Forest sector in Poland

KIEMET – Central and Eastern European Forest Information Service

Joensuu 4 April 2012
Juhani Marttila
1 Forest resources and their use

KIEMET – Central and Eastern European Forest Information Service
Forest resources

- **Moderate resources**
  - 9.3 million ha (30% of land area), mostly hemiboreal, 0.2 ha per capita
  - Total volume: 2.3 billion m³ (in Finland 2.2 billion m³)
  - Mean volume: 247 m³/ha
  - Annual growth: 70 million m³ (8 m³/ha/year)

- **Most common tree species**
  - pine: 70 %
  - spruce 6%
  - oak: 6%
  - birch: 6%
  - alder 5%
  - beech 5%
Forest resources – age classes

- Age structure is imbalanced
- Dominating age class is 41–60 years

Source: Centrum Informacyjne Lasów Państwowych
Forest resources – mean volume in 1967–2010

Source: Central Statistical Office, Forest Management and Geodesy Bureau, Large-Scale Forest Inventory
Location of forest resources

- Western and northern parts of the country
- Carpathian Mountains in the extreme south

Source: Central Statistical Office
Proportion of total forest from total land area

% at 1 x 1 km resolution
- Water
- No data
- 0–1
- 2–10
- 11–25
- 26–50
- 51–75
- 76–100

Source: Forest map of Europe, EFI
Białowieża Forest, Polish–Belarusian border region (Source: Wikimedia Commons)
Usage of forest resources

- Annual cuttings are about 35 million m³
- Pine is by far the most important species in cuttings
- About 95% of regeneration is made by planting or seeding
- 8.5 million hectares (92% of total area) is exploitable for harvesting
- Usage of raw wood (average 2007–2009): 1.1 m³ per capita
Forest ownership

- Small scale private forest ownership was not abandoned after political changes
- Current structure of ownership:
  - State: 7.7 million ha (82%)
    - Major manager: Polish State Forests (Lasy Państwowe)
  - Private: 1.7 million ha (18%)
    - Private forests are highly fragmented
    - Mean size: 1.3 ha
    - Number of owners: about 1.5 million

Source: Central Statistical Office
Wood procurement

- Harvesting operation performance
  - Forestry contractors in State Forests (over 95%)
  - The owners (mainly) in private forests
- Skidders have been common
- Fully mechanized harvesting has increased rapidly after 2005
- Harvesting methods in 2008
  - Long-wood system – 60%
  - Cut-to-length – 30%
  - Tree length – 10%
Protection areas

- Nature reserves cover 0.2 million ha of forests
- Landscape parks cover 1.3 million ha of forests

Source: Directorate General of the State Forests
2 Forest policy

KIEMET – Central and Eastern European Forest Information Service
Administration and management

- Administration
  - Ministry of the Environment
    - Department of forestry
- Management of the State Forests
  - State Forests National Forest Holding
    - 17 regional repartments
    - 429 forest districts (2009)
Policy documents and targets

- Forest Act (1991)
  - Different functions of forests

- National Programme for the Augmentation of Forest Cover (1995, revised in 2002)
  - Targets to 2050 (increasing forest area to 33%)

- Regulations by the General Director of State Forests: No 11 of 1995 and No 11a of 1999 on ecological basis of forest management
  - Ecological basis on the developing forest management

- The National Forestry Policy (1997)
  - Multiple use of forests
  - Balancing wood procurement with ecological and economical targets


- National renewable energy action plan (2010)
  - Targets for the increasing share of renewable energy sources
Bioenergy

- National Action Plan on energy from renewable sources was adopted at the end of 2010
  - Defines national goals for the share of renewable sources in 2020
  - The target is to double the share (from 8% to 15% by 2020)
  - Biomass has the greatest potential among renewable sources
  - Targets for roundwood are limited

- In 2008, wood pellet production was 340,000 tonnes and consumption 120,000 tonnes
Sertification

- Almost all of the forests are sertified with the FSC standards
- Popularity of PEFC certification system has risen rapidly
3 Forest industry

KIEMET – Keski- ja Itä-Euroopan metsätietopalvelu
Forest industry

- Compared with many Central European countries, forest sector has a relatively large significance in Poland
- In 2010, forest sector contributed 1.8% to GDP (about 6% of export)
- Especially mechanical forest industry and value-added products have a strong position
Roundwood

- Significant cuttings on European level
- About 95% of roundwood is from the state forests
- Most of wood is used in domestic markets

Source: FAOSTAT
Sawnwood

- Annual production has stabilized to 4 million m³
- Sawmilling industry is highly dispersed

Source: FAOSTAT
Particle board

- Significant increase in production during 1990’s and 2000’s
- Many new factories (OSB) have been established
- The 3rd biggest production in Europe after Russia and Germany
- Strong furniture industry uses lot of particle board

Source: FAOSTAT
Fibreboard

- Production has increased significantly with help of foreign investments
- Production of MDF has an important role
- The 2nd biggest production in Europe after Germany
- Strong furniture industry uses lot of fibreboard

Source: FAOSTAT
Plywood

- Relative growth has been rapid
- Production level is lower compared with particle board and fibreboard

Source: FAOSTAT
Value-added wood products

- Very important player on the European level
- Values in 2010
  - Builder’s carpentry and joinery products
    - Production value: 1.3 billion €
    - Export value: 0.7 billion €
  - Furniture
    - Production value: 5.8 billion € (of wood: 73%)
    - Export value: 5.5 billion €
    - Main markets: Germany and France
Pulp for paper

- Production has increased slowly
- Growth of import has been more rapid
- Cellulose accounts for 75% of the production

Source: FAOSTAT
Paper and paperboard

- Production has increased rapidly
- Large and efficient factories
- About 2/3 of production are packaging papers
- Import consists mainly of graphics paper and packaging papers

Source: FAOSTAT
4 Education and research on forestry

KIEMET – Central and Eastern European Forest Information Service
Education and research

- Forest research institute (Instytut Badawczy Leśnictwa)
- Faculties of forestry in 3 universities
  - Warsaw University of Life Sciences
  - Poznan University of Life Sciences
  - University of Agriculture in Krakow
- Wood technology institute
- Secondary forest schools
5 Conclusions

KIEMET – Central and Eastern European Forest Information Service
Conclusions

- Poland has by far the strongest forest sector compared with other transition countries in Central and Eastern Europe
- The changes in ownership have been smaller than in many transition countries
- Growth of forests is significant and there are plenty of possibilities for increasing the level of harvesting
- Strong furniture industry uses much wood-based panels
- Also production of wooden windows and doors is notable
- Relatively large population (38 million) makes Poland an important market in Europe
Publications


- Gerasimov, Y. Atlas of the forest sector in Poland. (Will be published in Metla Working paper series)

http://www.metla.fi/metinfo/kie/