Romania
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ENVIRONMENT, WATER AND FORESTRY

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<th>Description</th>
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<tbody>
<tr>
<td>AAC</td>
<td>Allowable Annual Cut</td>
</tr>
<tr>
<td>AC</td>
<td>Administration Council</td>
</tr>
<tr>
<td>APDRP</td>
<td>Paying Agency for Rural Development</td>
</tr>
<tr>
<td>APIA</td>
<td>Agricultural Paying and Intervention Agency</td>
</tr>
<tr>
<td>APPR</td>
<td>Association of Private Forest Owners</td>
</tr>
<tr>
<td>BFP</td>
<td>Best Forest Practice</td>
</tr>
<tr>
<td>BPR</td>
<td>Business Process Review</td>
</tr>
<tr>
<td>CAP</td>
<td>Common Agricultural Policy</td>
</tr>
<tr>
<td>CBA</td>
<td>Cost Benefit Analysis</td>
</tr>
<tr>
<td>CEPF</td>
<td>Confederation of European Forest Owners</td>
</tr>
<tr>
<td>DG</td>
<td>Director General</td>
</tr>
<tr>
<td>EC/EU</td>
<td>European Commission/European Union</td>
</tr>
<tr>
<td>FBI</td>
<td>Forest Based Industries</td>
</tr>
<tr>
<td>FLEGT</td>
<td>Forest Law Enforcement, Governance and Trade</td>
</tr>
<tr>
<td>FMIMS</td>
<td>Forest Management Information and Monitoring System</td>
</tr>
<tr>
<td>FMIS</td>
<td>Forest Management Information System</td>
</tr>
<tr>
<td>FMP</td>
<td>Forest Management Plan</td>
</tr>
<tr>
<td>GD</td>
<td>Governmental Decision</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HQ</td>
<td>headquarters</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resources</td>
</tr>
<tr>
<td>HRD</td>
<td>Human Resources Development</td>
</tr>
<tr>
<td>ICAS</td>
<td>Institute of Forest Research and Management Planning</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>ITSRV</td>
<td>Territorial Inspectorate for Forests and Hunting (Romanian name)</td>
</tr>
<tr>
<td>MARD</td>
<td>Ministry of Agriculture and Rural Development</td>
</tr>
<tr>
<td>MCPFE</td>
<td>Ministerial Conference for protection of Forests in Europe</td>
</tr>
<tr>
<td>MoEF</td>
<td>Ministry of Environment and Forests</td>
</tr>
<tr>
<td>MIS</td>
<td>Management Information System</td>
</tr>
<tr>
<td>MoF</td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td>NAACLHR</td>
<td>National Agency for Cadastre and Land Registry</td>
</tr>
<tr>
<td>NEF</td>
<td>National Environment Fund</td>
</tr>
<tr>
<td>NFA</td>
<td>National Forest Administration (Romsilva)</td>
</tr>
<tr>
<td>NLBI</td>
<td>Non Legally Binding Instrument (for forestry)</td>
</tr>
<tr>
<td>NTFP</td>
<td>Non-timber forest product</td>
</tr>
<tr>
<td>POI</td>
<td>Physical Outputs Indicators</td>
</tr>
<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
</tr>
<tr>
<td>RON</td>
<td>Romanian New Lei</td>
</tr>
<tr>
<td>SFM</td>
<td>Sustainable Forest Management</td>
</tr>
<tr>
<td>SOP</td>
<td>Sectoral Operational Programme</td>
</tr>
<tr>
<td>SOP#</td>
<td>Standard operating procedure#</td>
</tr>
<tr>
<td>UNFF</td>
<td>United Nations Forum on Forestry</td>
</tr>
<tr>
<td>VPA</td>
<td>Voluntary Partnership Agreements</td>
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</table>
EXECUTIVE SUMMARY

Forest Resource and the Forestry Sector

1. Romania’s forests at 6.65 million ha or 29% land cover, constitute a valuable natural and renewable resource with the potential to contribute positively to national economic development and the well being of its citizens. An estimated 70% of the forest area is available for wood supply. Removals from forests in recent years have averaged 14.1 million m$^3$ or 46% of the total growing stock volume increment. The National Forest Inventory (NFI) is almost complete and is required to enable Romania to report nationally on the state of its forest resources and to fulfil its international reporting. The last NFI was in 1968. The MoEF will need to provide the funding to complete the fieldwork and data processing for 2011 and 2012.

2. Private forests, with an estimated 830,200 forest owners, now represent 51% of all forests and are characterized by relatively small and fragmented holdings, posing a challenge to their sustainable management. The absence of a forest cadastre is a barrier to any coordinated effort to consolidation of holdings. The majority of private forest owners are new to forestry and will require training and advisory support to manage their forests in a sustainable manner. In the short term little is possible. The next NDRP (2014-2020) should include measures to help tackle the problem.

3. Approximately 720,000 ha of forests are certified under FSC comprising 680,000 ha of state forests under Romsilva and 36,000 ha of private forests. There is approximately a further 2.5 million ha of mainly state forests which have undergone pre-evaluation under FSC but the expectation is that these areas may not be fully certified until 2011. If Romania is to compete in European markets, then efforts to increase certification especially in private forests will be needed.

4. Romania has an extensive forest regulatory framework, considered excessive by many (Savcor Indufor 2006) which has resulted in a very prescriptive type of forest management regime, with an over-reliance on technical norms which lack flexibility and stifle innovation. The suite of technical norms are outdated and do not always reflect advances in forest management, forest operations and or associated technologies. They will need to be revised to facilitate the introduction of more efficient practices. New norms should provide guidance and illustrate best practice in contrast to the current prescriptive format.

5. The current regulatory requirement is overly complex and a more simplified regulatory regime for small private forest areas is urgently required. This would remove areas less than a certain threshold e.g. 10 ha, to be under administration and instead require adherence to good SFM practice with simplified requirements for planning, marking, harvesting and sale of timber.

6. The average roading density of 6.4 m/ha is significantly below other European countries with broadly similar topography (Austria 36 m/ha, Switzerland 40 m/ha and France 26m/ha). The harvesting infrastructure, comprising mainly SMEs, is weak and suffers from a lack of investment in new machines and technologies due to a combination of (a) limited access to finance, (b) lack of continuity of work and (c) low profit margins.
7. The contribution of the forestry sector, including the wood industry, to GDP has varied between 3.5 and 4.5% over the past decade (Abrudan et al 2009). The sector is a major employer, especially in rural areas although numbers have fallen from 235,000 in 2000 to an estimated 161,000 in 2009. The furniture industry is the major employer accounting for almost 80,000 followed by wood processing and the National Forest Administration - Romsilva. Romania is a net exporter of forest products including furniture, sawnwood and wood based panels.

**Strategic Framework**

8. The main policy aims of the National Forest Policy and Development Strategy (NFPS) are still relevant and its formulation process has served as an example of best practice. It has a number of weaknesses and lacks (a) supporting economic analysis and/or cost benefit analysis (CBA) to justify the actions outlined, (b) any estimate of funding requirements or cost of implementation, (c) quantifiable targets, (d) procedures to monitor implementation and (e) formal procedure to review and update the policy. Much has changed since its formulation including forest restitution; EU accession, increased emphasis on climate change and the roll out of the Natura 2000 network.

9. The lack of an overall vision for the sector coupled with the shortcomings of the NFPS, means that there is no overall guidance or direction and no effective monitoring of strategy implementation making it difficult, if not impossible, to afford priorities and to co-ordinate actions. A new NFPS is required which would address the current policy weaknesses and which would tackle priority issues identified within the sector e.g. support and extension services to private owners, funding of public good functions of forests and a regulatory regime that is overly prescriptive and in part unenforceable.

**Organisational Structure and Systems**

10. The General Directorate for Forestry (GDF), now within the MoEF is the public authority responsible for forests. It has three Directorates – Control which includes the Territorial Inspection units, Policy and Strategy and Forest Development. The forest restitution poses significant challenges to the legal and regulatory framework, particularly in tackling problems such as illegal logging. The effectiveness of the control activity is low. The GDF has a relatively weak budgeting process and is unable to fulfil its obligations under the forest law. The development of the Forest Management Information and Monitoring System (FMIMS) to help the monitor the sector and better decide upon strategic directions, policies and priorities is incomplete and data introduction was abandoned following the close of the Forest Development Project. It will be important to build upon the initial configuration of the FMIMS system, to define the data requirements and data consolidation and relevant indicators that can serve as a decision support for policy and strategy development and to monitor overall policy implementation and activities within the forest sector. Concurrent with the upgrade and development of the FMIMS, further development of SUMAL will also be necessary.
11. Under the forest law, private forests are obliged to be under an administration. In 2002, the first private forest district (administration) was established and there are now 132. Private forest owners associations total almost 50, but they do not in general provide extension services to their members.

12. Romsilva, National Forest Administration, was established in 1990 (GD 1335/1990) as a legal state-owned entity with an essentially commercial mandate. It manages the state-owned forests which now account for 3.3 million ha. It has 41 County Branch offices, 323 forest districts, and the Forest Management and Research Institute (ICAS). Romsilva operates as a financially autonomous organisation performing forest management and silvicultural operations, engaging in non-timber forest products and services. It has a number of sawmills, a fish farm, extensive hunting facilities and operates other natural resource related businesses. It undertakes a wide range of public purpose activities some of which do not relate to forestry e.g. preservation of national gene pool for horse breeding. Since 2004, it manages, on a contractual basis, 22 of the 26 national and nature parks. Romsilva is organised along traditional lines for a state owned forestry enterprise. ICAS has three main departments i.e. production, research (including forest management planning) and forest inventory. Its 5 forest districts generate about 40% of revenues while a further 30% comes from the production of forest management plans for Romsilva and the balance of 30% from various research activities. Timber sales represent the major revenue source for Romsilva and will continue to do so into the foreseeable future. Romsilva has returned a profit year on year over the past decade despite its declining resource and revenue base, continuing obligations to provide extensive public goods functions with limited support and the downturn in the Romanian and European economies. The profit level is low and has averaged less than 2.5% of revenues over the past three years (2010 figures are not yet finalised). This compares with levels of more than 10% during years 2001/2002.

13. Romsilva has been unable to sufficiently adapt its practices or how it does business to the radically changing operating environment. It needs to reinvent how it does business and to so this will require continuity and leadership neither of which is possible under the current practice of political interference in appointments. With restitution expected to be completed before soon (although there is no set date), it is opportune to prepare an overall vision and strategic plan for the next decade that would prioritise those areas where there are market opportunities, explore alternative business arrangements e.g. private public partnerships and eliminate unprofitable businesses. Romsilva needs to undertake a comprehensive Business Process Review (BPR) of all the major processes within the organisation re-designing how they should be carried out and aligning them with the changing operating environment while building in efficiencies and improving resource allocations. The BPR could result in Romsilva having a separate arm for the provision of public goods. However, the initial priority should to fully identify the cost of providing these public goods, which are unknown.

14. To facilitate future development, Romsilva will need to define an information system strategy to address the four key aspects necessary to succeed: (a) Data Needs; (b) Business Applications; (c) Appropriate Technology; and (d) Organisation Structure. These aspects will need to be analysed and considered in a holistic fashion and their individual development must be synchronised.
15. While we do not see any particular advantage at this moment in time in recommending that Romsilva should be corporatized, following the outcome of the BPR it may be opportune to consider this option. The corporatized Romsilva would operate as an independent entity, free of political influence and according to good governance principles and best practices, benchmarking itself against best in class other state owned forest companies within Europe.

**Natura 2000**

16. Implementation of the Natura 2000 network in Romania started late resulting in limited time for public consultation, awareness raising, site designation and analysis. This has resulted in a general tendency to restrict activities even where they do not impact on the subject species and/or habitat. The hurried and under-resourced implementation of the network has created confusion, unnecessary tension between authorities, forest owners, landowners and administrators and is a lost opportunity for securing funding for public good functions of forest management.

17. The Romanian system for FMP is aligned with the same basic principles as the Natura 2000 network. However, the Natura 2000 legislation and management system has failed to reach any degree of integration with the FMP process or with the forest administration (state or private). FMPs are still developed in an independent fashion, without officially taking into consideration the Natura 2000 specific priorities, but having their own biodiversity conservation set of measures. The solution is to harmonize the permitting system for Natura 2000 with the process of FMP approval and the development of a national methodology for integrating Natura 2000 conservation requirements within FMPs. The legislation should allow Natura 2000 sites to be managed through adapted sectoral management plans – especially for forests habitats special designated sites.

**Funding**

18. Following Romania’s accession to the EU in January 2007, support funding for the forestry sector is now concentrated through the European Fund for Rural Development (EAFRD) with public counterpart financing provided through the MADR budget. The National Rural Development Programme (NRDP) recognises the importance of forests and sets out a range of priorities and ambitious targets for (a) increased afforestation, (b) infrastructure development (roading), (c) adding value to agriculture and forest products (d) improvement in the economic value of forests and (e) compensatory payments for Natura 2000 sites. The EU support for the specific forestry measures totals €787 million (2007-2013).

19. Implementation and uptake of the forestry measures has been slow. This is due to (a) the lack of visibility of some of the forestry and forestry related measures among potential beneficiaries, (b) the complexities of the applicant guides and (c) institutional capacity. The ADRP in collaboration with GDF should ensure that procedures and requirements are clear and do not act as a barrier to implementation.

20. Afforestation levels of the scale (49,000 ha) envisaged in the NPRD will require a nationally coordinated plan to support implementation. This is lacking. While the NPRD
includes guidance from ICAS and other bodies regarding the afforestation, it lacks any form of supporting framework or strategy for implementation. The GDF should prepare, subject to its inclusion in the new NFPS, an Indicative Forestry Statement (IFS) with the overall aim of providing high-level, national guidance in relation to the suitability of land for afforestation.

21. The exclusion of private forest districts which manage about 1.5 million ha from funding for forest roads, despite their capacity to co-finance such projects, is regrettable. While it may not be possible to change matters now without causing further delays, the next NDRP will need to address this issue. Equally Romsilva will need to be treated more equitably under future selection criteria for roading projects.

22. The transfer of responsibility for forestry from MADR to MoEF has implications for the implementation of the forestry measures under the NPRD and for the planning and elaboration of the next NDRP. The APDRP lacks technical forestry expertise. Improved coordination between MARD and MoEF is required to facilitate an improvement in uptake and absorption of funding and a more formal procedure put in place with the establishment of an interdepartmental committee relating to forestry measures under the NPRD. In the longer term i.e. before the next NPRD is finalised, serious consideration should be given to assigning responsibility for the promotion, and implementation of the forestry measures to the GDF while using the APDRP simply for the processing of payments. This would have significant advantages in terms of coordination and efficiency with the competent forest authority being in a more informed position to react and adapt to any implementation difficulties. At this stage the new NFPS would be in place and the GDF will have a vested interest in ensuring that targets for afforestation, roading and other activities are met.

Human Resources

23. Within the GDF, apart from the Territorial Inspectorate, staffing is considered adequate. There is a skills capacity shortage in areas such as analysis (financial and cost benefit analysis), project management, planning, policy formulation, GIS etc reflecting the low average salary levels.

24. Within Romsilva, even though staff numbers have reduced by approximately 12,000 over the past decade, the current level is high by comparative European standards. This is partly due to the “forest guarding” (staff whose job is to look after the forest) requirement, which is a unique Romanian feature among EU Member States and partly due to how Romsilva organises itself. Staff are technically well qualified in forestry and it could be argued that the prescriptive forestry regulatory regime renders them somewhat overqualified for their work.

25. Neither the GDF or Romsilva have a HRD strategy or programme and in the absence of such, any training is delivered on an opportunistic basis and lacking in overall co-ordination.

26. Romsilva can only reinvent its business model and achieve a degree of organisational fit with the new operating environment through the active involvement of its staff. To facilitate and support the planned recommendations in this report and to support the long term development of the organisation it will be important to introduce a career management programme. This would
involve improving the current staff appraisal / evaluation system, establishing skills needs throughout the organisation but especially in the areas of business development, investment appraisal, cost benefit analysis, change management, business process review and leadership and based on this provide a company-wide continuous training programme.

27. One of the major recommendations is to develop a new NFPS. This will require specific strategy development, policy formulation and project management skills to implement. Accordingly, staff within the GDF should receive training in these areas prior to the start of the NFPS process.

28. Staff motivation is a recurring issue throughout the GDF due in part to the low salary levels and reduced budget but also to the lower perceived status of forestry within the MoEF and their isolation (including office location) from mainstream activities. If the GDF is to have motivated staff then it will have to address these issues.
1. Forestry

1.1 Forest Resource

1. Romania’s forests and other wooded lands account for 6.65 million ha and represent almost 29% of the total land area (EC 2010). This compares with an EU-27 average of 42%. Romanian forests have been well managed over the centuries and are rich in biodiversity and habitats including some of the largest tracts of natural forests still remaining in Europe.

2. The total growing stock is estimated as being 1,347 million m$^3$ which equates to an average growing stock of about 210 m$^3$/ha. The average annual volume increment is 5.4 m$^3$/ha/year. An estimated 70% of the forest area is available for wood supply compared an EU-27 average of 73% (EC 2010).

3. Approximately 70% of forests are broadleaves with the main species being Beech (*Fagus*) and Oaks (*Quercus spp*). Conifers represent 30% by area with Spruce species dominating.

4. While forests occur throughout Romania, they are mainly located in mountain areas (65%) followed by hills (27%) and a relatively small proportion of forests are located in the plain areas.

Removals from forests over the past number of years has averaged approximately 14.1 million m$^3$ with broadleaved species accounting for 8.5 million m$^3$ and conifers 5.6 million m$^3$. The annual commercial potential is estimated at 16.5 million m$^3$, of which 1.9 million m$^3$ is located in inaccessible areas (USDA-FAS 2006).

Removals represent only 46% of the total growing stock volume increment. This compares with an EU-27 average of 60%, with only Bulgaria (41%), Cyprus (16%), Denmark (35%), Italy (26%), Luxembourg (38%) and Slovenia (44%) removing a smaller proportion of their overall volume increment (EC 2010).
Some 51% of forests are classified as having a protection function (soil protection, water protection, climate protection, wildlife conservation and leisure functions) while the remainder can be exploited for production in a sustainable way. Other important functions of Romanian forests are recreation and hunting, flood protection (through regulating water flows), biodiversity conservation (especially wildlife habitat), mitigating climate changes (through carbon sequestration and storage), and providing non-timber forest products (such as berries, seeds, mushrooms etc).

1.2 Forest Ownership

5. There are an estimated 830,200 forest owners in Romania (Table 2). Forest land in private ownership, which now represents just over 50% of all forests, is characterized by relatively small holdings, and fragmentation, posing a challenge to realizing their economic potential in a sustainable manner. This is due to the manner in which restitution took place.

6. Under the new Forestry Code (Law 46/2008), the national forestland is divided into the following four categories:

1. Public property of the state;
2. Public property of local communities (i.e. villages, towns, cities – the so-called “administrative – territorial units”);
3. Private property of these local communities; and
4. Private property of physical persons and legal entities (e.g. individuals, associations, schools, churches etc.).

7. According to Abrudan (2009) as an initial measure, under the first phase of restitution (Law 18/1991), approximately 353,000 hectares of forest land were returned to around 400,000 pre-1948 individual owners (up to 1ha per owner). Under the second phase of land restitution (Law 1/2000), all community, town and communal forests should be restituted to their former owners. The restitution was limited to 10 ha for individuals and 30 ha for churches, even if the size of their ownership before the 1948 nationalization was larger than these imposed limits; protected forests were exempted from restitution. Under the third restitution law (Law 247/2005) all forest (including protected areas) should be restituted to the former owners irrespective of size, location and ownership type. It is foreseen that, at the end of the restitution process (widely expected but no timeline has been set), approximately 40% of the country’s forests will remain in state ownership.

<table>
<thead>
<tr>
<th>Ownership Category</th>
<th>Number of Owners</th>
<th>Total Area (million ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest &lt; 10 ha</td>
<td>828,000</td>
<td>0.85</td>
</tr>
<tr>
<td>Forest &gt; 10 ha</td>
<td>2,200</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>830,200</strong></td>
<td><strong>3.35</strong></td>
</tr>
</tbody>
</table>

8. Just 0.25% of owners account for 75% of the private forestland (Table 2). The regulatory framework requires that every forest owner assures the administration for their land either
through state forest districts or private forest districts. This is relatively straightforward for large owners be they individuals, communal indivisible owners or communities (Table 3). However, small owners still encounter many difficulties in administrating their forestland due to physical conditions, location, size and poverty. Their properties can also cause difficulties for the state and private forest districts that make significant efforts to serve small owners due to their small size, fragmentation and lack of clear demarcated boundaries.

9. The majority of private forest owners are relatively new to forestry and the management of forests, and will require training and advisory support in order to manage their forests in a sustainable manner. While the formal education sector offers a variety of courses in forestry and forestry industry at vocational, undergraduate and postgraduate levels, there is a lack of specific training programmes or courses for new private forest owners (NPRD 2007).

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Area</th>
<th>% Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public property of the state</td>
<td>3.30</td>
<td>49.6</td>
</tr>
<tr>
<td>Public property of local communities</td>
<td>0.90</td>
<td>13.6</td>
</tr>
<tr>
<td>Private property of communes – indivisible</td>
<td>1.25</td>
<td>18.8</td>
</tr>
<tr>
<td>Private property of physical persons and legal entities (individuals, associations, schools, churches etc.).</td>
<td>1.20</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6.65</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

1.3 Forest Management and Regulatory Framework

10. Romania has a long tradition in the sustainable management of its forest resource. In terms of forestry practice, the management of forests must be carried out according to national norms and technical parameters regardless of the type, size or type of ownership. The forest management plans (FMPs) which are valid for a 10-year period include management prescriptions for each forest stand. The FMPs are prepared by specialized forest management planning companies. Plans are approved by the national forest authority (General Directorate for Forests within the Ministry of Environment and Forests) and their implementation in practice is mandatory. Any changes in FMPs are obliged to be thoroughly substantiated and undergo an intricate and bureaucratic procedure before being accepted. Forest management planning is based on five major principles (Leahu 2001, Ministerul Apelor, Pădurilor și Protecției Mediului 2000):

1. Continuity of forest functions;
2. Optimal and sustainable exertion of the multiple production and protection functions of the forest;
3. Optimal and sustainable utilization of forest;
4. Principle of aesthetics;
5. Biodiversity conservation.
11. Romania has an extensive forest regulatory framework encompassing (a) laws e.g. Law No. 161/2004 approving Gov. Decision No. 11/2004 regarding production, marketing and use of reproductive material in forestry, (b) Government Decrees e.g. GD No. 85 of 29 January 2004 approving Regulation for timber sale by the public forest owners, (c) ordinances e.g. Ordinance No. 82 of 19 August 2004 regarding actions to be taken for improving forest accessibility and forest road construction, (d) Government emergency ordinances e.g. Emergency Ordinance No. 139 of 5 October 2005 regarding the forest management in Romania, (e) Ministerial orders e.g. , Oder No. 1.306 of 20 of December 2005 approving procedures for approving, modifying and cancelling the standing wood estimation, for harvesting purposes documents (f) regulations e.g. Regulation of 25 October 2005 regarding the Accreditation Commission for harvesting companies and (f) technical norms e.g. Technical regulations for compositions, schemes and forest regeneration technologies.

12. The national forestry management norms and practices are in essence legacies from the past which now must confront a new reality: the diversity of forest ownership types and a very dynamic economy (Stancioiu et al, 2010). The extensive regulatory framework, considered excessive by many (Savcor Indufor 2006) has resulted in Romania practicing a very prescriptive type of forest management regime, with an over-reliance on technical norms as opposed to general guidance regulations which allow for flexibility and innovation and which now form an increasing element of best forest practice (BFP) worldwide.

13. Approximately 720,000 ha of forests are certified under FSC comprising 680,000 ha of state forests under Romsilva which at one stage had 1,050,000 ha certified and 36,000 ha of private forests including one private forest district and communal owned forest areas. There is a further about 2.5 million ha of mainly state forests which have undergone pre-evaluation under FSC but the expectation is that these areas may not be fully certified until 2011.

1.4 Resource Infrastructure

14. The forest resource is poorly served in terms of roading infrastructure and the total road network of 42,000 km comprises about 33,000 km of forest roads and 8,000 km of public roads with the balance belonging to other sectors e.g. mining and hydro-electric roads. The average roading density of 6.4 m/ha is significantly below other European countries with broadly similar topography (Austria 36 m/ha, Switzerland 40 m/ha, France 26m/ha, Germany 45 m/ha). This results in more than 2 million ha of forests practically out-of-reach for technical and economic reasons (USDA – FAS 2006). The road network is unevenly distributed with the mountainous regions having the lowest density. Figure 2: Extraction Productivity (Savcor Indufor, 2007)
The basic network was mainly constructed during the period 1960-1985. Parts of the road network have suffered, especially in recent years, from a combination of torrential rains and lack of investment in maintenance and rehabilitation. The low density and poor condition of the road network has significant consequences for harvesting and transport resulting in higher costs due to longer extraction distances to roadside and less than optimal on-road movement unit costs and can lead to environmental damage.

1.5 Harvesting and Transport

15. The harvesting infrastructure is relatively poor and of the 4,800 registered harvesting companies, the greater proportion are small with annual capacities of less than 10,000 m³. There are only a limited number of larger harvesting companies with annual capacities in excess of 20,000 m³. These capacities are extremely small by European standards. There is a lack of investment in new machines and technologies due in part to a combination of (a) limited access to finance, (b) lack of continuity of work and (c) low profit margins. All harvesting companies are licensed by MoEF. The prevailing harvesting method is the motor manual longwood system in contrast to the highly mechanised shortwood systems which prevail elsewhere in Europe. Trees are felled by chainsaw and then extracted to roadside either as entire stems or long lengths, depending on tree size.

16. Due to the difficult terrain and characteristics of the roading infrastructure, pre-bunching in advance of extraction is a frequent occurrence. Skidding is the principal extraction method and is typically by four-wheel drive (4WD), split frame skidder of Romanian manufacture. Extraction distances reflect the poor roading infrastructure and can be excessive. Productivity in thinnings and final fellings is low and poor skills can result in lower than optimal value recovery. Despite low value recovery, the unit felling costs are competitive compared to the European average due to the relatively low wage rates (Savcor Indufor, 2007). The situation regarding extraction (skidding, off-road transport) and on-road transport is somewhat different with Romania showing relatively low productivity and with unit costs above the European average (Savcor Indufor, 2007). This is due to the fact that wages represent a much smaller proportion of extraction and transport costs than for fellings.

1.6 Wood Industry

17. The contribution of the forestry sector, including wood industry, to Romania’s gross domestic product (GDP) has varied between 3.5 and 4.5% over the past decade (Abrudan et al 2009). The forestry sector is a major employer, especially in rural areas although numbers have dropped from 235,000 in 2000 to an estimated 161,000 in 2009. Of this, the furniture industry is the major employer accounting for almost 80,000 followed by wood processing and the National Forest Administration - Romsilva.

18. Romania is a net exporter of forest products including sawnwood and wood based panels. The primary wood processing industry, excluding furniture production, has about 7,500 operational companies, as this sector is especially attractive for small entrepreneurs. Over the past decade there has been significant inward investment in wood processing. However, despite
this investment, the sector is dominated by many small companies with inefficient and outdated machinery incapable of ensuring consistent quality. Thus approximately 92% of all wood processing companies are SMEs. Romania, like many other countries in the region e.g. Bosnia, suffers from over-capacity in the primary wood processing sector although the scale of this has lessened in recent years. There are an estimated 3,500 furniture plants and workshops employing about 80,000 in 2008. Romania is a major exporter of wooden furniture. Exports are directed mainly towards EU markets. Investment in new technologies for producing solid wood panels for furniture and multi-layer parquet has underpinned export growth in recent years. In 2009, the furniture share of total exports/imports was 3.9% and 1.2% respectively. Furniture exports were worth €1,037.6 million in 2009 while imports were €324.5 million (Romania Centre for Trade and Investment, 2010).

**Figure 3: Sawnwood Exports and Imports**
2. Strategic Framework

2.1 FOREST EUROPE, EU Forest Strategy and Action Plan and FLEGT

19. The Ministerial Conference on the Protection of Forests in Europe (MCPFE), now known as FOREST EUROPE, of which Romania is a member, is the pan-European policy process for the sustainable management of Europe’s forests. FOREST EUROPE develops common strategies for its 46 member countries and the European Union (EU) on how to protect and sustainably manage forests.

20. Since its foundation in 1990, nineteen resolutions have been adopted at five Ministerial Conferences (Strasbourg 1990, Helsinki 1993, Lisbon 1998, Vienna 2003 and Warsaw 2007). Through the FOREST EUROPE commitments the concept of sustainable forest management (SFM) has been defined and continuously developed at the pan-European level. The commitments have also served as a framework for implementing SFM in European countries. High-priority topics of FOREST EUROPE are to strengthen the role of forests in mitigating climate change, secure the supply of good-quality fresh water, enhance and preserve forest biodiversity and provide forest products. Other important tasks are to develop a framework for future forest collaboration and to explore the possibilities for a legally binding agreement on forests in Europe.

Figure 4: Summary of MCPFE Forest Resolutions
21. The Treaty establishing the European Community makes no provision for a specific common forestry policy. The principle of subsidiarity applies and the responsibility for forestry policy lies with each of the Member States. Notwithstanding this, the European Union adopted a Forest Strategy in 1998\(^1\) which emphasises the importance of the multifunctional role of forests and sustainable forest management for the development of society, and identifies a series of key elements, which form the basis for its implementation. It states that forest policy lies in the competence of the Member States, but that the EU can contribute to the implementation of SFM through common policies, based on the principle of subsidiarity and the concept of shared responsibility. It also emphasises the implementation of international commitments, principles and recommendations through national or sub-national forest programmes or equivalent instruments, and active participation in all forest-related international processes, and stresses the need to improve co-ordination, communication and co-operation in all policy areas of relevance to the forest sector.

22. The EU Forest Action Plan\(^2\), adopted in 2006, provides a framework for forest-related actions at Community and Member State level and serves as an instrument of coordination between Community actions and the forest policies of the Member States. The overall objective of the EU Forest Action Plan is to support and enhance sustainable forest management and the multifunctional role of forests. The Action Plan has four main objectives: (1) Improving long-term competitiveness; (2) Improving and protecting the environment; (3) Contributing to the quality of life; and (4) Fostering coordination and communication. The Plan consists of a series of 18 key actions which the Commission proposes to implement jointly with the Member States. It also points out additional actions which can be carried out by the Member States according to their specific conditions and priorities, with support from existing Community instruments, although implementation may also require national instruments. Examples include (a) assessment of wood and wood residues for energy production, (b) development of advisory services for forest owners, (c) development of national afforestation guidelines and (d) promotion of Natura 2000-forest measures.

23. The 2008 Communication on innovative and sustainable forest-based industries in the EU\(^3\) includes a 19-point action plan to improve the long-term competitiveness of the forest-based sector while integrating climate change and energy objectives into the sector’s strategy. The actions it proposes are complementary to the Forest Action Plan regarding the competitiveness of EU forest based Industries (FBI), focusing on access to raw material, impact of climate change, innovation, trade and communication.

24. The European Union's policy to combat illegal logging and associated trade is contained within the Forest Law Enforcement Governance and Trade (FLEGT) Action Plan which covers both supply and demand side measures to address illegal logging, and was endorsed by the EU Council of Ministers in November 2003. The FLEGT Action Plan has led to two key pieces of legislation:

\(^3\) COM(2008)113
1. FLEGT Regulation adopted in 2005, allowing for the control of the entry of timber to the EU from countries entering into bilateral FLEGT Voluntary Partnership Agreements (VPA) with the EU; and

2. EU Timber Regulation proposed by the Commission in October 2008 and adopted by the European Parliament and by the Council in October 2010, as an overarching measure to prohibit placing of illegal timber and timber products on the internal market.

25. Regulation (EU) No 995/2010 also known as the (Illegal) Timber Regulation counters the trade in illegally harvested timber and timber products through three key obligations:

1. It prohibits the placing on the EU market for the first time of illegally harvested timber and products derived from such timber;

2. It requires EU traders who place timber products on the EU market for the first time to exercise 'due diligence'; and

3. It requires EU traders to keep records of their suppliers and customers (traceability).

26. The Regulation covers a wide range of timber products listed in its Annex using EU Custom’s code nomenclature. The application of the Regulation will start from 3rd March 2013 to allow sufficient time for EU operators, timber producers and Member States, as well as trading partners, to prepare. During this period the Commission intends to adopt more detailed rules.

27. Obviously timber from forests which are certified and companies which have chain of custody certification will be at a significant advantage and state of preparedness when this regulation comes into force.

28. It is also worth noting that in 2008 the US amended the 100 year old Lacey Act to include the banning of commerce in illegally sourced plants and their products, which includes logs, sawn wood, furniture, pulp and paper. This means that all wood products must be harvested, transported, processed and exported in accordance with the relevant local legislation. The Lacey Act is a fact-based rather than document based statute in that no document is a 100% guarantee of legality. It is up to the US importers and traders to exercise 'due care', to ensure that all imports are produced in accordance with all relevant legislation.

**Overall Goal for the Forest Sector**

“The development of the forestry sector is to increase its contribution to the improvement in the quality of life, based on the sustainable management of the forest resources.”

The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality, and their potential to fulfill, now and in the future, relevant ecological, economic and social functions, at local, national and global levels, and that does not cause damage to other ecosystems.
2.2 Strategic Planning in the Forest Sector

2.2.1 Sector Vision and Strategy

29. Strategic planning is essential (a) to ensure the coordinated and sustainable use of forest resources and the overall development of the forest sector in Romania and (b) to provide the framework and context within which the State’s ownership role in forestry, currently exercised through the National Forest Administration (Romsilva), can be elaborated and aligned to the changing operating environment both at national and international levels.

30. Romania’s forests constitute a valuable natural and renewable resource with the potential to contribute positively to national economic development and the well being of its citizens. Recognising this, during 2000, Romania developed a National Forest Policy and Development Strategy (NFPS) through an open, consultative and participatory process, involving stakeholders from all related sectors. The NFPS however did not contain an overall vision for the sector, although a vision had been elaborated earlier the previous year by senior Romanian forestry sector policy makers and technical specialists but never adopted at national level. The NFPS did however provide some national direction through the provision of an overall goal:

31. The achievement of this overall goal, together with specific sub-sectoral policies addressing silviculture, management, wood processing, research and education was intended to be supported by three overall strategic objectives at Government level (Figure 5). The overall goal and main policy aims of the NFPS have withstood the test of time and its participatory policy formulation process, which at the time was highly innovative and forward thinking, has been copied by many countries e.g. Croatia and Bulgaria.

32. Notwithstanding the many positive aspects of the NFPS, it does have a number of weaknesses in the context of its relevance to the forestry sector in Romania today. It lacks (a) supporting economic analysis and/or cost benefit analysis (CBA) to justify the actions outlined, (b) any estimate of funding requirements or cost of implementation, (c) quantifiable targets, (d) procedures to monitor implementation and (e) formal procedure to review and update the policy.
33. The General Directorate for Forests (GDF) within the MoEF does have a short term (2011-2014) forest plan which is closely aligned with the forestry measures elaborated in the National Programme for Rural Development 2007-2013 (NRDP) and includes ambitious targets for private and state afforestation of degraded lands, road construction, compensation for owners due to biodiversity considerations, awarding of hunting areas to voluntary management entities and reductions in illegal logging. The plan is not widely known within the sector, and there is no specific action plan or funding arrangements identified to support implementation. The plan does have quantifiable indicators to assess implementation.

2.2.2 Strategy Implementation

34. At the time of preparing the NFPS, the first phase of forest restitution (with a cap of 1 ha) had been completed and the second phase (with a cap of 10 ha) was just beginning. Consequently while various agencies and organisations were identified as having primary responsibility for the strategic actions or as partners in collaborative actions, Romsilva together with the GDF were identified as the primary organisations to implement the majority of actions.
35. At the time it was not foreseen that the scope of restitution would be so great and the understanding was that the state through Romsilva, which at that time managed almost 95% of forests, would continue to play a significantly dominant role in all aspects of strategy implementation over the next decade. However, today the situation is quite different and of the 6.65 million ha of forests, only 3.3 million ha remain in state ownership under the management of Romsilva. An estimated further 0.5 million ha is currently under restitution, which Romsilva are providing management but are not allowed to undertake harvesting and thus incur costs but do not generate revenues. This will leave Romsilva with about 2.8 million ha of forest.

36. Against this backdrop of increasing restitution, a decreasing asset base and reduced revenue opportunities through a reduction in its annual allowable cut (AAC), Romsilva’s focus has been more on containment rather than its role as a primary implementation agent under the NFPS.

37. The overall responsibility for the implementation of the NFPS, now rests with the Minister for Environment and Forests (MoEF). However in practical terms this responsibility has been devolved to the General Directorate of Forestry (GDF) within the Ministry.

38. The NFPS is not regarded as a living or even perhaps as a particularly relevant document, rather something that needed to be done and has been completed and now it its time to move on to address immediate needs such as required changes in legislation and to finalise restitution. The NFPS is regarded by many both within and outside of the MoEF as having been overly ambitious and any future revision should have fewer actions and more readily identifiable targets.

2.2.3 Strategy Monitoring

39. The NFPS did not set specific quantifiable targets for any of the sub-sectoral policies or for any of the strategic objectives. Thus, regarding afforestation, while the NFPS aims to ensure the integrity and enlargement of the forest fund, it does not say by how much or where (geographically) the afforestation should take place. Similarly, for example, the NFPS does not define a time requirement for the completion of a National Forest Inventory (NFI) (Action 2.4) or for a national Geographic Information System (GIS) for forest management (Action A2.3). The NFI which is being undertaken by the Forest Management and Research Institute (ICAS) is almost complete and indications are that the forest area is understated. The NFI, which has been funded from the state budget is currently partly stalled due to the withdrawal of sufficient funding to complete the final field data collection and analysis / reporting phase.

40. In the absence of specific quantifiable targets it is difficult, if not impossible to monitor implementation in an objective and transparent fashion.

41. The NFPS does not provide for any formal protocol or procedure to monitor implementation. In the absence of such an arrangement, any NFPS, will lose relevance over time as the circumstances and operating conditions within the sector change. Many countries within EU allow for a formal procedure to review and report on policy implementation. This can be included in the forest law or by way of a ministerial order.
42. The NFPS was updated in 2005 resulting in only minor amendments e.g. the provision of compensatory payments for forests in certain classes of protected areas. The update did not address Romania’s imminent accession to the EU, the increasing importance of climate change and the role of forests in this regard or the progress in forest restitution.

2.3 EU CAP and Rural Development

43. As an EU Member State, Romania no longer operates an autonomous agricultural and rural development policy, but nationally implements and manages the EU’s Common Agricultural Policy. The CAP supports agricultural and rural development through measures grouped into two principal areas of intervention. Pillar 1 provides agricultural market and income support, with direct (area) payments representing the prevalent form of income support to the EU farmers. Pillar 2 addresses both the agricultural and forestry sector and the wider rural population through a comprehensive set of rural development programs. Support is provided through a menu of about 40 measures, grouped under four intervention axes. From these, Member States can almost autonomously select the most suitable mix.

44. The Ministry of Agriculture and Rural Development (MADR), formerly the Ministry of Agriculture Forests and Rural Development (MAFDR), which included the GDF during the period 2002 to 2009, has responsibility for rural development.

45. The National Rural Development Programme (NRDP) 2007-2013 recognises the importance of forests and their role in climate change, the provision of environmental services (soil protection, watershed regulation, biodiversity, landscape) and their contribution to the rural economy. The NRDP sets out a range of priorities including (a) increased afforestation, (b) infrastructure development (roading), (c) adding value to agriculture and forest products and (d) improvement in the economic value of forests.

46. Regarding afforestation, the NRDP refers to an “optimal” national forest area of 35% and cites climate change and environmental reasons as justification.

2.4 Strategy Development

47. Forest strategy development cannot take place in isolation. Forest strategy must, if it is to be effective and relevant, integrate with strategies and policies within other closely related sectors, especially environment, agriculture and rural development, energy, tourism and industry and trade. The NFPS recognised this important aspect of strategy development and included a broad range of stakeholders from environment, tourism, industry, education, research, hunting as well as from forestry.

48. Given the extent and scope of the support measures for forestry included in the NRDP, strategy development within the sector has been weakened through the transfer of responsibility for forests and the GDF from the Ministry for Agriculture to the Ministry for Environment. Responsibility for strategy development rests with the GDF while the major support funding for forestry remains with a different Ministry i.e. agriculture.
49. Strategy development needs to be based on the current context and operating environment for the forest sector and recognise the significant changes that have occurred within the national, European and global forestry sectors since the policy was originally elaborated including:

- Forest restitution is much larger than originally envisaged – some 3.35 million ha have been restituted and there are now about 830,200 forest owners;
- Accession to the EU and access to forestry measures under the EU regulation for rural development;
- EU Forest Action Plan (2006) which although not binding, places an obligation on Member States to undertake actions in specific areas e.g. wood energy, forest fires, extension services etc;
- Increased importance of climate change and the ability of forests to sequester and store carbon;
- Advances made through the United Nations Forum on Forests (UNFF) in the development of a non legal binding instrument (NLBI) for forestry; and
- Designation of Natura 2000 sites of which forests represent more than 50% by area.

50. There is no formal procedure to facilitate strategy development or advise on issues to be addressed or provide analytical support to any proposed changes. Many countries within Europe have provided for a Forestry Forum (Figure 6) in their legislation.

![Diagram](image)

**Figure 6: Best Practice – Forest Strategy Development**

A Forest Consultative / Advisory Forum is a policy/strategy advisory body established by the Minister with responsibility for forestry. It typically has broad sector stakeholder representation and can have responsibility for reporting on policy and strategy implementation progress on an annual basis. The Forum can typically establish working groups to address specific policy issues and / or to undertake supporting analysis.

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4 CR (EC) No 1290/2005
2.5 Recommendations

1. The lack of an overall vision for the sector coupled with the shortcomings of the 2001 NFPS and its updated version of 2005, means that there is no overall guidance or direction. This makes it difficult, if not impossible, to afford priorities and to co-ordinate actions. The MoEF through the GDF should as an immediate priority start the participatory process of developing a new NFPS which as a minimum should set out realistic and quantifiable targets and define the responsibilities for monitoring progress and implementation on an annual basis. The new NFPS should address policy issues currently missing e.g. forestry and climate change, wood energy. Planned actions should be through cost benefit analysis, thereby ensuring that the state is in a position to allocate scarce resources in an informed fashion. The new NFPS will also need to address priority issues identified within the sector e.g. support and extension services to private owners, funding of public good functions of forests and a regulatory regime that is overly prescriptive and in part unenforceable.

2. Strategy implementation has suffered through the absence of any procedure, formal or otherwise, for its ongoing development, thereby ensuring it’s relevance to the sector. To overcome this, the GDF through the Directorate for Policy and Strategy should provide a secretariat to a small Forestry Forum to be appointed by the MoEF. The Forestry Forum would provide ongoing policy and strategy advice and its membership should be representative of the sector and other major stakeholders e.g. environmental NGOs.

3. The GDF should establish an in-house functional team to assist with the elaboration of forestry measures to be included in the next NDRP and their alignment with the targets and priorities in the new NFPS. The leader of this team would also serve as the focal point for liaison with MARD regarding implementation of the forestry measures under the current NPRD 2007-2013.
3. Organisational Structure and Systems

3.1 Introduction

51. Over the past decade there have been significant institutional and organisational changes within the forest sector in Romania (Figure 7). The GDF now within the MoEF and formerly within the MAFRD has been the public authority responsible for forests. It has undergone many changes and the regulatory, supervisory and support functions have been contained in varying Directorates within the GDF over the past number of years. In 1999, the Forest Inspectorates were established, initially with 7 territorial branches and then increased to 16 in 2001 to address the increasing levels of restitution and then reduced to 9 branches in 2005 due in part to the amalgamation of separate hunting and forest branches.

52. Under the forest law, private forests are obliged to be under an administration. In 2002, the first private forest district (administration) was established. The number of private forest districts now totals 132 and will increase further in line with future restitution.

53. Romsilva (National Forest Administration) administers and manages the state-owned forests which currently total 3.3 million ha including an estimated 0.5 million ha yet to be restituted. It has undergone a series of reforms during the past decade in response to the reducing levels of state forest and the addition of a number of public good functions. The Forest Management and Research Institute (ICAS) comes under Romsilva. In 2004 following Government Decision 230/2003 regarding the administration of protected areas, Romsilva contracted to manage 22 national and nature parks.
3.2 Private Forest Sector Organisation

54. There are now 3.35 million ha of private forests (Table 2). The sector is organised for administrative purposes into 132 private forest districts. The Association of Private Forest Districts (Administrations), formed in 2004, now represents 113 private forest districts and its membership administers about 1.2 million ha of forestland.

55. The Association of Private Forest Owners (APPR) founded in 1998, is a national umbrella organisation representing all categories of forest owners. It played an important role during the early years of the restitution process in promoting the sustainable management of forests. It is currently facing financing and staffing difficulties as well as conflicting interests among its members and is to all intents and purposes inactive.

56. There are around 50 active private forest owners associations, but only 36 are registered with the central authority. The associations are spread throughout Romania. In effect, all of the restituted "obsti", meaning indivisible forest ownership, are organised as associations. The distribution of associations is strongly connected with the forest area and with the history of former ownership. In Transylvania (western side of the Carpathians) there are many "obsti” and "comosesorate” resulting in a high number of associations. In the East Carpathians, the former individual ownership dominates and the unwillingness to collaborate (as well as the lack of very clear incentives) has led to a lower number of associations.

57. More recently in 2010, Proforest (association of private forest landowners) was established to represent the interests of larger forest owners (minimum threshold is 1,000 ha of forest) and to act as a lobby group at national level and through its planned membership of the Confederation of European Forest Owners (CEPF) represent its members at EU and international levels.

58. The forest owner associations do not in general provide extension services to members. Some private forest districts also act as associations and in this instance provide limited extension services to members. With the demise of the APPR, private forest owners have no voice at national level to represent their interests and no forum to generate support or to lobby for changes in funding, policy and or legislation.

59. Romania chose to focus solely on advisory services to farming under Measure 114 Use of advisory services, in the National Rural Development Programme 2007-2013.

3.3 Ministry of Environment and Forests (MoEF)

3.3.1 Organisational Structure

60. Responsibility for forestry within the MoEF (Figure 8) comes under the GDF. There are three Directorates. The Policy and Strategy Directorate deals with forest policy issues, policy development and the regulatory / legal framework for forestry which includes the technical norms which govern activities within the forest. The Forest Development Directorate has
responsibility for overall development within the sector including afforestation, forest infrastructure and the approval of forest management plans.

![Figure 8: Forestry within MoEF](image)

61. The Control Directorate in addition to a hunting census / survey unit consists of 9 field based territorial inspection units (ITRSV), one of which is located in Bucharest. Under GD 333 of 21 April 2005, these have responsibility to organise and control inspection of forests for compliance with the law, regulations and technical norms, irrespective of type of ownership including across all forest activities / operations and to identify and follow up on illegal activities and determine the sanctions according to the law. They also have responsibilities regarding approval of technical designs, in relation to forest management planning, provision of consultancy/advice to private owners, compensatory payments and maintenance of records.

62. Under the recently completed World Bank-financed forestry project, the ITRSV undertook a self-assessment effectiveness and monitoring survey. This attempted to assess some basic aspects of the inspectorate’s activity: achievement of objectives, effectiveness in accomplishing tasks, impact of the investments in equipment and areas to be improved. The model used was a modification of the framework assessment development for Protected Areas which is based on the premise that good planning and management follows a process encapsulating six themes:

1. Context – assessment of importance, threats and policy environment
2. Planning – assessment of ITRSV activity design and planning;
3. Inputs – assessment of resources needed to carry out activity;
4. Processes – assessment of the way in which management is conducted.
5. Outputs – assessment of the implementation of management programs and actions
6. Outcomes – assessment of the outcomes and the extend to which they achieved objectives

63. The survey shows that the weakest aspect of their work relates to the context which includes appropriateness of policy, regulations and technical norms and the current situation does not facilitate them in delivering a quality service. The highest score was for planning, which includes not only the ability of ITRSV to plan their own work but also the quality of forest management planning within the sector.

64. The restitution of land to private individuals poses significant challenges to the legal and regulatory framework, particularly in tackling problems such as illegal logging. Currently, it is estimated that 100,000 m³ is being illegally logged each year (NDRP 2007-2013). Responsibility for controlling illegal logging has been vested in the Territorial Inspectorates for Forestry Regime and Hunting, but while it is possible to regulate activity on the NFA’s property or the property of private individuals located in national parks, extending regulatory control to private forest holders beyond national parks is a significant challenge.

65. The controlling activity against illegal logging and illegal wood transportation can be undertaken by the Territorial Inspectorates personnel and also by forest districts (private or state) personnel. The effectiveness of the control activity is extremely low (Table 4) with only 89 out of 2,263 cases resulting in fines being imposed. The data refers only to the activity of the Territorial Inspectorates, but the effectiveness level is considered the same for the forests districts.

Table 4: Summary of Forest Offences 2007 (Directorate for Control, MoEF)

<table>
<thead>
<tr>
<th>Total Number of Offences</th>
<th>Active Files</th>
<th>Finalized Files</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Sent to Police</td>
</tr>
<tr>
<td>2,735</td>
<td>2,263</td>
<td>599</td>
</tr>
</tbody>
</table>

Budgeting

66. The GDF has a relatively weak budgeting process. There are two main budget lines i.e. (a) investments for specific projects which the GDF decides upon and (b) support funds which is based on the various support requirements set out in the forest law. With the establishment of the National Environmental Fund (NEF), support for investment in ecological reconstruction and torrent control will in future come from this source rather than through the GDF. Typically the budget allocated can represent only a relatively small proportion of that requested and is insufficient for GDF to fulfil its obligations under the forest code e.g. support for guarding of private forests under a certain area threshold or compensation payment to private owners for not harvesting in certain categories of protected forest. The 2011 budget funding of 0.8 million RON for the National Forest Inventory represents only 15% of the estimated costs (Table 5).
Table 5: GDF Main Budget Funding Lines (‘000 RON)

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads + Flood Control</td>
<td>35,694</td>
<td>32,978</td>
<td>32,622</td>
</tr>
<tr>
<td>Afforestation Degraded Lands</td>
<td>28,368</td>
<td>51,991</td>
<td>41,808</td>
</tr>
<tr>
<td>(continuation of works)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Forest Inventory</td>
<td>4,000</td>
<td>1,600</td>
<td>800</td>
</tr>
<tr>
<td>Support Forest Owners</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
</tbody>
</table>

67. The status of “forestry” is perceived by the GDF as having being eroded / weakened by virtue of the fact that the sector no longer has a Minister of State with responsibility for forestry. While the view has been proposed that the GDF should be reorganised as a state agency with responsibility for forestry, there is no particular advantage in the same staff doing the same functions, albeit under a different name. The challenges facing the sector are more endemic and less related to agency or directorate status.

3.3.2 Information Systems

68. The recently completed World Bank-financed Forest Development Project financed a Forest Management Information and Monitoring System (FMIMS) as an IT based information infrastructure to help the central authority monitor the sector and better decide upon strategic directions, policies and priorities.

69. The FMIMS is composed of three main software modules:

   (a) ForMIS – Forestry Management Information System – that is a versatile MDI (Metadata Driven Interface) together with a forestry database model able to hold a wide variety of technical data related to forests, land, owners, administrator etc. The system design has dynamic forms and reports capable of adapting to changes in user requirements, legislative volatility and so on.

   (b) ForCES – Forestry Central Enterprise Storage – a data warehouse incorporating a suite of tools for holding, updating and analysing large quantities of historical data related to forests.

   (c) ForGIS – Forestry Geographic Information System – a software tool that can provide the central authority, Territorial Inspectorates and other users access to data stored in ForMIS in geographic format.

   (d) SUMAL – a user interface based system designed for tracking the forest volume evaluation, harvesting, transportation and processing, with data being entered by a large number of users (forest districts and companies operating in the sector).

70. The Ministry did not complete the configuration of the system and data introduction was abandoned following the close of the Forest Development Project. As a consequence, the system is severely underused, apart from SUMAL, which is currently being implemented country-wide.
71. SUMAL aimed to eliminate all of the bad practices in wood harvesting and transport by forcing all the players (forest administrators, harvesting companies, processing companies and wood transporters) to report all document records in the proposed data base format. The system is able to (Iordache 2009):

(a) Distribute all the transport documents on APVs (Act de Punere in Valoare – official document for evaluating the wood to be harvested) signalling over utilization of authorized volume, or utilization of transport documents for wood with illegal provenance

(b) Verify the series and numbers of the transport documents – false documents or utilization of other companies’ documents.

(c) Cross check to determine if all the documents are recorded at the wood beneficiary, making the supplier unable to declare the documents as being lost or damaged. Usually, the beneficiaries are large legal companies recording all the supply.
SUMAL for forest economic agents and forest districts (SUMAL OCOL and SUMAL AGENT client applications)

72. By recording electronically all the documents that are produced by the forest administrator, the provenance of every piece of wood should be traceable. By recording all the documents that are created by the economic agent (transporting, processing, sales documents) the wood with the known provenance has a certain defined chain of custody. In this way, the wood with no legal provenance should be readily identifiable along the supply chain.

73. Unfortunately SUMAL is not a very mature system due to the fact that it was implemented without proper testing and it has not a very clear reporting and signalling function. There are also serious discontinuities in administrating the system within GDF. However with some further development and administration, SUMAL could deliver on its objectives and has a role to play in relation to the implementation of the EU Timber Regulation.

3.4 National Forest Administration - Romsilva

3.4.1 Organisational Structure

74. Romsilva, National Forest Administration, was established in 1990 (GD 1335/1990) as a legal state-owned entity with an essentially commercial mandate. It manages the state-owned forests which now account for 3.3 million ha. It has 41 County Branch offices, 323 forest districts and the Forest Management and Research Institute (ICAS). Romsilva operates as a financially autonomous organisation performing forest management and silvicultural operations, engaging in non-timber forest products and services. It has a number of sawmills, a fish farm, extensive hunting facilities and operates other natural resource related businesses.

75. It undertakes a wide range of public purpose activities. In 2002, through the Government Emergency Ordinance 139/2002, the “National Company Thoroughbred Horses” (joint stock company) was dissolved and taken over by Romsilva. Since 2004, it also manages, on a contractual basis, 22 of the 26 national and nature parks. Within these parks, forest accounts for
approximately 65% of the land area. Romsilva in effect subsidises the operation of the horse breeding and nature parks. Within Romsilva, only ICAS and the Parks administrations are legal entities, other subordinate branches are considered as subunits. In June 2005, the joint stock company, “Research and Development Institute for Breeding Fur Animals” was transferred to Romsilva and is managed under the coordination of the Agriculture and Forestry Sciences Academy in Sisesti. A key objective of this transfer of horse breeding and fur bearing animals to Romsilva was to preserve what was considered a nationally significance gene pool and heritage.

**Figure 9: Romsilva Organisational Structure**

76. Romsilva is organised along traditional lines for a state owned forestry enterprise. It has a headquarters (HQ) with a number of functional Directorates responsible for forest operations, reforestation and development, commerce, finance and horse husbandry. There is a small IT unit reporting to the Deputy Director General (DDG), while the human resource unit reports to the finance Directorate.

77. Operationally, forest management planning, forest inventory and forest research are implemented not by the HQ Directorates but by ICAS – which is assigned the same level in the administration hierarchy as a County Branch.
78. Romsilva’s operations are overseen by its Administration Council which comprises the Director General (DG) and representatives from (a) Ministries of Environment and Forests, Finance and Education, (b) Romsilva directorate directors, (c) ICAS and (d) County Branches. From a governance perspective, the appointment of the DG Romsilva as the head of the Administrative Council, is at variance with the more appropriate model whereby the head of the supervisory body / board of director is not the head of the organisation is supervises.

79. The Administration Council (AC) has a wide remit. It approves the organizational and functional structure of Romsilva at all levels, analyses and endorses the budget and financial statements, approves the necessity for loans, decides on technical, financial and human resource competencies, and decides on establishing / dissolving subsidiaries etc. The AC meets on a monthly basis and more frequently depending on a needs basis.

80. The Director General (DG) is responsible for the management and supervision of HQ, the 41 Branches and ICAS. A key responsibility focus is ensuring a balance between projected annual revenues (including any state budgetary support) and the costs of activities. The position of DG tends is politically influenced – within the past four years there have been five appointments as DG.

![Diagram](image-url)

**Figure 10:** Example of County Branch Organisation (Cluj)

81. The organisational structure at County Branch level is almost a mirror picture of that in HQ. There is a Director and Technical Director (TD) with a number of functional units and an
Economic Director with a finance unit. Below the County Branch office there are a number of forest Districts (FD) each with a number of forest ranges and depending on local circumstances one or more units with responsibility for hunting area, wood processing, road maintenance etc. In addition there may be a non timber business unit e.g. fish farm.

82. The lowest organisational level in Romsilva is the Forest Guard Range – known as a Forest Guard District (Canton Silvic, CS). The average number of these varies across the forest ranges, but at mid-2006 there were 8,169 CS supervised by the forest range managers. A single forest guard may be responsible for more than one CS. There are currently some 6,000 forest guards employed by Romsilva.

83. In line with the restitution process and changes in the Hunting Law, the number of hunting areas managed by Romsilva will reduce to about 350 from the current level of 517.

84. With a number of minor exceptions relating to additional public purpose responsibilities, the organisational structure of Romsilva has remained essentially unchanged over the past decade. The number of Branch offices has varied between 36 and 41 and the number of forest districts has decreased somewhat but in essence little has changed. The traditional area based management structure (Branch / District / Range / Guard Area) alongside a number of functional units represented at HQ and Branch level has remained intact.

3.4.2 Institute for Forest Research and Management - ICAS

85. The Institute for Forest Research and Management (ICAS), founded in 1933, reports to the DG Romsilva and has the same status as a County Branch within the overall organisational structure. It has a headquarters in Bucharest and three main departments i.e. production, research (including forest management planning) and forest inventory. Under the Research department, apart from the researchers in Bucharest, there are 7 regional branches: Brasov, Pitesti, Roman, Bistrita, Oradea, Simeria and Craiova. Under its Production department, ICAS has 5 forest districts which it manages as a regular Romsilva Branch. ICAS generates an estimated 40% of its revenues from management of these forest districts while a further 30% comes from the production of forest management plans and the balance of 30% from various research activities. The incidence of Forest Research Institutes or organisations managing forest areas is not unique to Romania. However these forest areas are generally relatively small and are more than often managed on an experimental basis. In this regard, ICAS is unique.

86. ICAS undertakes forest management planning (FMP) for Romsilva on a contractual basis. The FMPs are prepared for each forest district on an agreed price per hectare which varies with type of forest and location (mountain, hills or plan). The average price is €7.30 / ha which is more than 20% higher than that charged by private companies for similar sized areas but ICAS maintains that due to its database and expertise the quality of the FMPs they produce is higher. Notwithstanding this contention, the €7.30 / ha can be viewed as an internal charge within Romsilva and as such it could be viewed as a non-market rate for the provision of the FMP

5 The size of the forest range is subject to regulation being a minimum of 3,000 ha (for plains), 5,000 ha (for hills) and 7,000 ha (for mountains).
services as the charge is greater than market rates and in effect it is a monopoly supplier. While it is eligible to provide FMP services to the private sector, it has not pursued this market and its current capacity is sufficient to provide all of Romsilva’s requirements. ICAS undertakes research on specific topics on a contractual basis with Romsilva. Other aspects of research are funded from the Ministry of Research, Ministry of Agriculture and Ministry of Environment and Forests or other research and consultancy contracts and projects with different financing agencies or different beneficiaries.

87. The collection of field data for the first statistically based National Forest Inventory (NFI) began in 2008 and by the end of 2010 some 65% of the required field data encompassing 28,000 forest plots has been collected. There are 20 field teams of three persons involved in data collection. The NFI is due to be completed by the end of 2012. Funding for the NFI has been intermittent and in 2010 ICAS received only 40% of the funding requirement and was forced to make up the balance from its own resources. The allocation for 2011 is only 15% of the requirement, although there is the “possibility” of additional funding at a later stage following national budget reconciliation. The NFI, when complete, will provide information on (a) current values and rate of changes on quantity and quality of forest resources, (b) spatial distribution of forestlands including ownership, (c) forest biodiversity and carbon pools and (d) estimates of future growth. While the NFI data has the potential to facilitate the carbon accounting for forestry, neither ICAS nor the National Environment Protection Agency (NEPA) which is the focal point for data collection are undertaking any formal program or project for forest carbon accounting.

88. As an organisation, ICAS is unique within the EU Member States in that it combines forest research, forest management planning, forest inventory and forest production under one roof and it has a captive market i.e. Romsilva, for a large part of its activities. Any major changes to the current ICAS model should be aligned with national research and development strategies, climate change strategy and ensure continuation of research of a national importance. Thus while the main Romsilva recommendations in this review also relate to ICAS, the most appropriate organisational and future institutional arrangements represent a special case and warrants inclusion under the proposed NFPS.

3.4.3 Information systems

89. For an organisation of the scale, geographic spread and diversity as Romsilva, the requirement for a robust, integrated and IT based information system is a pre-requisite for informed decision making, sound planning, budgeting and controlling. While there is a management information system in place, Romsilva are aware of its shortcomings in terms of data sharing across applications, the ability to report against activities, report generation, data quality, data ownership and the continued need to collate some information manually using a paper based system. It plans to introduce a company-wide Enterprise Results Planning (ERP) system later this year based on a two year software / systems development phase financed from its own resources.
3.4.4 Budgeting and Work Planning

90. Romsilva’s work planning and budget preparation incorporates three types of indicators:

- Operational or Physical Output Indicators (POI) e.g. volume of wood sales, tons of game meat or numbers of seedlings;
- Financial indicators included in the Budget Sheet – revenues and costs by category, numbers of staff and productivity parameters; and
- Performance indicators – a collection of both operational and financial indicators used for controlling purposes.

91. Planning and budgeting begins at the Forest District level and the starting point is the requirements and operational activities specified within the Forest Management Plan. Based on this, a draft operational plan including expenditures is prepared. Concurrent with this, there is an assessment of staff requirements and salaries and an analysis of the direct and indirect costs of operations, investment needs, depreciation and taxes. All of this feeds into a draft budget and based on this the Forest District proposes the POI, final budget and performance indicators to the County Branch.

92. After receiving the planning and budget proposals from the Forest Districts, the functional staff in the County Branch under direct coordination from the Director and the Financial Director develop a consolidated proposal for the operational and financial indicators level and budget considering:

- Local priorities;
- Potential estimation;
- Cash-flow needs; and
- Development needs and opportunities.

93. Following some consultation with the Forest Districts and adjustments, the County Branch develops it’s proposals for the POI, budget, and performance indicators and forwards these to NFA HQ for consideration.
94. The functional staff at HQ analyse the County Branch proposals and, taking into consideration overall priorities and strategies, develop the budget and operational plan to be analysed within the Administration Council (AC). The AC only oversees the budget and the level of the legally established financial performance indicators and approves the physical outputs.

95. After being analysed by the AC, the budget and the financial performance indicators are further analysed and approved by the Inter-ministerial Committee (MoEF, Ministry of Public Finance, Ministry of Labour and Social Protection). The official approval is made through a Common Ministry Decision.

96. After the approval of the budget (including the financial performance indicators), the functional staff in the HQ finalise the performance and financial indicators.

97. Based on their proposals the County Branches will receive their POI, budget and performance indicators. Following this the Branch will in turn allocate to the Forest Districts, based on their original proposals, the budget, POI and performance indicators for the year.

3.4.5 Reporting and Controlling

98. Each month progress on budget execution, major liabilities and major receivables are reported from the field level to the AC level. The reports are analysed at district, County Branch and HQ levels and compared with the programmed financial indicators. For the receivables and liabilities there are certain limits established by the HQ and by the Branch Office for the lower levels.
In accordance with the analysis of the reports, the budgets and the forecasts are adjusted permanently or on temporary basis awaiting further information and or outcomes. Large unexplained variances between the established levels of the financial indicators, the liabilities and the receivables are sometimes used as a criterion for salary reductions.

### 3.4.6 Efficiency and Financial Performance

Romsilva has returned a profit year on year over the past decade. This is despite its declining resource and revenue base, continuing obligations to provide extensive public goods functions with limited support and the downturn in the Romanian and European economies. The profit level is low and has averaged less than 2.5% of revenues over the past three years (2010 figures are not yet finalised). This compares with levels of more than 10% during years 2001/2002. Obviously recent results are influenced by the requirement to subsidise certain public good functions but the extent of which is not possible to quantify. Comparing year on year results can be misleading and provide little insight into how a company is performing. Thus, comparing the profitability for the three years shows only marginal differences and this could be interpreted as either a good result given the economic climate or a poor result given the low return on the resources used.

The recent review of Romsilva (Savcor Indufor, 2007) provided a benchmarking exercise which compared Romsilva outturns and performance with a number of state-owned forest enterprises across Europe. In any comparison...
of this nature, care must be taken as the levels of activities, age structure and composition of the forest resource, degree of commerciality and scope of businesses operated varies enormously depending on the country in question. Notwithstanding this reservation, the findings provide an insight into the relative efficiency of the organisation.

102. In terms of efficiency / productivity level of administration staff using the parameter of $m^3$ of invoiced volume per administration staff member, Romsilva fared poorly. However when the cost of administration per $m^3$ is used as the comparison parameter, Romsilva’s performance improved significantly. This is due to the relatively low salary levels.

103. The analysis examined overall profitability levels and concluded that “the organization (Romsilva) makes a small profit, a few percent of turnover, placing itself in the “middle” group among all participating organizations” alongside Bavaria and Austria. What is unclear from the report is how comparable the profit levels are given the scope of business activities in some of the state forest companies e.g. in Ireland, Coillte operates two world class panel mills and was reliant on an active property development market to generate profits.

### 3.4.7 Timber Sales and Pricing

104. Timber sales represent the major revenue source for Romsilva and will continue to do so into the foreseeable future. Timber is sold through a sealed tender system (harvested and standing)
and there are a number of long term supply contracts in place which are being run down. A reserve price is set centrally based on prices achieved during recent sales and the County Branches have some flexibility to amend this to reflect local conditions. The process of reserve price setting is not regarded as being wholly transparent by the wood processing sector.

105. In 2010, Romsilva sold 9.491 million m$^3$ which represented approximately 80% of its annual allowable cut (AAC) with the balance being mainly considered inaccessible for harvesting. Almost 40% of material was sold harvested (Table 6) and Romsilva intends to increase this proportion to 50% in the immediate future as it maintains it can increase product recovery thereby improving revenue and net stumpage compared with standing sales.

| Table 6: Romsilva Timber Sales 2010 (million m$^3$) |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
| **Annual Allowable Cut** | **Total Volume Sold** | **Standing Sales** | **Roadside Sales** | **Roadside Sales** |
| | | | **Harvested by Contractors** | **Harvested by Own Resources** |
| 12.0 | 9.491 | 5.852 | 1.636 | 2.003 |
| % | 100 | 62 | 17 | 21 |

106. Romsilva provides annually each autumn to the wood processing sector, its estimate of the volumes, species and assortments it plans to bring to the market in the following year. This is based on an analysis of the harvest volumes in the FMPs. In 2011 Romsilva will make about 9 million m$^3$ available to the market. An additional 20% or 1.8 million m$^3$ is potentially available but inaccessible. Outturn versus plan varies depending on market conditions but is currently relatively high and of the order of 98%.

107. The demand for wood energy within the EU is set to increase significantly (Mantau et al, 2008) driven mainly by the requirements set out in the Renewable Energy Directive (RED - 2009/28/EC)$^6,7$ and on each Member State’s response in terms of its proposed renewable energy mix. One of the barriers to investment in wood energy facilities e.g. pellet plant or combined heat and power plants (CHPs), is security / continuity of supply of raw material be it in the form of roundwood, or processing co-products (sawdust, chips bark etc.). Romsilva has a large forest estate and is potentially in a position to take advantage of this growing market through a form of public private partnership (PPP) for supply. This would facilitate the harvesting of what are currently unattractive sale lots and the increased recovery of volumes from existing sales. The regulation on timber sales does not allow for medium term timber supply contracts, which are a pre-requisite for this type of investment.

3.5 **Recommendations**

108. While this series of recommendations addresses the immediate issues facing the sector, as they are being implemented, the overall operating environment will change and will provide

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$^7$ Directive 2009/28/EC on the promotion of the use of energy from renewable sources establishes the basis for the achievement of the EU’s 20% renewable energy target by 2020. Under the terms of the Directive, each Member State is set an individually binding renewable energy target, which will contribute to the achievement of the overall EU goal.
opportunities for further improvements and the introduction of efficiencies not only in the delivery of volumes to market but also on the delivery of non timber services to society in general. Thus while we do not see any particular advantage at this moment in time in recommending that Romsilva should be corporatized, following the outcome of the BPR it may be opportune to consider this option. Such an arrangement would foresee the independent and open appointment of a Chief Executive, the appointment of a Board of Director, some of which would be appointed by the Minster but others would occupy their position based on their business expertise and the added value they could bring to the development of Romsilva. The corporatized Romsilva would operate as an independent entity, free of political influence and according to good governance principles and best practices, benchmarking itself against best in class other state owned forest companies within Europe.

1. If the current levels of political interference and appointments continue, then over the lifetime of a beech crop, Romsilva will have had 96 different Director Generals with a somewhat smaller number of appointments at County Branch level. The organisation needs continuity and leadership, neither of which is possible under current practice. The Government and MoEF should provide an assurance that a moratorium will be placed on political appointments.

2. Romsilva does not have a long term strategic plan which would provide direction for development and facilitate the prioritisation and allocation of resources throughout the organisation. The organisation needs to develop a vision for its future development. While its operating environment has changed, the organisation still has a good forest resource base, technically competent staff and a wealth of experience to build upon. With restitution almost complete, it is timely to prepare an overall vision and strategic plan for the next decade that would prioritise those areas where there are market opportunities, explore alternative business arrangements as for example private public partnerships and eliminate unprofitable businesses.

3. Romsilva has not been able to sufficiently adapt its practices or how it does business to the radically changing operating environment. It continues to operate more or less the same as in 2000 when it had an almost monopoly position regarding timber supplies. It needs to reinvent how it does business. Romsilva should establish a comprehensive Business Process Review of all the major processes within the organisation. A business process is a collection of related, structured activities—a chain of events—that produce a specific service or product for a particular customer or customers. One example of a business process is the steps involved in the preparing timber for sale. The BPR will critically analyse existing business processes to identify opportunities to improve compliance, improve quality, reduce costs, and cut cycle time. Once the BPR has redesigned how the process is to be undertaken (who, where, when, how and the ordering of the various input activities) the process is formally written up in a standard operating procedure. The development and use of SOPs promotes quality through consistent implementation of a process or procedure, even if there are temporary or permanent personnel changes. Ultimately, the benefits of a valid SOP are reduced work effort, along with improved data comparability, credibility, and legal / regulatory defensibility.
The BPR would be implemented in two phases (Figure 16) under a core BPR group to be appointed by the senior management within NFA. The first phase lasting approximately 8 months would be a learning phase with a limited number of working groups. The focus would be on building capacity and expertise. The core group would identify and propose priority areas for analysis, oversee the implementation of the BPR, provide training to the working groups and report to senior management on a regular basis. The second phase over the following 9 – 12 months would see a rolling out of the BPR and an increase in the number of working groups.

Figure 16: Business Process Review Model for Implementation

The Romsilva County Branch structure has a purely administrative basis and little if any connection with the forest resource which the organisation has the remit to manage. This leads to the situation where there is an enormous disparity between the County Branches in terms of forest area, cashflow, production functions etc. Despite this variance (in terms of staffing this accounts for a tenfold factor), each County Branch has a more or less uniform overhead structure. Other state forest organisations have moved away from this purely administrative basis for organising the forest management to a more resource based approach. This can be reflected in organising the level of management below the headquarters along the lines of profit centres. This is a more business orientated approach and sustainable in the longer term as each of the units can generate sufficient revenues to cover the costs of production and administration. This avoids the necessity for cross financing and the justification for same which can act as a de-motivating factor for more efficient management and work practices. Romsilva, concurrent with the BPR or indeed it could be a particular project within the BPR, should determine the most appropriate number of Branch profit centres that the forest resource can justify. This will
require the definition of minimum financial and technical parameters, bearing in mind the diversity of the forest resource and the scope of activities. Production facilities like sawmills, nurseries etc could be treated as stand alone business units within the proposed profit centres. The underlying principle of “profit centre” could also be applied to the most appropriate number of forest districts although perhaps not to the same extent as each could have varying revenue potential due to differences in species and age structure of their forest resource.

4. Romsilva is aware of the shortcomings of its information system and is in the process of rolling out a new Enterprise Results Planning information system. Notwithstanding this, if the organisation is to develop and become more efficient in its planning and resource allocation, then the decision making and controlling requires further advances in the development of a more integrated and comprehensive information system. As investment in IT can be high risk and there are many examples of information systems not delivering, Romsilva should first define an information system strategy. The strategy should address the four key aspects necessary to succeed: (a) Data Needs; (b) Business Applications; (c) Appropriate Technology; and (d) Organisation Structure. These aspects will need to be analysed and considered in a holistic fashion and their individual development must be synchronised. The development and implementation of Information Systems cannot be considered in isolation. It impacts on the organisation as a whole. It is important that implementation of Information Systems is phased in line with the needs and development of the organisation. This will ensure that development of Information Systems and the organisation development are in harmony.

5. Romsilva is not in a position to identify fully the costs it incurs in the provision of public goods. The same applies at Branch and Forest District levels. Concurrent with the BPR and IS strategy development, Romsilva needs to identify all the costs and revenues associated with the provision of public goods throughout each of the organisational levels. These costs should be recorded and reported on separately. This would include a proper time recording and allocation system for staff time. While the provision of some public goods functions form part of SFM and good management practice, other public goods e.g. in relation to guarding of land under restitution, the management of National and nature parks at own cost, conservation of horse breeding gene pool etc do not form part of SFM of state forest resources. Indeed there is no logic to Romsilva having responsibility for horse or fur breeding and these activities should under normal circumstances be managed by organisations outside of the state forest sector. Their inclusion under the remit of Romsilva is a reflection of the degree of politicisation of the organisation. The BPR could result in Romsilva having a separate arm for the provision
of these public goods. Equally the BPR could recommend the divestment of some of these public good functions. However at this stage their initial identification and reporting will enable Romsilva to justify cost recovery for part of its expenditure on public functions.

6. Romsilva will remain the dominant supplier of roundwood to the wood processing and wood panel sector even after forest restitution is finally completed. Currently only 20% of its forests are certified. If the wood industry sector is to compete in the European market which is increasingly requiring certified timber, then Romsilva will need to increase its efforts to extend certification to all of the forests under its stewardship.

7. To take advantage of the increased demand for wood energy, Romsilva should have the flexibility to enter into medium term wood supply contracts and to form part of a PPP where the other partner would invest in wood energy facilities in Romania. (Note: The supply of raw material for wood energy whether it be roundwood, chips, pellets etc will be covered by the EU Timber Regulation.)

8. Restitution has resulted in the fragmentation of the forest estate. From a Romsilva perspective, the implications of this fragmentation are only now beginning to emerge as it attempts to manage on a sustainable basis areas, within which are private parcels of forest which impact on how they can manage the state resource. From an SFM and national perspective this fragmentation will, in some areas, lead to sub-optimisation of the forest resource. There are no clear or obvious solutions. Some suggestions are that the state through Romsilva should buy out the private forest areas in an attempt to consolidate its holding. This is not feasible under the current economic climate. It is a national issue and its solution is in part linked to the development of the forest cadastre, which is long overdue. Responsibility for the cadastre lies with the National Agency for Cadastre and Land Registration (NACLR). Currently the priority of NACLR is the cadastre for agricultural land holdings, the property titles of which were issued without a proper cadastre check of corresponding land and without registering them in the registry (land book) system. The location and the boundaries of these restituted parcels oftentimes failed to be clearly identified and are therefore subject to many litigations and disputes. Clearly consolidation will not be possible until the forest cadastre is in place but equally simplification on the regulatory regime for small forest owners will have a major impact in facilitating consolidation. The private forest areas are however being entered on the GIS as part of the NFI. Any workable solution will require consultation with owners and their buy in. As such, this area should be discussed under the NFPS. However in advance of this the MoEF should establish a national working group to (a) identify the scale and potential impact of the fragmentation and (b) propose possible solutions to the NFPS.

9. The suite of technical norms, some of which are currently under review organised through the GDF, are outdated and do not always reflect advances in forest management, forest operations and or associated technologies. The required stocking for regeneration ignores advances in nursery technology, improvements in seedling quality, plant handling and site cultivation, all of which contribute to extremely high survival rates and improved
overall stand quality. Similarly the norms for harvesting and rotation lengths are based more on past technical considerations and do not reflect advances in growth and yield modelling and stand dynamics or on the financial viability of the prescription for the stand in question. The current process of updating has stalled as the main part of the work is voluntary. A more holistic, encompassing and co-ordinated approach is required. This MoEF should prepare ToR for the review of all the technical norms within a twelve month period. This should include a requirement for stakeholder participation and consultation at first and final draft stages of development. The new norms should provide guidance and illustrate best practice in contrast to the current prescriptive format.

10. The current regulatory requirement whereby a forest administration (private or state) is obliged to accept any privately owned forest which agrees to its published offer price for administration is not working as intended. If the private owner does not pay the agreed charge, then the administrator is still obliged to provide management and guarding services. To exit from the contract requires the administrator to prove that there are no unstamped stumps (i.e. no illegal harvesting) in the area in question and this can only be undertaken by the ITRSV. Forest administrators and in particular Romsilva are increasingly being forced to provide services and incur costs on behalf of non-paying forest owners. A more simplified regulatory regime for small privately owned forest areas is required. This would not require areas less than a certain threshold e.g. 10 ha, to be under administration but rather require adherence to good forest practice and SFM guidance with simplified requirements for planning, the marking, harvesting and sale of timber and non timber forest products.

11. The last NFI was completed in 1984, a quarter of a century ago. The current NFI is required to enable Romania to not only report nationally on the state of its forest resources but also fulfil its international reporting requirements to Eurostat, FAO, MCPFE and UNFCC and to underpin future development of the wood industry sector. The MoEF should provide the funding to the NFI to complete the fieldwork and data processing for 2011 and 2012.

12. There is no formal process or organisation responsible for actually undertaking forest carbon accounting. The NFI in collaboration with the planned FMIMS and SUMAL offers an ideal platform for Romania to develop its own forest carbon accounting methodology which following peer review would be subject to approval by the Intergovernmental Panel on Climate Change (IPCC). The alternative is to use the default parameters in the IPCC guidance documents (IPCC, 2006) which are prudent and would underestimate the level of carbon sequestered. This latter approach, based on experience from other countries which use NFI data, e.g. Ireland, could result in a loss of stated carbon of the order of 20% or more (COFORD 2009). The impact of such a loss in monetary value is immense. If the carbon accounting methodology based on the NFI and other datasets resulted in an increase of as small as 10 tonnes of CO₂ per hectare over the default values, then the potential monetary benefit to Romania could be of the order of €0.75 billion. ICAS is ideally situated to perform the forest carbon accounting function and should be mandated to do so with a budget line coming from MoEF.
13. The level of support and extension services for private forest owners, the majority of whom are new to forestry, is insufficient to ensure that private forests are managed in a sustainable fashion. The requirement for private forests to be under administration is positive. The state through the ITRSV lacks the capacity to provide any meaningful level of support. Part of the solution may be the use of funding under the Axis I of the next NPRD to support forest owner associations who obviously have a role to play. Equally private forest districts could be used as a vehicle to provide extension services to the owners whose forests they manage. In the short term however, very little is possible other than to include support under the planning for the next NRDP.

14. There is lack of clarity as to which organisation within the MoEF has or will have responsibility for the implementation of the EU Timber Regulation. The GDF maintains that as part of the requirement under this regulation is for traceability of the wood being placed on the market, it is outside of their remit and have suggested that the National Environmental Guard (NEG) should have this responsibility with the support of the GDF. The full implications of the Regulation are as yet unclear and the Commission plans to adopt more detailed rules known as "implementing measures" to help ensure the uniform implementation of the Regulation by 3rd June 2012 together with adopting "delegated acts" to supplement and/or amend the procedural rules for recognition of monitoring organisations by 3rd March 2012. However prior to these deadlines it will be important to have clarity as to who is responsible and to ensure that sufficient preparatory work is undertaken.

15. It will be important to build upon the initial configuration of the FMIMS system, to define the data requirements and data consolidation and relevant indicators that can serve as a decision support for policy and strategy development and to monitor overall policy implementation and activities within the forest sector. This work should be organised on a project basis under the direction of the GDF and include representation from the relevant forest sub-sectors. The FMIMS will need to be comprehensively tested to ensure that (a) it meets data management requirements of the Ministry, (b) is technically robust and (c) is user friendly and sufficiently supported through user documentation etc.

16. Concurrent with the upgrade and development of the FMIMS, further development of SUMAL will be necessary. SUMAL had very demanding objectives regarding traceability and statistical reporting. The underlying concept behind the system is sound. However as it currently operates, it is overly complex, not user friendly and has a weak reporting and signalling facility. The system needs to be simplified in terms of data entry and overlapping of reporting. The statistical element will require improved data consolidation, with improved report generator ensuring data confidentiality with appropriate user access limits. The system which has a potential user base of about 20,000 will need to be thoroughly tested prior to the upgrade becoming operation.

17. The target market for Romanian timber exports is Europe which is increasingly demanding certification as a pre-requisite for imported timber and timber based products. Romsilva will need to focus more efforts internally on progressing certification including (a) up skilling of its managers in certification procedures and requirements, (b) greater
awareness raising throughout the organisation and (c) setting demanding yet achievable targets for the certification of all its forests. Within the private sector the proposed simplification of the regulatory framework will facilitate certification however the GDF will need to promote certification more actively and work with the private forest districts in heightening awareness.

3.6 Other Considerations

109. The requirement for forest guarding is unique to Romania and is part of its forestry heritage and tradition. In practice the concept of forest guarding results in a mixing of civil and administrative law which is not good practice. The fear has been expressed that if the guarding function was removed, then illegal harvesting would increase significantly and result in partial degradation of the forest resource. Such anticipated levels of widespread illegal harvesting are not a feature of neighbouring countries or indeed anywhere within the EU. With the proposed simplification of the regulatory system, a twin track approach to large and small forest owners and improved practices within Romsilva coupled with the introduction in 2013 of the EU Timber Regulation, the time might be opportune to consider either eliminating or reducing the guarding requirement. This would not result in the elimination of the forest guards but rather a reduction in numbers reflecting the realignment of their functions and duties.

110. Although outside the remit of this review, the permitting system for harvesting and processing companies is worthy of comment. The system is very open and has contributed to the current situation where there are now over 12,000 companies operating in harvesting and wood processing, the majority of which are micro enterprises unable to meet the increasingly demanding quality standards for timber products and forest services. Over capacity in timber processing is still a problem and some rationalisation is required to balance capacity with supply. A more restrictive permitting system may be an option and this could have the added advantage of eliminating those opportunistic small enterprises which anecdotally facilitate illegal logging.

4. Natura 2000

4.1 Introduction

111. Implementation of the Natura 2000 network in Romania started late in the fall of 2005 resulting in limited time for site designation and analysis. Furthermore, the timeframe made it impossible to undertake a proper process of stakeholder consultation and public awareness raising. There are 381 Natura 2000 sites (273 SCI and 108 SPA) encompassing about 18% of the land area.

112. Sites vary significantly in size, ranging from a few hectares to hundreds of thousands of hectares, and include wild/natural areas as well as agricultural, industrial, urban and rural areas. Their designation at national level was completed in one year and was based mostly on personal communications and literature sources which frequently were quite old. Notwithstanding these shortcomings, all sites were declared in 2007 as protected areas under the Romanian legislation.
113. The lack of understanding of Natura 2000 and its rushed implementation has resulted in a general tendency among authorities to restrict many human activities irrespective if they have or do not have an impact on the subject species or habitat(s). Romania decided to limit the administration options provided by the Habitats Directive (that allows the possibility to integrate the measures which correspond to the ecological requirements of the Natura 2000 sites into other local development plans) and stated that the administration of the sites is possible only at the site level, according to a stand alone management plan, specially designed for that site.

114. At national level, the institutional framework for administration of the entire network was to be ensured by The National Agency for Protected Areas (NAPA) established in 2008 under the Ministry of Environment. This was cancelled after one year due to the Government cost reduction programme. Currently the mandate of NAPA rests with the Directorate of Biodiversity within the MoEF (even if the NAPA was intended to have an implementation mandate while the Directorate has a more regulatory role).

115. The process of designating new Natura 2000 sites is on going. The MoEF is currently analysing proposals for enlarging the Natura 2000 network up to a total of 24% of the national territory.

116. For some sites, MoEF may decide to delegate the management responsibility to organizations that proves its willingness and financial and technical capacity to manage the site.

Figure 17: Management of Natura Sites

117. The administration contracts and caretaking conventions are signed by the selected voluntary organizations and MoEF, specifying certain responsibilities for administrators and caretakers. This includes the elaboration of the site management plan (MP) within a certain period of time to be approved by the MoEF. The financing of administrators or caretakers is their own responsibility. Due to a combination of late start up, disbandment of NAMA and transfer to Biodiversity Directorate and financing through SOP Environment – priority axis 4 – to date only 50 MPs for Natura 2000 sites are currently under elaboration. It is envisaged that, by the end of 2015 (end of current SOP) approximately 200 MPs will be enforced.
118. Under current legislation there are no general or specific recommendations regarding the conservation measures to be implemented in Natura sites, even if, as a result of several Life or GEF financed projects there are in place some guidelines: conservation measures for some specific species and habitat types. These documents are not properly integrated with the legislation and financing mechanisms. Consequently there is an observed tendency by the authorities to impose unnecessary severe restrictions.

119. The compensatory payments to owners for Natura 2000 restrictions are not yet defined even if, the frame for these payments has been outlined under the Agro-Environment measures and partially under the National Programme for Rural Development (NPRD). Still, the detailed procedures are missing.

120. The hurried and under-resourced implementation of this ecological network has created confusion, unnecessary tension between authorities, forest owners, landowners and administrators and is a lost opportunity for securing funding for public good functions of forest management. The net result, as has happened in other Eastern European countries (e.g. Bulgaria), is a general dislike of Natura 2000 among owners and administrators (i.e. the main stakeholders). Thus even though site proposal has ended there are still many challenges to be overcome if successful implementation of this new concept of nature conservation in Romania is to take place.

4.2 Forestry and Natura 2000

121. In terms of forests, a GIS analysis of the pSCI layer (MoEF 2010) shows that approximately 40% of the forestland under administration of private forest districts is now included within the Natura 2000 network. Bearing in mind that during the restitution process it was possible for owners to choose the location under some conditions, it is obvious that the state owned forests are included in the Natura 2000 network in a greater percent. Romania has a long tradition in the sustainable management of its forest resource. The principles underpinning forest management include (a) biodiversity conservation, (b) multiple use (protection and production) and (c) sustainability.

122. In management planning there are two main categories of forests: I. Forest vegetation with special protection functions and II. Forest vegetation with protection and production functions. Depending on the attribute to be protected, the first category covers roughly slightly more than 50% of Romania’s forests.

123. It is obvious that the Romanian system for forest management planning is aligned with the same basic principles of the Natura 2000 network. As a result, the implementation of the Natura 2000 should not encounter major obstacles, at least in terms of conserving the forest

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habitats. Moreover, if in the years to come, both the state and the owners respect their duties (i.e. the state – to provide financial compensations; the owners – to follow the forestry practice guidelines and meet other conservation requirements), the management of forests for multiple use (including nature conservation) should be readily assured.

124. In spite of this beneficial situation, the Natura 2000 legislation and management system has failed to reach any degree of integration with the forestry management planning process or with the forest administration (state or private). Forest Management Plans (FMP) are still developed in an independent fashion, without officially taking into consideration the Natura 2000 specific priorities, but having their own biodiversity conservation set of measures.

- The MP for Natura 2000 are developed without benefiting from the knowledge and expertise of the FMP development process;
- Missing synergy in financing. Funds that are allocated through different national and European financial mechanisms are not being efficiently and effectively spent;
- Stand alone sites administrations or caretaking has the potential to create further tensions with local stakeholders; and
- Precise detailed process for compensating the forest owners is long overdue.

**Figure 18: Natura Sites and Private Forests (Stansioiu et al, 2010)**

125. This situation is seriously affecting both the forest administration sector and the Natura 2000 network implementation and management.

### 4.3 Recommendation

1. Forest management should not be restricted *a priori* simply due to the fact that a piece of forest land is now inside a Natura 2000 site. Natura 2000 seeks the maintenance or restoration of the “Favourable Conservation Status” for the natural habitats and species. In terms of forests, this means the maintenance (perpetuation) in a specific area of a certain forest habitat. This leads to two important points. Firstly the lack of certain management interventions may allow the succession towards other structures and compositions (i.e. towards other ecosystems, different than those sought to be conserved by the Natura 2000 network). Therefore, generally, active management measures are required to ensure not only the maintenance of the forest as an ecosystem type but more
specifically the conservation of a certain type of forest. Secondly there is no requirement to maintain a forest habitat in the same stage of development indefinitely (e.g. young stand, mature forest, old-growth forest). Forests are dynamic ecosystems. Therefore, the evolution of a forest stand during its lifecycle should be regarded as normal (i.e. the transition from the regeneration phase to young forest, or from mature forest to young regeneration) as long as the natural forest type is maintained. Restriction should be carefully analysed and implemented only when needed and on the specific area(s) where they are required (not across the entire site), to mitigate tensions between stakeholders and lessen the loss to land owners.

2. The current permitting process for Forest Management Plans should be changed in the short term i.e. for the next three years to allow approved FMPs to be implemented in the way they were authorised by the authorities and eliminate imposing additional costs for environmental assessment on a resource which already practices SFM and the conservation and enhancement of biodiversity values.

3. The legislation should allow Natura 2000 sites to be managed through adapted sectoral management plans – especially for forests habitats special designated sites. That would mean that the Natura 2000 sites should not be seen as strictly protected areas within the legislation.

4. Harmonize the permitting system for Natura 2000 with the process of forest management approval. Development of a national methodology for integrating Natura 2000 conservation requirements within forest management plans. This will require changes in the specific legislation including the forest management planning guidelines which in future should allow for a thorough assessment of the restrictions on current management especially when imposed on non-state lands. This approach will mitigate potential conflicts and facilitate the proper implementation in the field (not only on paper) of the Natura network.

5. The European legislation on compensation measures (Council Regulation EC1698/2005) provides financial compensations only for private property. Therefore, the public property belonging to local communities is not eligible. Today this type of ownership covers large areas inside of the proposed sites of community interest. Possibilities for compensating those owners should be carefully assessed by the authority.

6. Currently, without approved site specific management plans, compensation measures for Natura 2000 sites are potentially inaccessible. In order to improve the situation, several measures should be taken into consideration including:

   a. Use of sectoral plans for site management (see above)
   b. Develop and implement as soon as possible a methodology for approving the site specific Natura 2000 management plans (when sectoral integrated plans are not the best solutions), including mandate delegation to local agencies of the MoEF (currently the Directorate of Biodiversity does not have the capacity to implement such a process).
5. Funding

5.1 Introduction

126. Romsilva, apart from some budget support for afforestation of degraded lands and road reconstruction is essentially self financing. The level of budget support is declining and increasingly being limited to payments due for projects under completion e.g. afforestation of degraded lands.

Under the Law 56/2010 on national forest accessibility, all forest administrations (private and state) are obliged to set aside:

- 15% of timber revenues to a regeneration reserve; and
- 10% of timber revenues to road rehabilitation and construction reserve.

127. The regeneration reserve is used to fund activities in the forest connected with reforestation and afforestation. The roading reserve fund is used to support feasibility studies, road design, construction and rehabilitation.

128. ICAS relies on its forest districts to provide 40% of its funding and on Romsilva for a further 30% relating to the preparation of FMPs and the balance through research projects and studies, some of which are undertaken on behalf of Romsilva and funding from MoEF for the NFI.

129. In addition, as users of natural resources all forest administrations are obliged to pay a 2% levy on revenues arising from the sale of harvested timber to the National Environmental Fund (NEF). The NEF in late 2009 decided to support the afforestation of degraded land and issued guidelines with the assistance of the GDF and subsequently launched a call for proposals. It is worth noting that the first afforestation of non agricultural land i.e. afforestation of degraded land, is also supported under Measure 223 of the NPRD.

130. Economic efficiency is an underlying objective of government policy and should be reflected in the way that the forestry administrations organise their forest activities. Economic theory shows that economies tend to function most efficiently when the levels of output and prices of goods and services are established through competitive markets. Therefore, in situations where the government controls the production of a good or service, such as they do with 50% of the forest resources, a useful starting point for developing a charging policy is that the government should aim to charge for the use of forest resources in a way that resembles what might be achieved in a competitive market (Whiteman 1999)

131. Economic rent can be defined as the surplus value created during the production of a good or service, due to the ownership of a factor of production that is in fixed or limited supply as is more or less the case with forestry. The concept of economic rent represents a more informed and objective guide to setting charges for the use of the states forest resource than a charge on profits or arbitrary levy on natural resources harvested / extracted / utilised. Its calculation can be complex but its application forces the user of the resource to become more efficient as the economic rent is due not on the output but rather on the right to use the resource.
The current practice whereby Romsilva must return to Government 95% of profit and also pay the 2% levy on harvested wood to the NEF is unsustainable in the short term. While it can be accepted that the increase in contribution from 50% of profit to 95% represented a special once-off emergency situation, its continuation severely impacts on cashflow and Romsilva’s ability to undertake necessary investments, neither of which have been properly evaluated.

5.2 National Programme for Rural Development (NPRD) 2007-2013

132. Following Romania’s accession to the EU in January 2007, support funding for the forestry sector is now concentrated through the European Fund for Rural Development (EAFRD). Public counterpart financing to EAFRD allocation is provided through the MADR budget.

133. Romania has decided to concentrate funding for forestry to address infrastructure development, afforestation of agricultural and non agricultural (degraded) lands, improvements in economic value of forests and Natura 2000. Forestry is also to a lesser extent included under measures dealing with vocational training, adding value to agricultural and forestry products. Potentially forestry could be included under the measure dealing with the use of advisory services but specific details have yet to be elaborated. The EU support for the specific forestry measures totals €787 million over the period of the current NDRP.

134. Romania has opted for setting up two paying agencies: the Agricultural Paying and Intervention Agency (APIA) for CAP Pillar 1 and area-based Pillar 2 payments, and the Rural Development Paying Agency (APDRP) for the rest of the Pillar 2 payments. Thus implementation and payments under Axes 1 and 2 is the responsibility of APDRP while implementation and payments under Axis 2 is the responsibility of APIA. Neither the APDRP nor the APIA have any technical forestry expertise or capacity. At the time of preparing the NPRD, the responsibility for forestry was within the Ministry for Agriculture and the General Directorate for Forests and its subsidiary Directorates contributed to the framing of the forest aspects of the
NPRD. Technical project designs are passed to the ITRSV for approval and compliance with the regulatory framework.

135. Start up of the NPRD was delayed until 2008 and the reasons for this have already been elaborated in the functional review of the Agriculture and Rural Development Administration, completed in 2010.

136. Measure 125 (b) dealing with forest road rehabilitation and construction has a very demanding target of 2,101 km of forest roads. The beneficiaries under this measure are: (a) forests private holders/owners and their associations, (b) local councils and their associations holding forests and (c) National Forest Administration – Romsilva. Indications to date are that the measure will not impact significantly on overall forest road density as the majority of projects submitted relate to improvements in existing roads. The project selection criteria award 15/100 points for beneficiary category with the maximum being given to private forest owners and their associations and the minimum of 5 for Romsilva. This scoring places Romsilva at a significant disadvantage as any project it submits is in essence being scored out of 90 rather than 100. The private forest districts are ineligible (because they were not specifically mentioned as beneficiaries to this measure) despite the fact that through their infrastructure reserve account, they would be in a position to raise the necessary co-financing. While the APDRP and the GDF are both confident that this measure will be fully subscribed, the initial call for proposals had a low success rate and to date only 39 projects with a value of €60.3 million have been contracted (Table 7).

137. Measure 221 foresees the afforestation of 49,348 ha of agricultural land through 14,180 beneficiaries with an average afforestation area of 3.48 ha. The eligible beneficiaries are private land owners and public authorities holding agricultural lands. The target is extremely optimistic, especially so given to date only 6 projects have been submitted and none selected or contracted. Visibility and awareness of this measure among potential applicants is low and there is no tradition of farmers planting part of the agricultural holdings.

138. The planning and implementation of an afforestation programme of this scale is a complex undertaking requiring many preconditions for success including (a) adequate and informed nursery capacity, (b) high level of public awareness among potential applicants, (c) identified targeted priority areas for initial afforestation and most importantly (d) uncomplicated and clear guidelines for applicants with minimum bureaucratic procedures. While the NPRD sets out the necessary criteria and technical considerations regarding species and affords greater priority to larger areas and planting in the plains and adjacent to existing forests, it assumes rather naively that the supply of seedlings of suitable species, origin and size will be supplied by the market or failing that the supply can be imported. The seedling requirement is, based on minimum stocking levels, of the order of 245 million (There will be a further seedling requirement under afforestation of non-agricultural land if the measure is not cancelled). The nursery capacity is not capable of meeting the seedling requirement.
Table 7: Situation Regarding Forestry Measures February 2011 (€ million)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Projects Submitted</th>
<th>Projects Selected</th>
<th>Contracted</th>
<th>Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Value</td>
<td>No</td>
<td>Value</td>
</tr>
<tr>
<td>111. Vocational training and information actions</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>122. Improvement of economic value of forest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>123. Adding value to agricultural and forestry products</td>
<td>913</td>
<td>972.3</td>
<td>56</td>
<td>587.1</td>
</tr>
<tr>
<td>125 (b). Infrastructure related to the development and adaptation of agriculture and forestry</td>
<td>151</td>
<td>216.2</td>
<td>39</td>
<td>60.3</td>
</tr>
<tr>
<td>221. First afforestation of agricultural land</td>
<td>6</td>
<td>1.8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>223. First afforestation of non agricultural land</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>224. Natura 2000 payments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>225. Forest environment payments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>226. restoring forestry potential and introducing prevention actions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

139. Measure 223 regarding the afforestation of non-agricultural lands has not been launched and due to difficulties in obtaining the necessary digital land information, may have to be cancelled. Measure 224 Natura 2000 payments has not been launched and its implementation awaits the provision of management plans for the Natura sites (see section 4.0 Natura)

140. With now slightly less than three years to go, implementation of the forestry and forestry related measures under the NPRD is significantly delayed and uptake much slower than anticipated. If matters continue as at present, then Romania and in particular the forestry sector, will be at a significant loss with knock on effects relating to environmental improvements, infrastructure.

5.3 Recommendations

1. Afforestation levels of the scale envisaged in the NPRD will require a nationally coordinated plan to support implementation. This is lacking. A lead in time of three to four years is necessary for the nursery sector to increase capacity, purchase seed, produce seedlings and have in place the necessary transport infrastructure. Nothing has been done to ensure the sustainable supply of seedlings. While the NPRD includes guidance from ICAS and other bodies regarding the afforestation of lands, it lacks any form of supporting framework or strategy for implementation. The GDF should prepare, subject to its inclusion in the NFPS, an Indicative Forestry Statement (IFS) with the overall aim
of providing high-level, national guidance in relation to the suitability of land for afforestation. One of the key aspects of delivering a balanced programme is to ensure, as far as possible, that new forests integrate, enhance and reflect the diversity and local distinctiveness of the landscape in which they are set. It is also fundamentally important to provide the public and the forest industry with the earliest indication of the areas where potentially sensitive issues may arise in relation to, for example, landscape, water quality, archaeology and biodiversity. The IFS would be a map-based approach which integrates many different spatial datasets which take account of a wide range of environmental factors and other opportunities and constraints.

2. Beneficiaries for forest infrastructure development exclude private forest districts of which there are now 132 and who collectively manage about 1.5 million ha of privately owned forests. Many of these private forest districts have the capacity to co-finance roading infrastructure yet cannot do so under the current eligibility criteria. The eligibility rules should be changed to allow the private forest districts to submit projects under measure 125 (b). This would require a change to the applicant guide, which could in turn cause further delays. Bearing this in mind, it is possibly too late at this stage to effect this change. However, the second NPRD from 2014 onwards should include the private forest districts as eligible beneficiaries.

3. Uptake and as a consequence absorption of EU funding, has been slow. This is in part due to the lack of visibility of some of the forestry and forestry related measures among potential beneficiaries and in part due to the complexities of the applicant guides. The APDRP has indicated its intention to develop additional support and explanatory documentation and to undertake a national campaign for “slow” uptake measures. This should be initiated and actions relating to forestry uptake coordinated with the GDF. Prior to this, the APDRP in collaboration with the GDF should revise the applicant guides to ensure that procedures and requirements are clear and do not act as a barrier to implementation.

4. Romsilva should be treated more equitably under the selection criteria for projects and be awarded a similar score to local authorities for forest road infrastructure projects. Romsilva provides a wide range of public functions, much of which is funded from its own resources which other forest landowners do not.

5. The transfer of responsibility for forestry from the Ministry of Agriculture to the Ministry of Environment has implications for the implementation of the forestry measures under the NPRD and for the planning and elaboration of the next NPRD. The APDRP lacks technical forestry expertise. Improved coordination between MARD and MoEF is required to facilitate an improvement in uptake and absorption of funding and a more formal procedure put in place with the establishment of an interdepartmental committee relating to forestry measures under the NPRD.

This improved coordination only addresses the immediate needs. In the longer term i.e. before the next NPRD is finalised, serious consideration should be given to assigning responsibility for the promotion, and implementation of the forestry measures to the GDF.
while using the APDRP simply for the processing of payments. This would have significant advantages in terms of coordination and efficiency with the competent forest authority being in a more informed position to react and adapt to any implementation difficulties. At this stage the new NFPS would be in place and the GDF will have a vested interest in ensuring that targets for afforestation, roading and other activities are met.

6. Economic efficiency is an underlying objective of government policy and should be reflected in the way that the forestry administrations organise their forest activities. Economic theory shows that economies tend to function most efficiently when the levels of output and prices of goods and services are established through competitive markets. Therefore, in situations where the government controls the production of a good or service, such as they do with 50% of the forest resources, a useful starting point for developing a charging policy is that the government should aim to charge for the use of forest resources in a way that resembles what might be achieved in a competitive market (Whiteman 1999). Economic rent can be defined as the surplus value created during the production of a good or service, due to the ownership of a factor of production that is in fixed or limited supply as is more or less the case with forestry. The concept of economic rent is a more informed and objective guide to setting forest charges as opposed to the combination of 95% of profit and an arbitrary 2% levy on timber revenues. Its calculation can be complex but its application forces the user of the resource to become more efficient as the economic rent is due not on the output but rather on the right to use the resource.

6. **Human Resources (HR)**

6.1 **Staff Capacity**

6.1.1 **Forestry Staff in MoEF**

141. Within the Directorates for Policy and Strategy and Forest Development overall staffing at 33 (19+14) is considered adequate. However there is a skills capacity shortage in areas such as analysis (economic, financial and cost benefit analysis), project management, planning, GIS etc reflecting the low average salary levels compared with the private sector.

142. The current ITRSV staffing of 447 is less than authorised and is not considered sufficient by the ITRSV to effectively implement all of the functions set out under GD 333 of 21 April 20059. The organisation has found it difficult to attract and retain staff with the required skills and competencies. This is due to the unattractive salary levels compared with what is available in the private forest districts and Romsilva.

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9 Governmental Decision No. 333/21st of April 2005 regarding the re-organisation of the Territorial Directions for Forest Regime into ITRSVs
Some 74% of staff are forestry graduates with a further 8.5% graduates of other disciplines.

143. Between December 2007 and February 2009 the ITRSV underwent a comprehensive modular training programme in mainly technical forestry subjects financed by the recently completed World Bank Forestry Development Project at the “Transilvania” University Brasov, Faculty of Silviculture and Forest Engineering. The following sub-programs were developed:

- Management for DoF and ITRSV’s,
- Training of trainers and forest certification/standardization;
- Forest management planning and GIS;
- Silviculture and tree measurements;
- Biodiversity conservation;
- Computer applications;
- Communication and conflict management;
- Forest statistics;
- Forest legislation including EU Directives;
- Benchmarking the ITRSV’s;
- Establishing and supporting Local Associations of Forest Owners; and
- Project Management.

144. The total number of participants (in all programs and modules) was 428. Since then, training has ceased and the GDF has been unable to consolidate or build on the training provided. As a consequence, the ITRSV lacks the capacities and skills to provide any sort of meaningful extension services to private owners on a sustainable basis. The main focus of its activities is on compliance and illegal forest activities including illegal logging.
6.1.2 Staffing Romsilva

145. Even though staff numbers have reduced by approximately 12,000 over the past decade, the current level of 18,192 is high by comparative European standards. This is partly due to the “forest guarding” requirement, which is a unique Romanian feature among EU Member States and partly due to how Romsilva organises itself. Notwithstanding this, the number of technical staff is still high in comparison with other state forest organisation although direct comparisons are difficult due to varying scope of activities and associated businesses.

Table 9: Staffing in Romsilva

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Technical</th>
<th>University Graduates</th>
<th>Medium School Graduates</th>
<th>Management</th>
<th>Workers</th>
<th>Grand Total</th>
<th>% Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>University Graduates</td>
<td>Medium School Graduates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Forestry</td>
<td>Other Disciplines</td>
<td>Forestry</td>
<td>Other Disciplines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Headquarters</td>
<td>81</td>
<td>38</td>
<td>37</td>
<td>-</td>
<td>6</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>County Branches (41)</td>
<td>11,937</td>
<td>2,491</td>
<td>832</td>
<td>7,660</td>
<td>946</td>
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<td>4,997</td>
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<td>ICAS</td>
<td>672</td>
<td>304</td>
<td>60</td>
<td>213</td>
<td>95</td>
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<td>Park Administration</td>
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<td>68</td>
<td>94</td>
<td>76</td>
<td>18</td>
<td>23</td>
<td>-</td>
</tr>
<tr>
<td>Hunting Museum</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Fur Animals Facility</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Totals</td>
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<td>1,026</td>
<td>7,949</td>
<td>1,067</td>
<td>77</td>
<td>5,179</td>
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<tr>
<td>% Grand Total</td>
<td>71.2</td>
<td>15.9</td>
<td>5.6</td>
<td>43.7</td>
<td>5.9</td>
<td>0.4</td>
<td>28.5</td>
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</table>

146. Staff levels within the 41 County Branches varies by a factor of ten from a low of 130 in Brâila to a high of 1,303 in Suceava. Obviously there is a degree of correlation between area and scope of activities being undertaken. However the extremely large range in staffing levels, with implications for levels of overhead per unit area, supports the contention that the County as the basis for organization as opposed to the forest resource as the basis is not the most appropriate.

147. ICAS with more than 50% of staff having graduate qualifications warrants some comment. Normally a research organisation would have a higher proportion of graduates across a wider cross section of disciplines. However while one major area of work is preparing FMPs for Romsilva, its main source of revenues is from administration of the 5 districts under its stewardship. This explains the apparent anomaly.

148. Staff are technically well qualified in forestry matters and it could be argued that the prescriptive regulatory regime which operates within the forest sector renders them somewhat overqualified for their work as it leaves little to the judgement or discretion of the professional forestry graduate.

149. There are limited skills and capacities in many of the areas which the organisation will have to address if it is to return to former levels of profitability and reinvent a new business model compatible with its changed operating environment. These include business process re-engineering, business development, decision support systems, investment appraisal, cost benefit analysis.
Figure 19: County Branch Staffing
6.2 Human Resource Development (HRD) and Appraisal

150. There is no HRD strategy or programme within the GDF. Given the size of the ITRSV and scope of activities within the overall remit of the Directorates under the GDF this is a cause for concern.

151. Romsilva, does not have a HRD strategy and there are no immediate plans to introduce one. In the absence of such a strategy, training is delivered in an opportunistic and ad hoc basis with no co-ordinated approach and no prioritisation at organisation or other operational level.

152. Romsilva does operate an appraisal system in relation to its methodology to determine staffing. This however, does not include sufficient indicators of achievement and the organisation has indicated its intention to revise the system more in line with organisational needs in the immediate future.

153. One of the underlying reasons why Romsilva is not in apposition to identify all the staff costs associated with the provision of public goods functions is the absence of a modern time based recording system.

154. Romsilva does not have any formal career path development for its technical staff.

6.3 Recommendation

1. Romsilva can only reinvent its business model and achieve a degree of organisational fit with the new operating environment through the active involvement of its staff. Currently there is no incentive for staff to develop their skills outside of their core forestry competencies yet to develop Romsilva needs skills competencies outside of technical forestry. To facilitate and support the planned recommendations in this report and to support the long term development of the organisation it will be important to have a career management programme. This would involve improving the current staff appraisal / evaluation system, establishing skills needs throughout the organisation but especially in the areas of business development, investment appraisal, cost benefit analysis, change management and leadership and based on this provide a company-wide continuous training programme.

2. Specific training and technical assistance will be required to kick start the planned Business Process Review. The initial training here should focus not only on the small number of BPR teams to provide them with the skills and methodology to undertake the BPR projects but also on senior and middle management so that they understand the process and are in an informed position to collaborate.

3. One of the major recommendations is to develop a new NFPS with quantified targets, clear monitoring procedures / responsibilities, identified funding requirement and actions supported through cost benefit analysis as appropriate. This will require specific strategy
development, policy formulation and project management skills to implement. Accordingly, staff within the GDF should receive training in these areas prior to the start of the NFPS process.

4. Staff motivation is a recurring issue throughout the GDF due in part to the low salary levels and reduced budget for projects and planned investments but also to the lower perceived status of forestry within the MoEF and their isolation (including office location) from mainstream activities. If the GDF is to have motivated staff then it will have to address these issues, especially now when the levels of planned activities are set to increase in the short to medium term inline with the recommendation in this review. It is not appropriate to single out the GDF within the MoEF for special attention in this regard and their salaries and motivation should be reviewed in the broader context of the overall MoEF.
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