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2. ПРИКЛАДНІ АСПЕКТИ ГЛОБАЛІЗАЦІЇ ТА РЕГІОНАЛЬНОЇ ЕКОЛОГІЧНОЇ БЕЗПЕКИ

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THE INTERNATIONAL FOREST REGIME – A PIVOTAL PART OF GLOBAL ENVIRONMENTAL GOVERNANCE

Forests cover about one fourth of the land surface of the Earth and are the dominating in the biosphere. Due to the global importance of forests and the worldwide consequences of their destruction, the international forest regime emerged during the 1990s. Global Environmental Governance is related to the overall purpose of maintaining the integrity of the global ecosystem for the common good of all people.

The author of this article considers the structure of the International Forest Regime, multilateral agreements on forests and the concept of Global Environmental Governance.

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Міжнародна лісова система – основна складова Глобального екологічного уряду

Ліси вкривають біля одної четвертої поверхні Землі та є домінуючою рослинністю в біосфері. Зважаючи на глобальну важливість лісів та на всесвітні наслідки їх знищення, протягом 90-х років виник міжнародний лісовий режим. Глобальний Екологічний Уряд є пов'язаний із загальною метою підтримки цілості глобальної екосистеми для вселюдського блага.

Розглядається структура Міжнародного лісового режиму, багатосторонні угоди щодо лісів та концепцію Глобального Екологічного Уряду.

1. Introduction

Forests cover about one fourth of the land surface of the Earth and are the dominating vegetation in the biosphere. Wood is a renewable resource of enormous importance. And about 3.4 billion cubic meter of wood are harvested each year. Forests comprise more than 50 % of the total global biological diversity. Forests act as important factors of the global climate household. However, the Food and Agriculture Organization of the United Nations (FAO) estimates that we loose about 15 million ha of forests worldwide each year, most of them classified as natural forests. The Pilot Analysis of Global Ecosystems (PAGE) assesses decreasing capacities of forest ecosystems with regard to water quality and quantity, biodiversity and carbon storage.

For the complex of institutions and organizations that develop around international agreements, the term *regimes* is increasingly used. These regimes involve a number of constituencies and actors and go beyond the dynamics of power between sovereign nation states. Due to the global importance of forests and the worldwide consequences of their destruction, the international forest regime emerged during the 1990s (Humphreys). It can be defined as the agreed upon principles, norms, rules, procedures and programmes that govern the interactions of actors in

the specific area of protection and utilization of forests. The forest regime was shaped in four rounds of intergovernmental negotiations:

- The negotiations in the preparation phase of the United Nations Conference on Environment and Development in Rio and during the conference itself (1990-1992)
- The Intergovernmental Panel on Forests (1995-1997)
- The Intergovernmental Forum on Forests (1997-2000)
- The United Nations Forum on Forest (2001-ongoing)

The overall concept of Global Governance was developed to establish a representatives and democratic system of the United Nations that should replace the traditional geopolitical forms of international dominion. Governance goes far beyond government and means a collection of written and unwritten rules by which people share power, make choices, implement action and achieves results. Global *Environmental Governance* is related to the overall purpose of maintaining the integrity of the global ecosystems for the common good of all people (Yale).

2. The structure of the international forest regime

The international forest regime consists of many compartments that are closely linked together. The basis of international cooperation is still built by the **nation on states** and, as is the case with the European Union, supranational entities. Both contribute to international organizations in the form of policy ideas, data, financial funding, personnel and technical support. International organizations, in the forest sector especially sub-units of the United Nations structure like the IPF, IFF and UNFF, are designed as temporary or permanent bodies that receive support from advisory bodies. For that purpose, in former times the Interagency Task Force on Forests was established. Taking into consideration the new tasks of the United Nations Forum on Forests, this advisory body was transformed into the Collaboration Partnership on Forests. International organizations create **agreements** in the form of hard law, soft law and civil society agreements. I will come back to this issue later on. On the other hand, these agreements can initiate the establishments of new official or advisory bodies or restructure their tasks and working conditions. For instance, the creation of a Global Forests Fund is discussed at the moment. Such an organization could support less developed countries in their efforts to promote sustainable forest management. Agreements have to be **implemented** by the nation states, supra-national entities and/or in regional approaches, e.g. the Helsinki-Process or the Montreal Process.

It should be mentioned that 42 % of the IPF/IPF proposals of action are addressed toward countries, 27 % refer to countries and international organizations, and 9 % have to be implemented in cooperation between countries, international organizations and major groups (Puelzl and Rametsteiner).

On the other hand, regional and bilateral approaches provide valuable input and expertise for the official and advisory bodies. Of course, regional approaches are closely linked to the policy issues of the Nation states and supranational entities in the respective areas.

These processes of policy formulation and implementation are embedded in a theoretical framework consisting of concepts and procedures. **Concepts** can be defined as political ideas or visions and scientific paradigms in the field of forest

policy that are accepted by a majority of actors. Important concepts are Sustainable Forest Management (including economic, environmental and social-ethical concerns), Criteria and Indicators, National Forest Programmes or the Natural Disturbance Paradigm. **Procedures** refer especially to the principles of decision making, e.g., transparency; participation; multi-stakeholder approaches; ad-hoc meetings and intercessional work, but also to monitoring, assessment and reporting.

The International Forest Regime has several linkages to other environmental regimes, e.g. in the field of biodiversity, climate, desertification, water. However, we should not forget the link to the economic regime, especially questions of trade. The forest issue was one of the reasons for the battles in the streets of Seattle where the future tasks of the World Trade Organization (WTO) were discussed. The WTO regime is of relevance for forests because it regulates all trade, including timber and timber products, and since trade liberalization can have both positive and negative effects on the exploitation of forests (Ruis).

3. Multilateral Agreements on Forests

a) Typologies

Currently, more than 500 multilateral environmental agreements can be counted; 60 % of them have come into existence since the Stockholm Conference in 1972 (Esty & Ivanova). On the regional or bilateral level, their number could be greater than 1000 (Handbook). A lot of these agreements deal with forests in a direct or indirect way. For the multilateral agreements related to forests, several typologies are available.

Ruis (2001) gives an overview about the ten most important "tree treaties", as she calls it. She highlights the fact that three conventions have to be seen as the most important ones: The Framework Convention on Climate Change, The Convention on Biological Diversity and the Convention to Combat Desertification. Meanwhile 95 % of all nation states have ratified the Climate Change Convention, and 92 % are parties of the Convention on Biological Diversity.

The most comprehensive typology originates from the Costa Rica – Canada Initiative within the Process of the Intergovernmental Forum on Forests.

The final report of the Initiative identifies 33 international agreements that are relevant for forestry under the following headlines:

- I. Hard law agreements directly related to forestry
- II. Hard law agreements indirectly related to forestry
- III. Soft law commitments and processes
- IV. Civil society initiatives.

The first category, i.e. legally binding agreements **directly** related to forests, comprises the International Tropical Timber Agreement (ITTA), the Agreement for the Conservation of the Biodiversity and Protection of Priority Forest Areas in Central America and the Regional Convention for the Management and Conservation of Forest Natural Ecosystems and the Development of Forest Plantations. It should be mentioned that the International Tropical Timber Agreement is the only international agreement that directly addresses a wide range of aspects of sustainable development. About 22 hard-law agreements have to do indirectly with

forestry, especially the conventions on biological diversity, climate change and desertification. Currently, the CBD is the only international legally binding instrument to which actions and activities relating to conservation, sustainable use, management and forest genetic resources can be referred at the global level. The special relevance of the Framework Convention on Climate Change for forestry has to be seen in the context that, according to the IPCC, forestry has the potential for offsetting approximately 15 % of the world's greenhouse gas emissions. The Kyoto-protocol mentions afforestation, reforestation and deforestation as land use activities that have to be considered in efforts to achieve the framework's aims (Moura-Costa).

Examples for **soft law** commitments and processes are the Helsinki and Montreal Processes, the Forest Principles and Chapter 11 of Agenda 21. according to Humphreys (2002), the IPF and IFF proposals can also be subsumed under the category of soft law.

Above others, **civil societies initiatives** become obvious in the United Nations World Charter for Nature, and – in the field of certification – the International Standards Organization Approach and the Forest Stewardship Council.

b) The Struggle about a Legally Binding Instrument on Forests

As could be shown, forest issues are addressed in many existing multilateral agreements and treaties. In contrast to biodiversity, climate and desertification, on consensus for a convention in the forestry sector has been realized up to now, especially due to different views of northern and southern countries. That means that there is no global legally binding instrument that would deal with forest issues comprehensively and comprise all goods and services forest provide. The forest principles only reflect a *first* global consensus on forests.

(cf. Unasylva)

During the preparations for the UNCED in Rio, there was a clear division between proponents and adversaries of a forest convention. The opinion of the nation states showed a North-South cleavage. Most Northern states were favoring a convention, assigning the role of global Commons to the forests. Only a few of them feared a loss of power and increasing financial burden, especially for Official Development Aid. Countries of the South opposed, arguing there would be a loss of sovereignty and no real burden-sharing. The majority of non-governmental organizations were in favor of a convention because at that time they thought a convention would be the only instrument that could protect the forests effectively.

At the United Nations General Assembly Special Session in 1997 (often called Rio plus 5), the situation had changed. The European Union and its member states, and also Canada, Russia, but also Malaysia and some developing countries now were in favor of a convention. On the other hand, the United States, Brazil, India, Australia and New Zealand opposed against it. A majority of the NGOs changed their view and opposed against a convention that would fix weak standards of forest protection.

Today, the idea of a forest convention is still alive, although the level of support is relatively low. The task for the international organizations is formulated as follows: "With respect to a convention it was agreed that the UN Economic and

Social Council (ECOSOC) and the General Assembly would "within 5 years ... consider with a view to recommending the parameters of a mandate for a legal framework on all types of forests".

4. The Concept of Global Environmental Governance

According to many scientists, the state of the current environmental regime is disappointing. The diagnosis of the Yale Center for Environmental law and Policy enlists failed collective action; fragmentation in the field of responsibilities, funding, priorities, roles, actors and geographic locales; deficient authority; and insufficient legitimacy. It is argued that the world has changed considerably since the United Nations Environmental Programme (UNEP) was established in 1972 and that this organization is not able to respond to the challenges of international environmental policy. However, deliberations for a global environmental organization are not new. It was even in 1970 that an International Environmental Agency was advocated (Esty & Ivanova). Recent proposals have been discussed under the headlines *Global Environmental Organization* or *International Environmental Organization*.

According to the Yale project Group, a global UN organization for environmental questions should consolidate, streamline and strengthen existing elements of UN Systems devoted to the environment. The core function of a new Global Environmental Organization should be to fashion a coherent and effective international response to global-scale pollution control and natural resource management issues. The German Advisory Council on Global Change also proposed to centralize several functions in the field of environmental policy and to establish a hierarchical order for international environmental policy making.

A global environmental regime could also serve as a counterpart and counterbalance to the World Trade Organization, World Bank, International Monetary fund and other elements of the international economic regime (Esty & Ivanova).

The Yale model shows the structure of a triple umbrella. It integrates various international environmental bodies with different degrees of intensity: consolidation, coordination and consultation. The center of the entity should be a Global Environmental Organization, formed by organizations responsible for global commons: UNEP, WMO, the international Oceanographic Commission (IOC) and the International Hydrological Programme of UNESCO (IHP). The second level would comprise structures and secretariats of multilateral environmental agreements strongly controlled by the GEO. The third level would involve international bodies that have environmental responsibilities, e.g. CSD, UNDP, FAO, WHO and UNESCO with strong and permanent consultation links.

5. Conclusions

Today, there is a broad agreement that an international forest regime has emerged. However, many issues are not adequately by the existing regime, comprising, *inter alia*, national forest programmes, forest conservation and protected areas, deforestation and forest degradation, monitoring transfer of technology and financial resources, valuation of goods and services. The existing rules show gaps and overlaps, lack of synergies, uncertainty in focus, limitation in effective imple-

mentation and compliance. For covering the gaps in existing agreements, three options are available:

- a. amendment of existing conventions
- b. adopting of piecemeal approach
- c. or the conclusion of a comprehensive agreement on forests taking into account all functions of forests in a balanced way.

There are several strong arguments in favor of the third option, i.e. the development of a forest convention. First, in contrast to the actual situation where forest issues are dispersed under more than one multilateral instrument, they would be more visible if addressed under a single instrument. Second, it could be potentially detrimental to forests to focus attention only on synergies among existing treaties. Third, if forest issues are dealt under separate agreements, it is difficult to balance the value of forests as a resource with the value of forests as a source of products.

However, there are a lot of obstacles that have to be removed before a forest convention can be agreed on. There is a general decrease in willingness to come to global agreements. In addition, the forest convention issues had been postponed several times and it is not sure when the next "window of opportunity" will open. Moreover, there are still efforts to integrate forest issues as a protocol to the CBD.

To conclude, the question in the title of the presentation can be answered as follows: Yes, the international forest regime *could be* a pivotal part of Global Environmental Governance. For that purpose, it should be strengthened, especially in the form of a global convention on forests for their protection and their sustainable use. Otherwise the danger might occur that forest issues will not be dealt with adequately within the emerging system of global environmental rule-making. We should not forget that sustainable managed forests – the word sustainable has to be stressed – will serve as important sources for wood as a renewable resource and other products and services in future, too.

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БІОГЕОХІМІЧНА РОЛЬ ЛІСОВИХ ЕКОСИСТЕМ У БІОСФЕРІ ТА ЗАВДАННЯ НАЦІОНАЛЬНОГО ЗАКОНОДАВСТВА І МІЖНАРОДНИХ КОНВЕНЦІЙ ЇХ ЗБЕРЕЖЕННЯ

Розглянуто біогеохімічну роль лісових екосистем у становленні та еволюції біосфери, її функціональної організованості. Розглянуто техногенний вплив на біосферу.

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Biogeochemical function of forest ecosystems in the biosphere and national legislation and international conventions tasks of their preservation

Biogeochemical role of forest ecosystems in formation and evolution of biosphere have been considered. Human influences on biosphere have been analyzed in the paper.

Вступ

Лісові формації, які виникли ще у середньому девоні (близько 250 млн. років тому), як панівний, найбільш продуктивний і найбільш довговічний тип рослинності, виконували вирішальну біогеохімічну функцію в еволюції біосфери та встановленні її функціональної упорядкованості. Вона полягала: у забезпеченні антиентропійної суті живої речовини (в розумінні В.І Вернадського [2] завдяки концентрації енергії сонячного випромінювання протягом геологічного періоду; у формуванні педосфери (разом з іншими типами рослинності); стабілізації сучасного киснево-вуглекислотного балансу у біосфері (разом з іншими типами рослинності та Світовим океаном); депонуванні запасів вуглецю та інших хімічних елементів; формуванні глобального клімату; сприянні еволюційного процесу в рослинному і тваринному світі та мікобіоті, пов'язаних з лісовим середовищем.

З появою у четвертинному періоді людини (близько 3 млн. років тому) і формуванням соціосфери, лісові і лісостепові ландшафти мали життєво важливе екологічне, економічне та соціальне значення для розвитку цивілізації. Жодна із ранніх цивілізацій не могла обійтися без лісосировинних ресурсів, які мали для людини енергетичне, будівельне та частково харчове значення. За деяким винятком і зараз найбільш заселені місця на Землі розташовані в регіонах, які перебувають під впливом клімату лісових біомів, що дозволяє розвивати сільськогосподарську інфраструктуру.

Протягом тривалого геологічного періоду, а згодом агрокультурної доби в лісовому покриві Землі відбувалися істотні територіальні та якісні трансформації – природні та антропогенні. До природних трансформацій, які мають здебільшого локальний характер, належать дія вулканів, водної стихії, природних пожеж, піщаних бур. У більших глобальних масштабах проявився антропогенний вплив – селитебний, пасторальний, агрокультурний. Протягом агрокультурної доби, що триває коло 10000 років, було трансформовано 65 % лісів на площі, яку вони колись займали [9]. В останні століття значної шкоди лісам завдає вплив беллоїдний (пов'язаний з воєнними діями) та зокрема техногенний.

Згідно з ФАО та іншими літературними даними [4, 7] площа лісів світу становить зараз 3870 млн. га, лісові формації покривають 30 % суходолу. Найбільш продуктивні вічнозелені дощові тропічні та субтропічні ліси займають у лісовому фонді світу 56 % ліси кореальної та поміркової зони – 44 %. За даними І.Я. Гуревича [6], загальний запас деревини у лісах світу становить 160 млрд. м³, а щорічний приріст – 3,3 млрд. м³.

Відзначимо, що природні ліси тропічної і субтропічної зон відіграють особливо важливу роль у підтриманні у біосфері балансу O₂/CO₂ та збереженні біологічної різноманітності. У них зосереджено коло 50 % генофонду органічного світу. Для порівняння відзначимо, що загальна площа сільськогосподарських угідь у світі не набагато перевищує три мільярди гектарів. У багатьох навіть економічно розвинених країнах Європи ліси займають більшу площу ніж землі сільськогосподарського призначення. За даними ФАО у 1990 р.