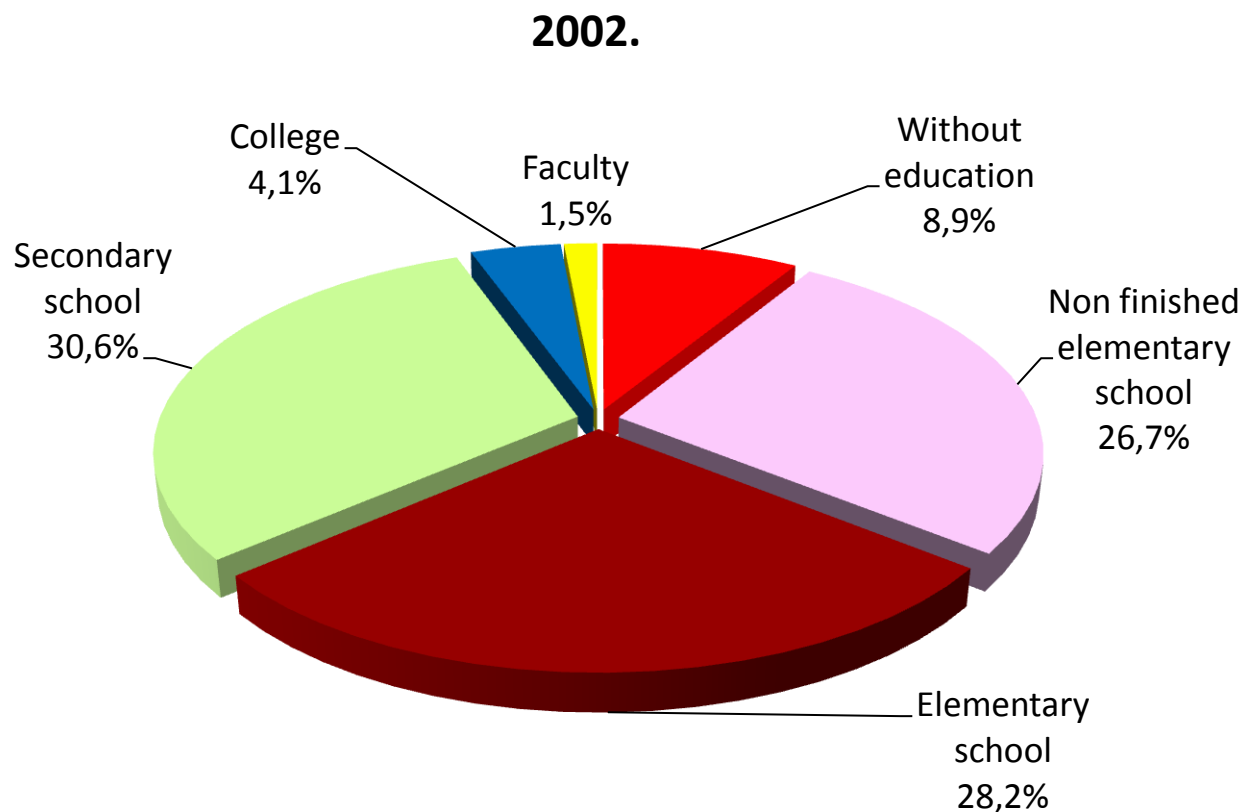
* Only registered

Source: Glavonjic and TCP/FAO 2011

VII. Rural development policy and education: key figures

In rural regions of Serbia as defined by OECD methodology, there are 1.365 million households which make up 54% of the total number of Serbian households.

Educational structure of rural population in Serbia, 2002.



THANK YOU FOR YOUR ATTENTION



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