International Legal protection of forests in the context of sustainable development.

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Abstract. The legal attention to the protection of forests is the key axe to protect the environment in the world, as well as ensuring the economic and social development for generations. Effective legal protection of forest heritage can be achieved only under the sustainability model. This latter ensures the exploitation of forest heritage as an important economic resource while preserving its ecological value in front of contemporary environmental threats, also estimating its role in meeting the social needs of the local population. The international society had paid attention to the importance of this vital wealth and started looking for appropriate mechanisms to protect them, while organizing how to exploit them as an economic resource, besides their social place and cultural aspects. This paper will deal with how does international law devote legal protection to a forest in the light of the sustainable development approach, especially after the united conference on environment and development in 1992.

Keywords: Forests, Environment, Sustainable development, Legal protection, Management

1. Introduction

Forests in particular and forest heritage such as biodiversity, in general, constitute an area of 31 percent of the total surface of the land in the world, that is, about 4 billion hectares, which alone contain more than two-thirds of the diversity in the world. 93 percent is natural forests, which are forested areas where there are no indications of human intervention. These basic forests, especially humid and tropical forests, are among the world's richest ecosystems in terms of species and ecological diversity [1].

Forests and trees in many developing countries constitute major sources of livelihood, especially for the poor and indigenous peoples, where they meet their needs for food, medicine and cash income, in addition to the biofuels that wood provides for cooking and heating, and thus they serve as economic and ecological safety nets for what it generates the resources and services it provides.

Although the crucial place of forest in the human life, the issue of its protection has not received sufficient attention unless in the last decade of the twentieth century because of the destruction values of forests, that led to prejudice to the natural environment. In addition, it affects and is affected by other natural phenomena such as climate change, desertification, drought, floods, natural disasters, and so on. Hence, there is a necessity to ensure the preservation of forest wealth, through sustainable exploitation of its assets in the context of sustainable forest management.

Based on the vital and the multiple roles of the forest, the study will deal with how were the forests in the world have been protected. Hence, it's divided into two axes:
- The ecologic protection of the forest.
- The economic management of the forest.

2. The protection of the forest from an ecological perspective.

2.1. The direct protection of forest in UNCED 1992.

The United Nations Conference on Environment and Development, which was held in Rio de Janeiro in 1992, known as the Rio Conference, was an important turning point in the path of the issue of environmental protection in general and also on the issue of protecting forest resources. In essence,
this conference aims to establish sustainable protection for the components of the environment, in a
way that ensures reconciliation between the requirements of environmental protection and the
requirements of development [2].

In sum, the 1992 Rio Conference resulted in three statements and two agreements. In what follows,
it will be dealt with documents directly related to the forest and forestry domain, and explain the
relationship of each document to forest protection.

2.1.1. Forest non-binding declaration. The text of this declaration reflects a global political consensus
on the need to protect forests and recognize the critical role of forests in sustainable development. The
purpose of this declaration is to recognise the essential and indispensable role of the forests, in
addition to a statement of sound management that takes into account the multiple functions and uses of
forests of all kinds [3].

This declaration bears a political character and not legally binding, but it has the authority on states
because it calls to a moral obligation vis-à-vis the principles stated within it. It is considered
acceptable in international law that the values and ethical principles expressly recognized by states
pledge to respect them, not by the obligation to fulfil a result is rather an obligatory
behaviour [4]. Thereby, this declaration took a middle ground between binding international law provisions and
voluntary courtesy requirements.

2.1.2. Agenda 21 (UNCED 1992).
This agenda covers many issues, including climate change, deforestation, desertification, ocean
protection ... etc. It focuses more explicitly than the Stockholm Action Plan on the interdependence of
economic, environmental, social and development issues, and seeks to integrate these goals within the
established protection of the environment [5].

As for the issue of deforestation, the 11th Chapter of the agenda dealt with the state of forests and
their management. This chapter drew attention to promoting the protection, sustainable management
and preservation of all forests by repairing degraded areas through afforestation, forest restoration and
other means of rehabilitation. Moreover, it focused on enhancing the scope and effectiveness of
activities related to the management, conservation and sustainable development of forests, and
emphasizing the assessment and regular monitoring of forests and related programs, projects and
activities, including trade and commercial operations [6].

Although the Agenda for the 21st Century is not mandatory, because the goals contained therein
came in the form of recommendations or in conditional formulation (should ..., for this purpose must ...
... etc.), it was established as a comprehensive action plan to promote sustainable development within
the framework of the Environment Conference Development in 1992 [7]. It is a significant work that
came in 800 pages in an attempt to reconcile the opposing trends to achieve sustainable development.

2.2. The indirect protection of forest in international law.

The international community has adopted a sectoral approach in protecting the elements of the
environment, such as biodiversity, combating climate change, fighting desertification etc., with
binding conventions. And mainly these three precedent conventions (the Rio Conventions), the
Convention on Biological Diversity (CBD), the United Nations Convention to Combat Desertification
(UNCCD) and the United Nations Framework Convention on Climate Change (UNFCCC),
acknowledge the important contribution of forests to the achievement of their respective goals and
objectives [8].

2.2.1. The protection of forest within the Convention on Biological Diversity (CBD). The Convention
on Biological Diversity is an international legally-binding treaty with three main goals: conservation
of biodiversity; sustainable use of biodiversity; and the fair and equitable sharing of the benefits
arising from the use of genetic resources [9]. This convention has relevant to forests as long as this
latter is a natural element, contains vegetable and animal components like trees, being, and habitats.
Indeed, to promote the effective implementation of this Convention, the Strategic Plan for Biodiversity 2011–2020 [10], has adopted by the tenth Conference of the Parties (COP), in order to stop the loss of biodiversity and the degradation of ecosystems, and continue to provide essential services for human well-being and livelihoods. In more detail, this plan pointed out directly to the conservation of forest biodiversity in several targets such as:

**Target 5.** “The rate of loss of all-natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation are significantly reduced”.

**Target 7.** “All areas under forestry are managed sustainably, ensuring the conservation of biodiversity”.

**Target 14.** “Ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded”

**Target 15.** “Enhance the resilience and the contribution of biodiversity to carbon stocks through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification”.

2.2.2. *The protection of forest within the United Nations Convention to Combat Desertification.*

The United Nations has undertaken the search for a legal regulatory framework in order to combat desertification after the international community recognized that it is a global problem of major economic, social and environmental dimensions that worries many countries in the world, since the Conference on Environment and Development in Rio de Janeiro in 1992 [11]. As it became necessary to give greater importance to the problem of desertification in light of the continuous expansion of the geographical areas that are decertified annually due to deforestation and drought, and the consequences of the phenomenon that threaten human security in all its dimensions.

According to the United Nations Convention to Combat Desertification, desertification is defined as the degradation of land in arid, semi-arid and arid regions as a result of various natural and human factors, which leads to the loss of the land's ability to agricultural production and support life [12].

The United Nations Convention to Combat Desertification of 1994 was adopted after the negotiations that were launched in Nairobi in 1993 in order to deal with the tragic effects of drought and desertification [13]. The aim of the agreement is to combat desertification, mitigate the effects of drought and contribute to sustainable management of forests, which is an important measure of the corrective measures envisaged in the UNCCD [14]. It contains four regional annexes, the first is in Africa, the second is for Asia, the third is for Latin American and Caribbean countries, and the fourth is for the northern Mediterranean countries. Most of these annexes recommend cooperation between all national and regional levels in order to achieve the objectives of the agreement.

The link between forests and desertification is based on socio-economic considerations because the causes leading to desertification and the causes of deforestation are often similar, and the link is also based on environmental considerations, because forests perform the function of mitigating the effects of drought, and thus preventing desertification, especially the way to help stabilize the soil and preserve its fertility. In this context, the second article of the agreement addresses in the second paragraph the duty to implement "long-term integrated" strategies that focus on improving land productivity, its rehabilitation, conservation and sustainable management of land and water resources, as the strategies developed and adopted in Combating desertification and deforestation converge and depend on each other.

In the context of a relationship between forests and desertification, an integrative approach aimed at sustainable forest management was adopted as an effective measure in order to achieve the common goals among the Rio conventions (the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, the Desertification Convention) within the Sixth Conference of the Parties to the Convention on Desertification (Cop 06).

In its decision 12, Cop 06 recognized the importance of all activities that aim at encouraging and strengthening relations with other relevant conventions, organizations, institutions and relevant
international agencies, as forms of synergies between the Rio conventions were strengthened through the work of the joint liaison group. The conference focused on the importance of cooperation between those in promoting activities in countries with limited forest cover to combat desertification, land degradation and deforestation [15].

Finally, we see that the conservation, protection and development of forests is an important method for combating desertification within the Convention to Combat Desertification, which is binding in reality, but is very limited in terms of addressing the issue of forests, as it does not clearly specify the inclusion of forests within the protection and sustainable management programs.

3. The economic management of the forest.

3.1. The development dimension of protecting the forest.
Humans have depended continuously on forests in order to achieve development, including wooded lands, scattered trees. The forest contributes deeply to providing building materials, firewood, food, medicine, fodder, timber, and poles, as well as primary raw materials for industry.

3.1.1. Forests the source of products and services. Forest resources are an important and the main commodity in maximizing the economic output on which people and groups have relied since ancient times. However, the expansion of the needs of the modern man to satisfy his desires has increased the demand for this resource, where it should be noted that developed countries, especially those whose economies suffered from deterioration during the Second World War, sought to maximize their gross domestic product in any way, so they overused their resources. The local natural products, including wood and non-wood forest products, wherever they are and in any way, as they were able to achieve growth and a surplus in their gross domestic product.

For developing countries that have the largest proportion of forest wealth, such as tropical developing countries, especially after most of them were freed from the economic control and direct dependence on developed countries, and their adoption of a productive and transformative economic policy based on the excessive exploitation of their natural resources, after the rise in the prices of raw materials. In the world, as a result of the depletion of some of the reserves of these resources, in the endeavour of these countries to exploit these resources to maximize their domestic production, thus benefiting from the policy of global economic openness.

3.1.2. The contribution of forests to the green economy.
The economic viability of forests within a green economy is embodied in the fact that they are a major part of the "ecological infrastructure" that supports human well-being. Forest services and goods support the economic livelihood of more than 1 billion people, and forests provide environmental services that cannot be replaced most of the time, as the house 80% of the species that live on the surface of the Earth, and provide the ecological foundations for GDP in many other sectors: Agriculture, tourism, water supply, health, and other sectors that depend on the biological aspects [16].

The current high rates of deforestation and forest degradation are attributable to the demand for wood products, and to pressures related to other land uses, such as agriculture and livestock in particular [17]. Among the contributions of forests in achieving a green economy, they appear within the green energy sector, and within the green construction sector [18], as well as providing green jobs [19], which contribute to reducing many environmental problems, especially climate change.

3.2. The Tropical Timber Agreements.
Countries adopted two binding instruments that govern the international trade in tropical timber, under the title of the International Tropical Timber Agreement, the first one took place in the year 1983 [20], while the second one was in the year 1994 [21].

3.2.1. The Tropical Timber Agreement of 1983. After six years of negotiations sponsored by the United Nations Conference on Trade and Development (UNCTAD), it has been adopted an agreement
about the management of tropical timber. The primary purpose of the agreement was to improve international trade in tropical woods and to protect tropical forests with regard to international trade, where it pointed out the conservation of forest genetic resources but not in detail [22].

The agreement establishes the International Tropical Timber Organization (ITTO) to ensure implementation of the agreement provisions, as well as to monitor its respect [23]. The International Tropical Timber Organization (ITTO) remains to date the only organization dealing on the one hand with the commercial aspects of the international trade in tropical woods, and on the other hand, with the environmental aspects of managing tropical forests. However, still remained the difficulty in reconciling the commercial and environmental aspects of tropical forests, which are often contradictory.

3.2.2. The International Tropical Timber Agreement, 1994. An agreement was adopted on January 26, 1994, to replace the International Tropical Timber Agreement of 1983. Among the main objectives of this agreement is to promote international trade in tropical wood and to encourage, expand and diversify forest products, provide an effective framework for international consultation, cooperation and policy development among all with respect to all aspects related to the global economy of timber, provided that the International Organization of Tropical Forests, established under the 1983 International Agreement, is committed to ensuring the implementation of the provisions of this agreement and following up on operations.

The content of the main issues in the negotiations was Non-discrimination in commerce, financial resources and the performance of the International Tropical Timber Organization (ITTO), with the monitoring of the "the year 2000" target for tropical wood exports to have originated from sustainably managed sources [24]. Its new provisions have been strongly influenced by the concepts conveyed by forestry principles, especially with regard to integrating the ecological dimension into the development process, or what is intended to achieve sustainability.

The agreement recognizes the sovereignty of countries over their forests, rejects discrimination in trade based on purely environmental considerations, and refuses to accept unilateral measures in relation to tropical logging taken by some countries, besides imposing a commitment to an "ecological mark" for all imported tropical wood. However, its scope is still limited, as it focuses only on tropical forests, while the rest of its main objectives focus on developing trade in wood products.

4. Conclusion:
It concludes the evolution of the international legal interest, in which there was a direct and indirect framework for the protection due to the interference between forest and other natural elements and issues such as desertification, biodiversity, and climate change. On the other hand, there were legal mechanisms that dealt with the developmental as well as the ecological dimension of forest.

The legal protection of forest had known a paradigm shift with the convey of Rio Conference on Environment and Development (UNCED) 1992, where the relationship between environment and development became so clear, and where sustainable development became an essential approach to a policymaker. As well as, the international society has devoted the protection of the forest directly with a declaration (declarations of forest principles) though it was non-binding, so, that made the legal framework insufficient. While the estimated binding conventions convened during UNCED were indirect, thereby, that made the protection of forest deficient within these instruments.

Regarding the economic aspects of the forest, the international society arranged its exploitation whereby the International Tropical Timber Organization (ITTO) took this mission, through many agreements, and those were The International Tropical Timber Agreement of 1983 and of 1994. Though the economic character was overcome these latter, and that made (ITTO) look for many ways to realize the compatibility between economic and ecological aspects of the forest to achieve sustainable development.

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