

Forest management in Russia and ensuring its sustainability



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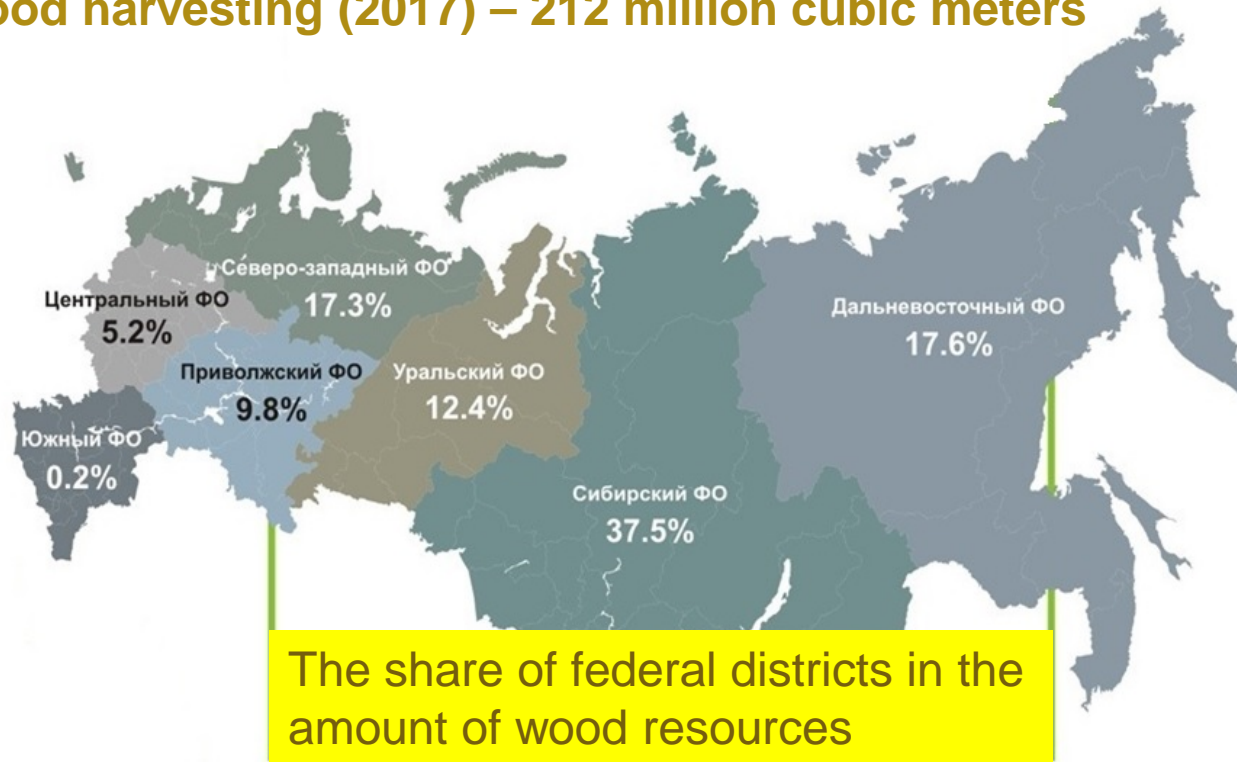
Wood resources of the Russian Federation

Forest Area- 771 million hectares

Wood stock– 83,4 billion cubic meters

Annual wood increment – 1.02 billion cubic meters

Wood harvesting (2017) – 212 million cubic meters



Information from new Strategy for forest-based sector development till 2030

TODAY

- ▶ Russia's share in the world forest products trade is **below 4 %**,
- ▶ the share in the gross domestic product - **ONLY 0.5 percent**,
- ▶ the number of employed - 500 thousand people (**ONLY 0.8 percent** employed in the economy).

As a result of the implementation of the Strategy by 2030

- ▶ an increase in the share of the forest complex in the gross domestic product to **1 percent**.
- ▶ The number of personnel employed will grow to 820 thousand people.

Forest complex in Russia

in official documents



FORESTRY

- ▶ Forest account and monitoring
- ▶ Forest protection
- ▶ Forest reproduction
- ▶ Biodiversity conservation and creation of favorable habitat
- ▶ Preservation of forest environmental and protective functions



Ministry of natural resources and ecology
Federal Forestry Agency
Subjects of RF- Regions

FOREST INDUSTRY

- Wood harvesting and deep processing
- Meeting the needs of the population and industry for **wood** products
- Increase in export of **wood** products



Ministry of industry and trade
Ministry of economical development
Subjects of RF- Regions

Forest management system

- ▶ The forests are in federal ownership. Forest management delegated to Subjects of the Russian Federation-Regions
- ▶ The federal center has retained control over the execution of delegated authority.
- ▶ The main mechanism for forest use - long-term lease of forest areas.
- ▶ Forests are managed by a tenant or a specialized government establishment (in non-leased forests)



Decentralization of forest management

in official documents

Federal Center

- ▶ Defining the boundaries of protective and operational (exploitative) forests
- ▶ Forest inventory
- ▶ Forest pathology monitoring
- ▶ Forest reproduction monitoring
- ▶ Remote sensing of forest use
- ▶ Forces and fire-fighting equipment - federal reserve
- ▶ Forest science institutions and technical schools/colleges

Subjects of RF-Regions

- Ensuring the protection, preservation and reproduction of forests
- Forest use and management
- Prevention and extinguishing of forest fires
- Providing forest account data
- Interaction with federal executive authorities

Priorities of state forest management

in official documents

Strategy goal:

Providing social needs for forest resources and services with guaranteed preservation of resource-ecological potential and global functions of forests

Tasks:

- ▶ Achieving a balance between forest harvesting and reproduction, increasing forest productivity and quality.
- ▶ Reduction of forest losses from fires, pests and illegal logging.
- ▶ Preservation of the ecological potential of forests when organizing their economic use.
- ▶ The formation of an economically sustainable, competitive industry branches, ensuring rapid growth of forest sector



Forest protection

Goal: reduction in losses from fires, pests and illegal logging.

Tasks:

- ▶ Increasing the efficiency of prevention, detection and extinguishing of fires
- ▶ Improving the effectiveness of protecting forests from insects
- ▶ Illegal logging prevention



Forest use

Goal: creation of conditions for the sustainable use of forests with the preservation of their ecological functions and biodiversity

Tasks:

- ▶ Ensuring meeting the forest legislation requirements
- ▶ Getting up to date information on forest resources
- ▶ Creating conditions for the rational and efficient use of forests



Forest reproduction

Goal: achieving a balance between forest harvesting and reproduction, increasing forest productivity and quality

Tasks:

- ▶ Improving the quality of seeds, improving the breeding and genetic properties of planting material.
- ▶ Restoration of dead and felled forest stands.
- ▶ Increasing the efficiency of reproduction and forest productivity



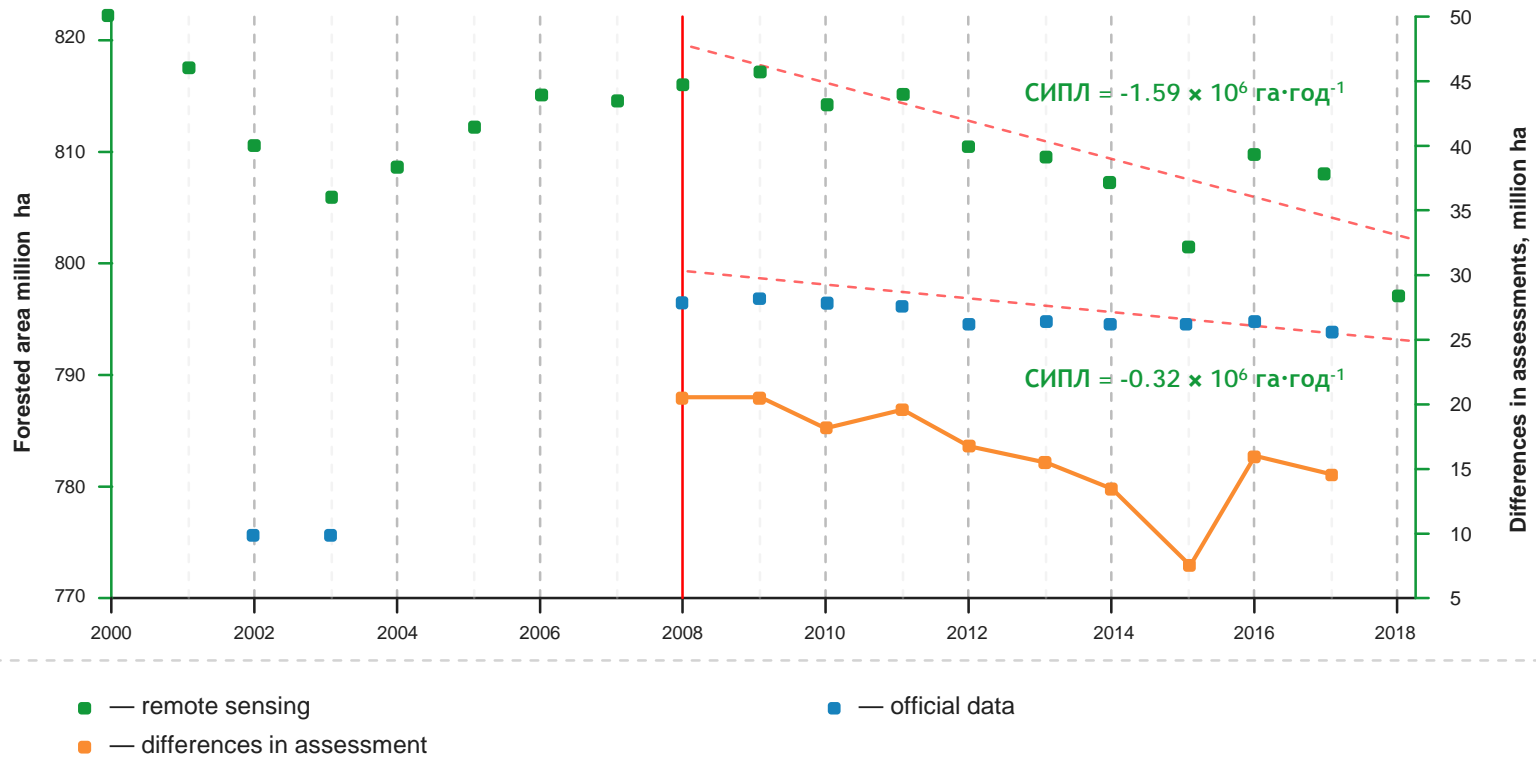
Some examples

WHAT WE HAVE IN REALITY?

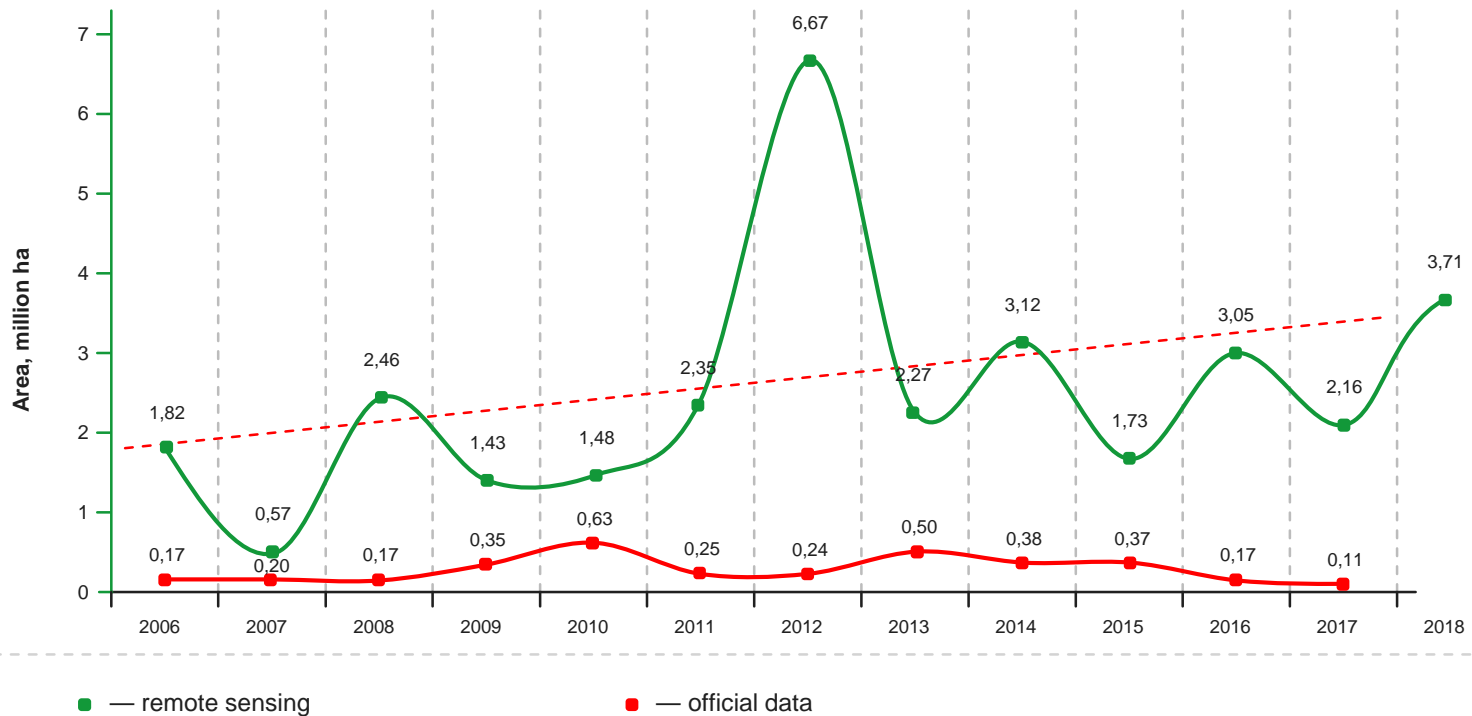
- ▶ Statistical data on forests
- ▶ Statistical data on forest fires
- ▶ Information on illegal logging

Significant discrepancies in official and scientific data on forests

Official data from Federal Forestry Agency and remote sensing data (Bartalev, 2019).



Significant discrepancies in official and scientific data on forest fires Forest death from fires (Bartalev, 2019).



Reasons for differences

- ▶ Forest inventory, forest pathology, forest reproduction monitoring - different networks, no links between them. Significant part of plots was established near by roads.
- ▶ Methodology and methods are not statistically valid.
- ▶ Low scientific level of analytical work.



Illegal logging is very high

- Accordingly official data **4 mln m³ , lower than 1 %**
- IUFRO- 35-40 mln m³- about 20% out of total logging
- Interpol and UNEP- до 50 mln m³ - 30% out of total logging.
- World Bank- 40 mln m³ - 20% out of total logging.
- CEPF RAS- 33.6 mln m³- 16 % out of total logging when taking into account data from official documents.

Conclusion: unified state automated forest information system (LES EGAIS) is a tool for monitoring wood transactions, but not a tool for identifying the legality of wood origin



Illegal logging structure

- ▶ illegal logging carried out by citizens for their own needs (heating, building materials, etc.) about 4 %, up to 8 million cubic meters (accordingly expert estimates)
- ▶ illegal logging carried out by citizens for sales (theft by the forest "black lumberjacks") about 5%, up to 10 million cubic meters (accordingly expert estimates)
- ▶ illegal logging in the implementation of permitted forest use, as well as logging on documents having signs of corruption about 20 %, up to 35 million cubic meters (accordingly expert estimates)

Reasons for illegal logging

- ▶ Corruption, use of imperfect legislation.
- ▶ Reduction of staff of forest inspectors by more than 10 times (compared to 2004): Irkutsk, Krasnoyarsk , Primorsky and Khabarovsk regions 1 inspector for 300 thousand hectares (in USA 1 inspector for 2 thousand hectares).
- ▶ Legally established restrictions on forest use for the local population, which is traditionally harvesting for their own needs.



Problems

- ▶ No reliable information on forests.
- ▶ No reliable information on forest fires.
- ▶ No effective forest reproduction due to lack of care for forests.
- ▶ Illegal logging.

New Forest Law ?

- ▶ February 12, 2019 Chairman of the Government of the Russian Federation Dmitry A. Medvedev at a meeting with representatives of the Federation Council supported the idea of developing a new Forest Code of the Russian Federation:

“According to forest legislation. I am probably inclined to support the idea that we cut down the Gordian knot of problems accumulated in forestry and forest legislation with the help of the new Forest Code. Because this is already such a complicated story that endless additions, changes, attempts to adjust something in isolation from other issues, most likely, will not lead to anything...”



Scientific Council of RAS on Forests

Recommendations discussed
during the debates on Forest
Policy, October 31, 2018

- ▶ Improvement and development of forest policy must precede improvement of forest legislation



Suggestions for improvement of forest policy

- ▶ To carry out the decentralization of legislative powers regulating relations in forestry, providing for the adoption of forest legislation at the level of the Russian Federation establishing the general principles for organizing state forest governance.
- ▶ Organizational and technological regulation of forest issues should be transferred to the regional level



Suggestions for improvement of forest policy

- ▶ To transfer lease-free forests to specialized state forestry organizations in permanent use with the right to conduct economic activity.
- ▶ Introduce forest management licensing tools and concession agreements into the practice with the establishment of economic criteria for the selection of efficient forest users.



Suggestions for improvement of forest policy

Strategical direction: development of circular forest-based bio-economy in Russia:

- ▶ Biodiversity
- ▶ Eco-system services
- ▶ Forest- based industry in bio-based industry (BBI) - wooden constructions (state programmes for supporting), bio-based products from wood, harvesting residues, wastes, cellulose, hemicellulose, lignin, extractives, pharma products etc.
- ▶ Smart packaging: wood and fibre- based against plastics and other packaging materials, hygienic and healthcare products
 - ▶ Renewable energy solutions, bio-energy products
 - ▶ New jobs in rural and industrial areas

Suggestions for improvement of forest policy

- ▶ It is necessary to clearly identify the role of science and education in the development of the Russian forest-based sector

A photograph of a forest interior. On the right side, a large, textured tree trunk is visible, showing signs of decay or insect damage. The foreground is filled with various green plants, including a prominent, thin, upright stem with small leaves and several clusters of broad, green leaves. The background is a dense thicket of trees and branches, with sunlight filtering through the canopy, creating dappled light and shadows.

Thank you for attention