

Challenges of a New Europe: Diversity, dilemmas and directions

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**The issue of deforestation in Romania in the
context of Europe**

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Prologue

In this paper I would like to address the issue of biodiversity and forest protection in Europe and Romania, focusing on the positive measures taken by the European Union and on the situation in Romania, where deforestation is a problem. Because conservation of biodiversity is such an ample subject, I decided to link my subject to processes such as sustainable development and inclusion of rural areas in development and conservation programs. In conclusion, the question driving my project is not just why is deforestation a problem in Romania, but how can well implemented policies for sustainable development can achieve success where law fails to be enforced or sanctions are not enough; how can it be created a social and economical environment in which both the natural environment and people would be in a win-win situation.

The first part of my project is a brief presentation of the situation, at European level compared to the case of Romania, regarding the problems of deforestation, illegal logging and lack of efficient strategies and action plans (the problem). The second part concerns the direct and indirect drivers that lead to the deterioration of the environment, forests included (the root of the problem). The third part is an overview of existing EU legislation and international treaties regarding the environment and forested areas in general. At this point I will compare again Romania with the European Union to find both causes of the problem/ flaws in the system and the path to follow to solve the problem (the rules of the game). Having discussed that, the next step will be to sketch a policy plan to help Romania improve her current status (the medicine).

I need to mention that beside the efficiency problem of the structures in charge of forests, the authority also display a lack of transparency in public communication. On the official website of the Ministry in charge of Forests, Water and Environment there are no statistics and reports on the topic of deforestation. I have gathered my information about the crisis, the facts and figures, from environment organizations, NGOs, investigation newspapers and international reports.

I. Forests in the world and in Europe. The forest-related problem in Romania

Nearly one third of the world's land area is covered by forests. Forests provide many benefits, including wood, fuel, shelter, food and water security and employment. They play a vital economic role, often in areas of poverty or relative economic disadvantage. Furthermore, the maintenance of forests is essential for the environmental well being of the world as forests have a crucial role in dealing with the challenges of climate change, and in sustaining species and biodiversity conservation.

Forests cover around 3870 million hectares (ha), or 29% of the Earth's land area. About 47% of the world's forests are located in the tropical zone, 9% in the sub-tropics, and 11% and 33% respectively in the temperate and boreal zones. The World Summit on Sustainable Development (WSSD), held in Johannesburg in 2002, addressed and emphasized the role of sustainable forest management in overall sustainable development and, more specifically, in poverty eradication, improvements in food security and access to safe drinking water and affordable energy. Forests play an often-unrecognized role in the livelihoods of poor people. At global level, an estimated 1.6 billion poor people depend, at least partly, on forest resources for a living. Despite all the efforts to protect forests, the world's forest area continues to decrease at an alarming rate. The net change in the forest area is estimated to be – 9.4 million ha per year, representing the difference between a deforestation rate of 14.6 million ha of natural forests and an expansion of 5.2 million ha per year of natural forests and forest plantations (FAO, Global Forest Resources Assessment 2000).

It is a known historical phenomenon that areas covered with forests are gradually disappearing. Because of this, the protection, regeneration and expansion of such areas have become priorities in many European countries and the results are visible. Instead of aligning to successful policies for sustainable development, Romania is going in the wrong direction by not taking effective measures to stop illegal logging and intensive exploitation. Beside pollution, human actions, such as replacement of natural forests with plantations of alien species, have led to changes in the flora and fauna, have accentuated soil erosion and contributed to change of climate. Storms amplified by climatic changes destroy large areas of conifers made from trees with reduced resistance and vitality, artificial and vulnerable forests planted by man in places where they would not naturally grow. More than that, natural fires, avalanches, diseases and insects now have the power to destroy a forest more and more weakened by human intervention.

The risk posed by deforestation and poor management is immense, because a forest is not just a grid of identical trees; it is a complex ecosystem comprised of different trees and shrubs, rodents and birds, bats, insects and large mammals at the top of the food chain. Compared to the rest of Europe, Romanian woods represent a quite well preserved national value. Even so, human interventions, most often severe, had and continue to have a negative impact. Unreasonable exploitation and lack of efficient conservation programmes have as result the continuous fragmentation and decay of our forests.

The European Union (EU) has a total area of forest and other wooded land area of 136 million ha accounting for about 36% of its surface area. Contrary to what is happening in other parts of the world, forest cover in the EU is slowly but steadily increasing at a rate of approx. 0.3% per year and forests are present in a huge variety of climatic, geographic and ecological as well as socio-economic conditions.

It is estimated that the annual growth potential of Romanian forests is of about 16 million m³, while the output ranges from 13 to 15 million m³. According to environmentalist organizations, the annual decline rate of woodlands is of approximately 9%, but the Government has not confirmed it. Most of the cutting has been done in accessible areas, the isolated areas being saved by the landscape, the only efficient defendant of the forests in Romania. Conservation involves prevention from decay of natural values and restoration of functional ecosystems. It is considered that old and dead standing trees are harmful for the ecosystem because of the insects and other organism that use them to reproduce. The truth is that many species of animals need these habitats to survive. For example, bats need hollow and rotten trees and in exchange bats feed on insects and, therefore, less pesticides are needed for crops.

In a well-known epic poem by a famous Romanian poet, the Forest is personified as an important character in our history, an ally in times of war and friend in times of prosperity. The author emphasises the ancestral bond between our people and nature, especially forests. Today, it would seem this connection has been forgotten and man deliberately destroys nature (including forests), without concern for future generations. Ignorance and hunger for profit drives owners and those in charge of forested areas to destroy one of our most valuable resources at the moment. Romania has five bio-geographical areas, the most on the continent.

Before 1989, forests have been intensely exploited for export, but in the same time the State implemented reforestation programmes and the surface covered by woods increased by 2%. After the fall of Communism, some forest areas have passed in the private domain and

the new owners did what they could think of first: cut-cut-cut. The State emitted contradictory policies, had no effective power to control how the forests should be used and the new owners lacked basic knowledge about forest management and sustainable development. More than that, most of them saw this as an opportunity to gain a considerable profit in a short period of time and feared they could lose again their rightful property.

Not only the private property is affected by damage done to the environment, but also the public domain administered by the National Authority of Forests, responsible for National and Natural Parks and Reservations. For example, the authority failed to stop or limit the poaching and illegal logging in the Rodnei Mountain National Park, an area considered Reservation of the Biosphere.

Reforestation is a must, but needs to be done scientifically, after a serious study on natural values. Not all areas require planting and not all species of plants can and should accustom to a specific area. The consequences vary from alteration of soil to extinction of some animals or insects. Reforestation should be done on abandoned agricultural fields, on former forested areas and where the landscape requires it (to prevent erosion, floods and so on). Forests resulted from reforestation are far from the natural ones in terms of biodiversity, composition of species, genetic diversity and stability. The new patches of trees ought to be planted close or among the natural or old ones so that the species can colonise them and assure a higher and higher biodiversity and long time stability.

The programmes for nature conservation should take into account the policies for rural development, agricultural and forest-related strategies and many other social and economical interests. All decisions should be taken after discussions between Government authorities and the social society. The 1992 *Convention for Biological Diversity* treaty has been signed and adopted by Romania in 1994 and the Ministry of Water and Environment Protection has elaborated in 1996 the *National Strategy and Action Plan for the Conservation of Biological Diversity*. Unfortunately, they exist only on paper, with no real statewide effect to protect natural values.

The Romanian natural environment, diverse in natural habitats and species, requires much more attention from the authorities because 20% of it has to be designated as protected area and integrated in the European Ecological Network *Natura 2000* before the integration in the European Union.

III. Anatomy of destruction. The causes that lead to environmental deterioration

Traditionally, the most important function of forests has been (and still is in many parts of the world) their use as a renewable source of timber and other products, such as resin, cork, mushrooms and berries: this is known as the raw material function of forests. Besides their economic role, forests offer many other benefits, which are increasingly being re-discovered as useful to society. In Europe, increasing leisure time, for instance, has made the recreational use of forests important socially. Environmental benefits of forests, such as biodiversity and landscape conservation, impact on global and regional climates, water and soil protection, are highly valued, even if not expressed in monetary terms. In mountain areas, avalanche control and protection against erosion are additional functions. Over the last decade, increasing attention has been paid to the role of the world's forests in the carbon cycle. Forests are generally managed in order to fulfill several functions simultaneously. That means, for example, that in a forest essentially providing soil protection but which is also important for biodiversity and recreation, selective timber harvesting can be performed while maintaining the former forest functions.

Since the introduction of agriculture, the average rate of global deforestation has been estimated to be 0.25 million ha/year. Deforestation is a major problem in the tropics with over 7% of tropical forests (142 million ha) turned into "other land uses" between 1990 and 2000. However, in non-tropical areas, forested land increased somewhat, as 1% of non-forested land use classes were (re)converted to forests. Although forestland has increased in Europe, only 1.6% of the natural forests in Europe (excluding Russia) are protected. The dramatic forest losses in the tropics have resulted in conflicts between people in favor of forest clearing and those concerned about biodiversity loss. Although the situation is similar in some European countries, in most parts of Europe, however, forest related conflicts are due to changing demands concerning forests and forestry. Even re-forestation may be a source of conflict, if the existing biodiversity is considered more valuable than that of the new forest. Thus, there is a need to identify the drivers leading to disputes between human activities and the conservation of biodiversity, and to find methods to manage and monitor the conflicts.

More than 70 percent of forest destruction is driven directly by the expansion of agriculture, with urbanization, energy production, and mining contributing significantly as well. In many cases indiscriminate logging has catalysed this destruction by providing the infrastructure for human expansion. Much of the destruction and degradation of forests could be avoided if access and tenure rights were fairer to local people who depend on forests for

their livelihoods. Governments and markets have failed so far to understand and support the true value of forests to human development, thus opening opportunities for illegal forest activities and violent conflict. Regulations and law enforcement regimes have been powerless to stop illegal logging, which accounts for at least half of all timber extraction. Indirect drivers of forest habitat deterioration include demographic changes, economic factors, and institutional gaps.

Environmental degradation is a product of the activities of both rich and poor. Deforestation, for example, is partly caused by local demand for agricultural land or construction materials, but is even more fundamentally driven by the industrialized world's demand for timber and the growing international trade in forest products.

According to the UN Millennium Project report of 2005, the five most significant direct drivers of environmental deterioration are:

1. Land cover change, resulting from logging, urbanization, conversion to agriculture, road construction, and human habitation, among other factors, can impair the delivery of vital ecosystem services, such as the water-retention and flood-attenuation capacity of soil.
2. Inappropriate exploitation of natural resources can reduce even the stock of renewable resources below sustainable levels.
3. Invasive alien species are non-native organisms
4. Pollution of air, soil, and water by chemical and organic wastes
5. Climate change may be the single greatest driver of environmental change at a broad scale.

There are also indirect drivers that lead to the deterioration of the environment and, consequently, forests:

1. Demographic change. Population growth, rural-to-urban migration, and shifts in household economic status have important implications for the environment because they tend to increase pressure on the environment.
2. Economic factors. Economic growth intensifies resource consumption, drives land cover change, and generates waste. But rising incomes can also bring investments in environmental improvement and cleaner technologies. Extreme poverty can drive environmental degradation, in turn reinforcing poverty.

3. Market failures and distortions. Environmentally damaging subsidies can encourage overproduction or overexploitation of resources such as fisheries and forests.

4. Institutional gaps. Malfunctioning or absent political and regulatory institutions allow overexploitation of resources, and weak enforcement regimes fail to deter damaging forms of extraction, such as illegal logging. Insufficient participation of key stakeholders in the planning and management of sustainable resource use reduces the effectiveness of policies and their implementation.

6. Sociopolitical factors. Differences in culture and social behavior yield varying consumption and production patterns, and social change can produce unpredictable shifts in resource use.

III. European legislation, international treaties and Romanian policies

In the European Union (EU), forest policies are implemented by Member States within a clearly defined framework of established ownership rights and with a long history of national and regional laws and regulations based on long-term planning. The forest based commercial activities fall within the open sector of the economy.

[The Ministerial Conference on the Protection of Forests in Europe](#) was launched in 1990 as a program of cooperation between European countries to address threats related to forests and forestry, and to promote the sustainable management of forests. The Treaties of the European Union make no provision for a comprehensive common forestry policy, but the management, conservation and sustainable development of forests are important concerns of existing policies and the subject of specific environmental issues such as the EU Biodiversity Strategy, Natura 2000, and the implementation of the Climate Change Convention.

[The UN Conference on Environment and Development held in Rio de Janeiro](#) in 1992 has given forests an increasingly important role in the context of sustainable development and environmental conservation. The concept of sustainable forest management has been recognized as a fundamental guiding principle by all participant countries.

On 15 December 1998 the European Council adopted a [Resolution on a Forestry Strategy for the EU](#) that fixed as overall principles for action the sustainable forest management and the multifunctional role of forests. The strategy is based on the commitments made by the EU and the Member States in international processes related to forests. Its substantial elements are:

- Responsibility for forest policy lies with the Member States, but the EU can contribute to the implementation of sustainable forest management through EU policies.

- Implementation of international commitments, principles and recommendations through national or forest programs developed by the Member States;
- Integration and support of these forest programs developed by the Member States through specific measures and EU policies.

In 2003, [the European Commission launched its Action Plan](#) to prevent and combat illegal harvesting of wood and related trade of forest products. The Ministerial Conferences on the Protection of Forests in Europe constitute a major initiative in the process of co-operation amongst European countries to contribute to the protection and sustainable management of European forests. They represent a joint response and a political commitment by the European countries and the EU to the protection and sustainable management of forests.

According to official papers of the European Commission (*Sustainable forestry and the European Union — Initiatives of the European Commission*, 2003), The EU major objectives in relation to forestry are:

- Promotion of the **sustainable development of the EU forestry sector** as a contribution to **rural development** and, in particular, to the creation and preservation of jobs in rural areas;
- **Protection of our natural environment** and our forest heritage by ensuring the role of forests and forestry in soil protection, erosion control, water regulation, improvement of air quality, carbon sequestration, mitigation of and adaptation to climate change effects, conservation of biodiversity and the restoration of damaged forests.
- Improvement of ecological, economic and socially sustainable forest management within the framework of the internal market, and in line with the Union's international obligations;
 - Assuring the competitiveness of the EU forest based industries;
 - Improvement of forest monitoring instruments in accordance with the requirements of existing environmental agreements;
 - Increasing the use of sustainably-produced wood and other forest products, as environmentally-friendly and climate neutral sources of materials and energy through encouraging certification of sustainable forest management and encouraging labeling of related products;
 - Promotion of sustainable and equitable forest management as a means of reducing poverty and thus contribute effectively to the EU's development policy.

The EU has introduced several pieces of legislation to assist the development of forestry and its related activities in rural areas. These are aimed at helping rural economies and the environment. Candidate countries for EU membership benefit also from specific policies and funding that cover forests and forestry.

The overall principles of the EU's Forestry Strategy, such as multifunctionality and sustainability, are reflected in the rural development policy of the EU by bringing together economic, social and environmental objectives into a coherent package of voluntary measures and thus giving added value to the implementation of forest programmes of the Member States in their regions. The forestry measures of the rural development programmes are at the same time seeking to contribute to more global issues such as climate change and biodiversity. The Rural Development Regulation thus emerges as an important vehicle for implementing the EU's Forestry Strategy. In broad terms, the integration of forestry aspects in the Rural Development Policy follows three pathways, in particular for privately owned and municipality forests:

- afforestation of agricultural land;
- investments to improve the multifunctional role of forestry;
- improvement of the forest protection values.

In the year 2002, the Special Accession Program for Agriculture and Rural Development (SAPARD) aimed to assist the 10 candidate countries of Central and Eastern Europe in making structural improvements to their agricultural and rural environment. To achieve this objective, each candidate country had to elaborate a development plan. A measure of the SAPARD regulation concerns forestry and the plan has been approved for seven countries: Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania and the Slovak Republic. A fund of 167 million euros was invested to support forestry activities under this measure. Its importance for each individual candidate country varied from 1% (Estonia) to 8% (Bulgaria and the Slovak Republic) and 10% (Romania). As we can see, the EU has granted Romania the largest amount of money, recognizing that there is much to do in the forestry sector related to the control of illegal logging and sustainable development.

Romania has signed international treaties (Rio Convention, Natura 2000) and is making efforts to adapt the existing legislation to EU requirements. Recently, more areas have been qualified as protected and initiatives are being taken to restore damaged woodlands and conserve the biodiversity. The real problem lies in enforcing the law and applying it with equity to for each case of illegal logging, poaching or other type of destruction. More than

that, economic policies are not in favor of private owners, especially those in the rural areas, who can't afford to manage the new property and might be in desperate need of money. Without enough knowledge and rural development policies, they cut and sell the timber for low prices.

In one of the very few European reports on Romanian progress concerning the EU integration requirements, posted on the official website of the Government, it is stated that:

*“Concerning **nature protection**, legislation is in place, but transposition of certain requirements of the birds directive has to be completed by the date of accession. While administrative capacities have been established, the roles and responsibilities of the various institutions involved should be clearly defined and put into practice. Further staff is needed to fulfill the acquis requirements. Preparatory works for the establishment of the Natura 2000 network have advanced, NGOs have been involved in the identification and classification of sites of Community importance, and the focus should now be directed on the next steps to implement the directive including preparations to ensure that relevant protection measures are applied by accession. Attention should be paid to more coordination with the implementation of the water framework directive”.*

In Romania, about 95% of the forested area is currently owned by the State, but this number is to be changed, because more and more hectares are to be given back to their rightful owners from whom the communists confiscated them. After the Second World War, people lost their private property, including forests, which were administered and owned by the State. A predictable result was illegal logging, since there was no guilt for taking back from the State what was rightfully yours. Exploitation was intense, but the forested area actually grew by a slight 2%. After 1989, the loss of wooded land became more accentuated with each passing year, due to poor management, lack of funds and the “habit” of illegal logging. It must be said that we are not talking only about a few individuals that cut down trees for personal use or escape poverty, but also about well-organized networks that export the wood.

So what is to be done?

IV. Prescription for *nature's pharmacy*. A possible policy plan

The first step in solving a problem is admitting it and trying to understand it as well as possible. In this case, the problem has two aspects: the deterioration of reservations of the biosphere, areas that should be protected, and the deforestation of woodlands that should be exploited in a rational way. I will focus on the second aspect.

The key concepts of this policy plan are:

- Sustainable forest management
- Rural development
- Rational use

We like it or not, the rot at the root of the problem is money. Lack of money, need for money, race for money, passion for money. Poor people living in the countryside need money since most of them do not have another job except working in agriculture their own land. Agriculture is still primitive and inefficient in some areas, so we cannot talk about profit. Forest owners might have debts or no desire to manage the property and invest in it beyond their financial powers. Entrepreneurs working in the timber industry often don't have a long-term strategy and wish to get rich as fast as possible, without concern for future generations. Finally, why not say it, corrupt politicians and businessmen that support politicians also want to make more money than they already have and illegal timber commerce can be a profitable way. Let's just say that from the legal point of view, the situation will improve because there is a lot of pressure upon the Government and State Structures because of the imminent integration in the European Union. But what about convincing the people about the advantages of protecting forests?

The best way to protect and restore forests and natural habitats in the Romanian context is to develop a healthy economic environment that would rather stimulate owners and inhabitants of rural areas to help woodlands grow before they are exploited. That would be a win-win situation from which everybody would benefit.

One of the objectives of the Romanian authorities should be to communicate to the owners, rural dwellers and timber industrialists the differences between the two possible approaches. The first approach, that I have named "**Butchering**", focuses on the immediate exploitation of the forest, with no concern for future results. This is the solution of the moment and has the "advantage" of quick profit. In the long run it leads to environmental destruction and poverty (we can assume that if the owner cannot manage a forest, he or she cannot manage the income to turn it into more profit).

The second approach, that I have named “**Milking**”, focuses on long-term strategy, sustainable development and rational exploitation. Just like milking a cow, this strategy is meant to ensure a steady income over a long period of time, assuming the management is efficient. There is also need for investments in the beginning and continuous care, but in the long run it will be worth all the money and labor. It will also mean a steady growth of the forest and improved environmental conditions.

Rural development is a key element in the formula of the success of this strategy. Only by involving, motivating and rewarding the people living in the countryside positive results can be achieved.

In the present, there is a problem with the allocation of SAPARD funds. Those who own small patches are not eligible for these funds, but those who are eligible either don't know how to write a project plan and request, or don't have the amount of money to guarantee the loan. The best thing that can be done in this case is a partnership between all players, encouraged by the Government through economic measures, compensations for the period the forest cannot be exploited and a framework to put in contact the involved actors.

Small, private patches of forests are not profitable. But united they would form a multifunctional forest, with trees of different ages that can be cut constantly, over a long period of time, while others grow.

Several owners of adjacent patches of woodland gather around an investor to form a cluster, a viable forest. They offer material (land) resources that otherwise they would not afford to maintain and they would neither gain much from. The investor offers financial resources, technological resources and is the general manager of the forest, also in charge of trading the products on the market and making the business profitable. The investor also agrees to employ inhabitants from the rural areas from the proximity of the forest, thus contributing to rural development. Working as woodcutters, wood processors, replanters and rangers, the inhabitants are more motivated and more attached to the forest. In this situation, everybody wins, including the environment.

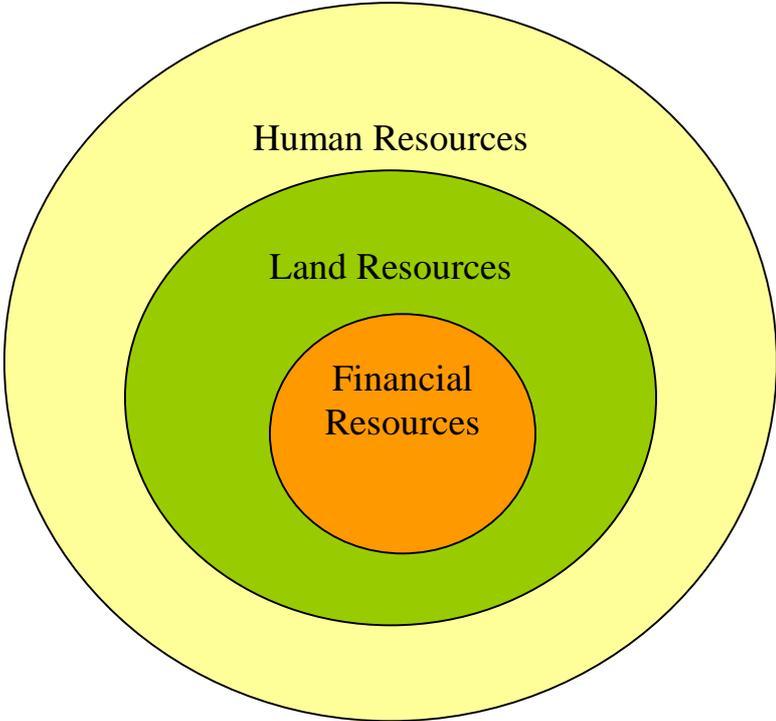
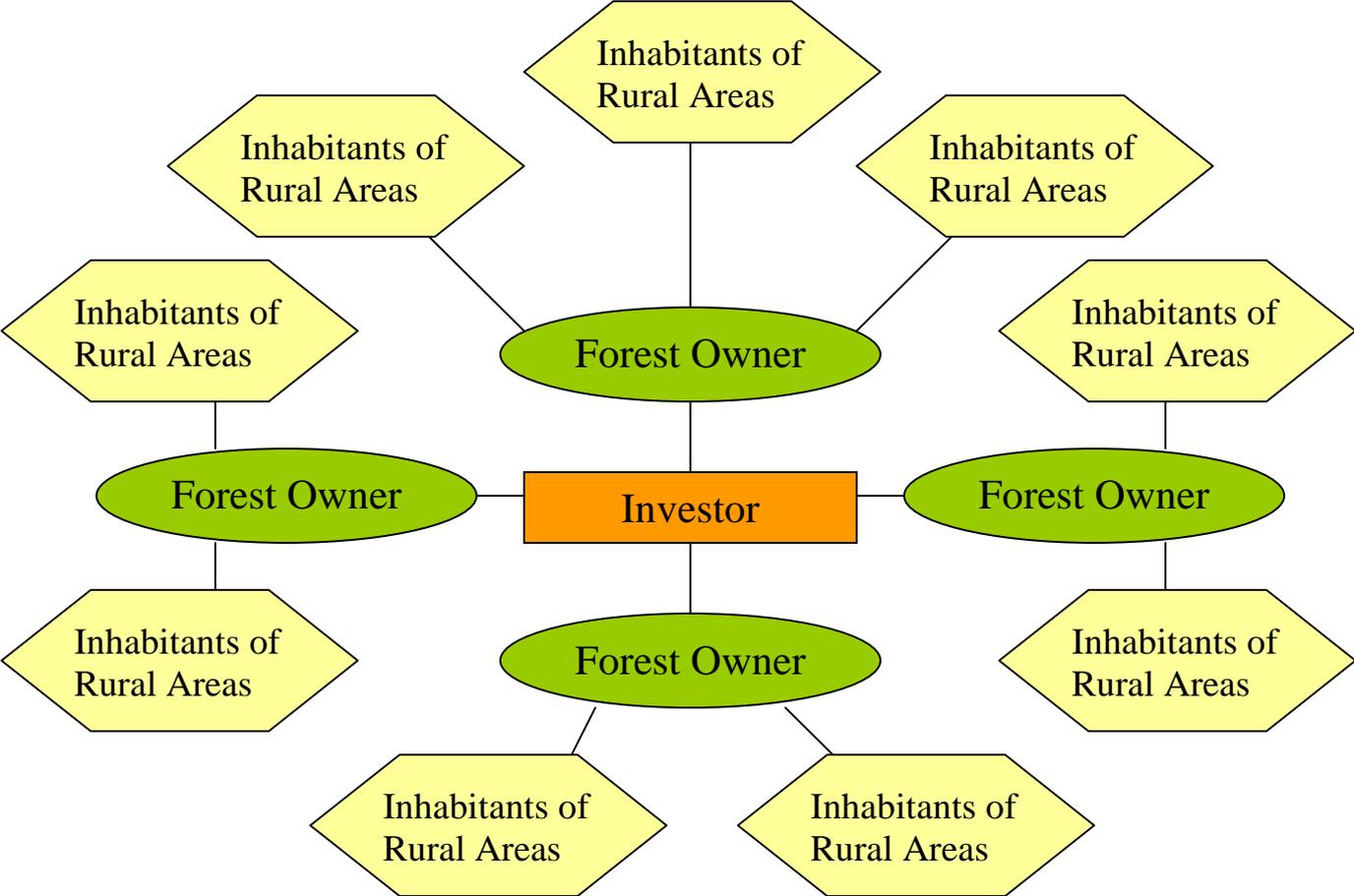
In the end, I would like to point out that the economical drive is more effective than penalties and coercive measures. People will always find a way to bend laws and avoid punishments, as long as it's worth. But if constant, legal gains through sustainable forest management are possible, then they will prevail. After all, it's a fact that all systems tend to be in a state of equilibrium and humans make no exception.

Appendix 1

Country	Total area of forest and other wooded land	Forest area			Other wooded land	Ownership of total area	
		Forest	Available for wood supply	Not available for wood supply		Public	Private
1000 ha						%	
Austria	3,924	3,840	3,352	488	84	18.1	81.9
Belgium	672	646	639	7	26	43	57
Denmark	538	445	440	5	93	28.4	71.6
Finland	22,768	21,883	20,675	1,208	885	29.7	70.3
France	16,989	15,156	14,470	686	1,833	24.9	75.1
Germany	10,740	10,740	10,142	598	0	53.6	46.4
Greece	6,513	3,359	3,094	265	3,154	81.9	19.1
Ireland	591	591	580	11	0	66.2	33.8
Italy	10,842	9,857	6,013	3,844	985	34	66
Luxembourg	89	86	86	0	3	46.7	53.3
the Netherlands	339	339	314	25	0	51	49
Portugal	3,467	3,383	1,897	1,486	84	7.7	92.3
Spain	25,984	13,509	10,479	3,030	12,475	21.6	78.4
Sweden	30,259	27,264	21,236	6,028	2,995	20.3	79.7
United Kingdom	2,489	2,469	2,108	361	20	43.1	56.9
Total EU-15	136,204	113,567	95,525	18,042	22,637		
Cyprus	280	117	43	74	163	57.9	42.1
Czech Republic	2,630	2,630	2,559	71	0	84.1	15.9
Estonia	2,162	2,016	1,932	84	146	91.5	8.5
Hungary	1,811	1,811	1,702	109	0	64.5	35.5
Latvia	2,995	2,884	2,413	471	111	56	44
Lithuania	2,050	1,978	1,686	292	72	82.1	17.9
Malta	0	0	0	0	0	100	0
Poland	8,942	8,942	8,300	642	0	83.3	16.7
Slovak Republik	2,031	2,016	1,706	310	15	55.8	44.2
Slovenia	1,166	1,099	1,035	64	67	29.8	70.2
Total EU-25	160,271	137,060	116,901	20,159	23,211		
Bulgaria	3,903	3,590	3,124	466	314	100	0
Romania	6,680	6,301	5,617	684	379	94.6	5.4
Turkey	20,713	9,954	8,635	1,319	10,759	99.9	0.1

Source: Sustainable Forestry and the European Union – Initiatives of the European Commission, 2003, p.20

Appendix 2



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