

independent of the fact that until now that the Antarctic protection mechanisms expressed in the Antarctic Treaty have been successful and that one can validly argue that it makes up an international custom with respect to the treaty to make its principles valid against third party states not party to the Antarctic Treaty.

## **Forests under international climate change law**

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### **1. Climate Change, Global Deforestation and Forest Degradation**

Climate change (CC) is one of the most significant environmental threats nations worldwide are facing nowadays. CC is defined as a change in the state of climate that can be identified by changes in the mean and/or the variability of its properties: temperature, precipitation, sea level, etc.<sup>1</sup>. Hurricanes in the USA, floods in Europe, forest fires in the Russian Federation, as well as other natural catastrophes and other weather extremes, most certainly influenced, if not caused, by CC all around the World, have become quite common. The majority of academics with more than 90% confidence believe that the recent CC is mainly caused by the persistent increase in anthropogenic greenhouse gases (GHG) concentrations in the atmosphere<sup>2</sup>. Such gases are primarily released by burning of fossil fuels, deforestation and forest degradation.

Deforestation is mainly caused by the conversion of forests to non-forest land available for other uses, such as infrastructure or agriculture. Besides conversion, deforestation is also caused by forest degradation, a gradual destructive process such as decrease in tree cover, changes in forest structure, or a reduction in the number of species. Climate change, forest fires, and illegal logging are driving this kind of deforestation<sup>3</sup>.

Current global deforestation rates are alarmingly high. The average net annual forest loss between 2000 and 2010 is estimated at 5,2 million hectares (ha) per year<sup>4</sup>. According to FAO Global Forest Resources Assessment, forest

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<sup>1</sup> Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Synthesis Report*, 2007, pp. 76-89.

<sup>2</sup> Ritter K., *Addressing Climate Change is the Responsibility of Developed Countries*. URL: [http://www.huffingtonpost.com/2012/12/05/ban-ki-moon-climate-change\\_n\\_2242395.html](http://www.huffingtonpost.com/2012/12/05/ban-ki-moon-climate-change_n_2242395.html), последнее посещение 06.03.2013.

<sup>3</sup> European Commission, MEMO/08/632, 17 October 2008, pp. 1-4.

<sup>4</sup> FAO, *State of the World's Forests*, 2012, p. 16.

area covers 4,4 billion ha, or more than one third of the land area on our Planet. If the world's forest area continues to decline in such a way, it will take only 775 years to lose all the forests on Earth<sup>1</sup>.

Contemporary science proves that the two global environmental problems, such as climate change and global deforestation, are interdependent<sup>2</sup>. On the one hand, CC disadvantages health and vitality of trees. On the other, forest degradation and deforestation release carbon stored in each tree and soil into the atmosphere and reduce carbon uptake by forests, thus, contribute to CC.

In order to be effective, laws, designed to solve the environmental problems, should take into account the scientific evidence on the interdependence of CC and global deforestation. Traditionally the two environmental problems have been regulated in international law largely as separate and distinct. Based on the contemporary scientific evidence, more attention should be paid to deforestation role in climate change international law.

## **2. International Law on Forests**

The recognition of deforestation as an environmental problem with, at least in part, global causes and impacts, has allowed to view forests as a subject of international law and policy. However, the development of international law on forests has been hampered by the prevailing principle of state sovereignty over natural resources<sup>3</sup>. As an essential component of international legal order, such principle inspires claims that a state's policies on forests, their conservation, and management are not a proper subject for international law.

Principle 2 of the Rio Declaration on Environment and Development, which was adopted at the 1992 Earth Summit in Rio de Janeiro, stated that "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or areas beyond the limits of national jurisdiction"<sup>4</sup>. This principle was confirmed in Principles 1(a) and 2(a) of the 1992 Non-Legally Binding Authoritative Statement of Principles for

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<sup>1</sup> FAO, Global Forest Resources Assessment, 2010, p. XVII.

<sup>2</sup> Писаренко А.И., Страхов В.В., Важность протокола Киото для лесного хозяйства России. – М., Лесное Хозяйство, 2008, № 2, - с. 2-4; Страхов В.В., Лесной аспект глобальных климатических изменений. – Спб., Охрана Окружающей Среды и Природопользование, 2008, № 2, - с. 2-21; Food and Agriculture Organization of the United Nations (FAO), Forest management and climate change: a literature review, 2012; FAO, Forests and Climate Change, 2013.

<sup>3</sup> Kiss A., Shelton D., Guide to International Environmental Law, Martinus Nijhoff Publishers, 2007, pp. 11-14.

<sup>4</sup> Declaration of the United Nations Conference on Environment and Development, adopted 14 June 1992.

a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests (Forest Principles)<sup>1</sup>, also adopted in Rio. Hence, the rights associated with sovereignty were also protected and preserved by an international forest instrument.

In 2007 the Non-legally Binding Instrument on All Types of Forests (NLBI) reaffirmed the message about sovereignty, but only within its preamble<sup>2</sup>. The fact, that states did not insist on recognizing sovereign rights in the articles of the agreement, perhaps, show evidence of a slight shift in states' willingness to accept some small limitation upon domestic forest use, management and conservation policies. Notwithstanding the slight shift, the emphasis on sovereignty over the economically valuable natural resource has resulted in the present absence of a universal legally binding framework document on forests. The new round of international negotiations on a (binding) forest treaty is set for 2015<sup>3</sup>.

As a consequence of the strong influence of the principle of state sovereignty over natural resources on the adoption of a universal agreement on forests, the contemporary international law on forests is highly fragmented<sup>4</sup>. The international regime on forests consists of multilateral intergovernmental treaties and agreements which address forests, either focusing on sustainable forest management (SFM), or more specific goals such as biodiversity conservation or climate change mitigation, and have achieved or have the potential to achieve significant effect on forests<sup>5</sup>.

The core component of the international forest regime is the latest global soft-law agreement on forests - the NLBI. Although it is a soft law agreement, the NLBI is considered as a document with legal significance in codifying and applying existing principles of international law to the context of forests: national sovereignty, states' responsibility, international cooperation. The NLBI major objective to "reverse the loss of forest cover worldwide through

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<sup>1</sup> Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests, adopted 14 June 1992.

<sup>2</sup> Non-legally Binding Instrument on All Types of Forests, adopted 17 December 2007, preamble, article II, 2 (b).

<sup>3</sup> MacKenzie C. P., *Lessons from Forestry for International Environmental Law*, *Review of European Community and International Environmental Law (RECIEL)*, 21 (2) 2012, p. 114.

<sup>4</sup> For more information on fragmentation see, International Law Commission (ILC), *Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law*, Report of the Study Group of the ILC, 2006, pp. 256.

<sup>5</sup> Gluck P., Angelsen A., et al., *Core Components of the International Forest Regime Complex, Embracing Complexity – Meeting the Challenges of International Forest Governance*, pp. 37-38.

sustainable forest management [...] and increase efforts to prevent forest degradation”<sup>1</sup> presents the overarching goal with regard to global forests.

Other agreements, multilateral treaties and acts of international organizations, which constitute the international forest regime, have historically developed to address particular issues. To give just a few examples of the binding international forest law’s fragmented nature: trees as commodity in the International Tropical Timber Agreement<sup>2</sup>; forests as home to biological diversity in the UN Convention on Biological Diversity (CBD)<sup>3</sup>; trees as sinks of carbon dioxide in the climate change regime, etc.

### **3. International Climate Change Law**

The core components of the international regime on climate change are the 1992 UN Framework Convention on Climate Change (UNFCCC) and its 1997 Kyoto Protocol (KP)<sup>4</sup>. The first commitment period of the KP to the UNFCCC, which sets binding limitations on GHG emissions, came to its end in 2012. Although the Protocol was amended to last for the second commitment period of 2013 to 2020, the future of its ratification is still very vague. This is due to the fact that the World’s largest emitters, namely the USA, China, India, and other countries, had chosen not to put any limits on their emissions and refused to enter the binding Protocol.

As for the UNFCCC, currently there are 195 parties to it, indicating almost universal perception that the CC problem needs to be addressed. In an effort to overcome the paradigm of States’ sovereignty and to stress that CC is an issue in respect of which all States have legitimate concerns, the UNFCCC acknowledges that the change in the Earth’s climate and its adverse effects are a common concern of humankind (CCH)<sup>5</sup>.

The ultimate objective of the Convention and any related legal instruments of the CC regime is to achieve “stabilization of GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”<sup>6</sup>. The UNFCCC also sets other general obligations related to mitigating the adverse risks of CC. Some of such obligations refer directly to forests.

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<sup>1</sup> Kyoto Protocol to the UNFCCC, adopted 11 December 1997, in force 16 February 2005.

<sup>2</sup> International Tropical Timber Agreement, adopted 1 January 1994, in force 1 January 1997.

<sup>3</sup> Convention on Biological Diversity, adopted 5 June 1992, in force 29 December 1993.

<sup>4</sup> Rayfuse R. and Scott Sh. V. (eds.), *International Law in the Era of Climate Change*, Edward Elgar Publishing Limited, 2012, pp. 378.

<sup>5</sup> United Nations Framework Convention on Climate Change, adopted 9 May 1992, in force 21 March 1994, preamble.

<sup>6</sup> *Supra* Note 18, preamble.

#### 4. Forests under the UNFCCC

In its preamble the UNFCCC states, that its Parties “are aware of the role and importance in terrestrial and marine ecosystems of sinks and reservoirs of GHG”<sup>1</sup>. Article 1 of the Convention further explains that a “reservoir means a component or components of the climate system where GHG or a precursor of a GHG is stored”<sup>2</sup>; a “sink means any process, activity or mechanism which removes a GHG, an aerosol or a precursor of a GHG from the atmosphere”<sup>3</sup>. Such definitions are broad and easily encompass services performed by trees and forest soils.

All parties to the Convention, protecting “the climate system for the benefit of present and future generations of humankind [...] and taking into account their common but differentiated responsibilities”<sup>4</sup>, and on the basis of precautionary principle “should anticipate, prevent and minimize the causes of CC and mitigate its adverse effects”<sup>5</sup>. “Policies and measures to deal with CC should cover all relevant sources, sinks and reservoirs of GHG”<sup>6</sup>.

All parties agree to “promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all GHG not controlled by the Montreal Protocol, including biomass, forests and oceans, as well as other terrestrial coastal and marine ecosystems” [22, art. 4 d]. Thus, art. 4 creates an obligation in relation to forest areas. However, the precise legal scope of “sustainable forest management” concept is not clear: there is no one authoritative definition of SFM, no one list prescribing the criteria of SFM, nor one globally agreed form of implementing SFM.

Article 4.8.(c) of the UNFCCC requires parties to “give full consideration to what actions are necessary [...] to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures, especially on countries with [...] forested areas and areas liable to forest decay”. Such actions may include funding, insurance and the transfer of technology to these countries. Thus, the UNFCCC gives a special recognition to forest-dependent countries.

The UNFCCC is not the only legal tool among CC regime instruments that regulate forests. The KP, for example, deals with the types of forest activities that

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<sup>1</sup> Supra Note 18, preamble.

<sup>2</sup> Supra Note 18, art. 1.7.

<sup>3</sup> Supra Note 18, art. 1.8.

<sup>4</sup> Supra Note 18, art. 3.1.

<sup>5</sup> Supra Note 18, art. 3.3.

<sup>6</sup> Supra Note 18, art. 3.3.

are suitable to achieve the objectives of the Protocol: the Clean Development Mechanism (CDM) forestry rules and the Reduced Emissions from Deforestation and Degradation (REDD) initiative. The Land Use, Land Use Change (LULUCF), and Forestry Guidelines further explain CDM and REDD.

## **5. Concluding Remarks**

Fragmented nature of the international forest regime allows for forest regulation by various international law instruments each addressing particular issues. For instance, the UNFCCC refers to forests mostly as “sinks” and “reservoirs” of carbon dioxide. Other CC regime instruments also regulate forests, each from its own perspective.

Since CC regime is a young and rapidly developing international regime it is presupposed that, having much stronger political support in the international arena at present, the regime may become dominant in setting the future international forest policy agenda.

However, since CC international law, at least in part, constitutes the international regime on forests, there is also a concern that the complexity and uncoordinated manner of the international forest regulation may lead to conflicts within the latter regime (a situation where two treaties suggest different ways of dealing with a problem). For instance, the international climate change regime encourages the development and use of renewable energy production, which subsequently increases global demand for wood. Some experts expect a nearly six-fold increase in the world demand for fuel wood by 2060<sup>1</sup>. Such an increasing demand for bio-energy from forest products may become a further driver of deforestation and forest degradation. Thus, conflicting with the overarching goal of the international forest regime of “reversing the loss of forests cover worldwide through sustainable forest management [...] and increase efforts to prevent forest degradation”<sup>2</sup>.

In order not to exacerbate the two environmental problems, such as climate change and global deforestation, there is a need for further legal study to outline the overlapping and conflicting norms and suggest ways of dealing with such conflicts. How the international regime on forests functions as a whole and how its various elements interact with each other require further legal investigation.

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<sup>1</sup> Raunikar R., Buongiorno J., et al, Global Outlook for Wood and Forests with the Bioenergy Demand Implemented by Scenarios of the Intergovernmental Panel on Climate Change, Forest Policy and Economics, 12, 2010, p. 48.

<sup>2</sup> Non-legally Binding Instrument on All Types of Forests, adopted 17 December 2007, par. IV, Global Objective 1.