Moldovan Forests
Reality, Problems, Solutions
May, 2010

Beech forests in Moldova, 2009 (Natural Reserve “Codrii”)
Forest fund structure

According to the Land Cadastre of Moldova by January 1st 2010, the forest lands constituted a total of 462.7 thousand ha or 13.7% of the territory; forest fund - 410.2 thousand ha (12.1%); area covered by forests - 365.9 thousand ha (10.8%); and other 52.5 thousand ha are covered by forest vegetation (30.9 thousand ha of forest belts and 21.6 thousand ha of plantations of trees and shrubs).

The state forest authority, Agency “Moldsilva”, holds 336.6 thousand ha of forest fund (9.9%), of which 302.2 thousand ha (8.9%) are forests. 44.1 thousand ha (1.3%) are administered by local governments and 3.2 thousand ha (0.1%) are private forests. Transnistria holds 26.3 thousand ha of forest lands.

Problems and challenges

Illegal logging

Official data on the level of wood illegally logged in Moldova during 1997-2004 stated an amount of 142300 cubic meters, of which 35000 cubic meters (24.6%) were produced in forests managed by the state forest authority (Agency “Moldsilva”) and the other 107300 cubic meters (75.4%) logged in forest lands of local authorities. Thus the total amount of revenue lost was over 10 million Moldavian lei.

Around 13 million hectares of forest are cleared worldwide annually, according to the European Commission. Estimates suggest that illegal logging costs timber-producing countries €10-15 billion per year in lost revenues (http://europa.eu). Illegal logging is a serious problem for many countries in Europe and North Asia, where forests are an indispensable source of livelihood for some 170 million people and annual revenues of forest resources are around $25 billion (20% of global wood trade) (http://www.illegal-logging.info). Illegal logging is a serious threat to forest ecosystems and their biodiversity.

Poaching

Illegal hunting (killing or capturing of animals contrary to conservation laws and wildlife management regulations) is punishable by Penal Code (Article 233) and Administrative Code (Article 128) of the Republic of Moldova. Hunting is regulated legally by the Regulation of National Hunting Fund, which represents an annex of the Law on Animal Kingdom.

Results of control activities undertaken by the State Ecological Inspectorate (over all territory of Moldova Republic)

<table>
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<tr>
<th>Indicators / Years</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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<tbody>
<tr>
<td>Drawn up protocols</td>
<td>58</td>
<td>141</td>
<td>225</td>
<td>119</td>
<td>208</td>
<td>286</td>
<td>129</td>
<td>143</td>
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<tr>
<td>Confiscated guns</td>
<td>58</td>
<td>38</td>
<td>23</td>
<td>27</td>
<td>33</td>
<td>260</td>
<td>86</td>
<td>65</td>
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<tr>
<td>Prejudice (Lei)</td>
<td>11844</td>
<td>1188</td>
<td>11382</td>
<td>8831</td>
<td>17818</td>
<td>63517</td>
<td>60486</td>
<td>30150</td>
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Pests and diseases

There exist risks of pest and disease outbreaks in Moldova due to both geographical position and environmental changing. Forests are continuously at risks from many leaf and stem eating insect pests. Pest outbreaks can reach 30% of the whole forest fund, accounting for important timber volume loss. The State Forest Authority undertakes air-chemical control activities over half of the outbreaks in affected forests (see Table).

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<tbody>
<tr>
<td>Area affected by defoliators, thousand ha</td>
<td>63.6</td>
<td>69.9</td>
<td>95.7</td>
<td>77.7</td>
<td>75.6</td>
<td>78.2</td>
<td>104.8</td>
<td>95.3</td>
<td>82.4</td>
<td>45.0</td>
<td>30.4</td>
<td>17.4</td>
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<tr>
<td>Area under air-chemical control, thousand ha</td>
<td>8.8</td>
<td>10.3</td>
<td>1.2</td>
<td>24.1</td>
<td>0.0</td>
<td>7.5</td>
<td>20.6</td>
<td>26.4</td>
<td>20.6</td>
<td>1.8</td>
<td>15.8</td>
<td>16.9</td>
</tr>
<tr>
<td>Control area rate of affected forests, %</td>
<td>13.8</td>
<td>14.7</td>
<td>1.3</td>
<td>31.0</td>
<td>0.0</td>
<td>9.6</td>
<td>19.7</td>
<td>27.7</td>
<td>25.0</td>
<td>4.0</td>
<td>39.0</td>
<td>97.1</td>
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Grazing

The unauthorized and often uncontrolled grazing has a negative impact on forests. Pastures (lands suitable for hay and grazing) occupy 14% of the total land fund of Moldova. A daily productivity of 1 ha of pasture can provide feed to 0.3 unit of large cattle (cow, horse) or 2 units of small cattle (sheep, goats). The grazing capacity of pastures is six times lower than the number of 625 thousand head of existing livestock in Moldova, which increases pressure on forests. Good land management can improve productivity of pastures, enabling them support from 1.5 to 2.0 head of large cattle or 10 to 14 head of small cattle per 1 ha of pasture. This would significantly reduce pressure on forests.

Freezing rains

The freezing rain and ice of November 2000 caused severe damage to ca 50 thousand ha of forest fund in districts of Edinet, Soroca, Orhei, Ungheni, Chisinau and Balti. Due to ice accumulations many large tree branches can break, and trunks sag and fall. Thousands of trees suffered and the economic impact on forests is huge. Ice damage to forest vegetation rivals disease and insects as a destructive agent. The phenomenon happened again in February 2010, but caused less damage. The consequences of freezing rains can result in reducing the annual increase of up to 50% of the stands of affected forests.

Forest fires

The extent of forest fire area in the country depends on climatic conditions in the spring - summer season. Climate change, temperature rise and risks of droughts could increase the number of forest areas affected by fire. Almost 95% of Moldavian forests are deciduous forests which are less affected by surface-crown fires; however, the low fire can affect litter, fallen branches and timber, low-lying vegetation and animal diversity. Accidental and/or intentional forest fires can be very dangerous.
The Forest Law Enforcement and Governance (FLEG) Program was created to combat the threats posed to forests by illegal logging, trade, poaching and corruption. Poor governance of forest resources combines with weak rule of law to undermine sustainable economic growth, societal equity, and environmental conservation. The effects of unsustainable forest management and illegal forest activities include: significant loss of revenue to governments, the private sector and rural communities (especially forest-dependent communities); degradation of the environment and forest ecosystems; loss of biodiversity; and the loss of carbon stocks, further exacerbating climate change.

The ENPI-FLEG - “Improving Forest Law Enforcement and Governance in the European Neighbourhood Policy East Countries and Russia” Program has been initiated in response to the growing problem of illegal forest activities in the participating countries (Armenia, Azerbaijan, Georgia, Moldova, Ukraine, Belarus and Russia). This Program is funded by the European Union.

The initiative is comprised of processes which address the complex and politically-sensitive issues related to illegal logging at national and regional levels, and is implemented in cooperation with the major stakeholders:

- governments (Ministries, departments, parliaments, judiciary authorities, local authorities, customs)
- civil society (NGOs, community organizations)
- private sector (timber companies, business)

However, even well designed initiatives will fall short unless there is political commitment and cooperation at the highest levels. Improving forest law enforcement and governance will require collaboration across sectors and stronger stakeholder involvement. In Moldova the ENPI-FLEG Program started in 2009 and it is implemented by the World Bank and IUCN.

Implementing organizations of the ENPI-FLEG Program

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<td>is one of the largest financial institutions in the world aiming at helping countries and people worldwide. The Bank’s mission is to aid developing countries and their inhabitants to achieve development, reduce poverty, promote economic growth and ensure a sustainable environment.</td>
<td>is the world's oldest and largest global environmental organization, with more than 110 government and 800 NGO members and almost 10000 volunteer experts in more than 180 countries. IUCN's mission is to help the world find pragmatic solutions to our most pressing environment and development challenges.</td>
<td>is the world's largest independent conservation organization with over 5 million supporters worldwide, working in more than 90 countries. WWF's mission is to stop environmental degradation, conserve the world's biological diversity, and ensure that the use of renewable natural resources is sustainable.</td>
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