

Forum: General Assembly Second Committee

Issue: The Question of Sustainable Management of All Types of Forests to Halt Deforestation and to Restore Degraded Forests

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Introduction

Forests cover approximately one third of Earth's total land area. The majority of species on Earth are harbored by forests. In addition, forests provide valuable ecosystem goods and services to humanity, for example food, fiber, timber, shelter, medicine, clean water, aesthetic and spiritual values and climate moderation in the form of absorbing CO₂ from the air. Furthermore, over 200 million of the world's poor rely on forests for energy, shelter and their livelihoods.¹ Everyone depends on and is affected by the goods and services of forests.²

Over the past 50 years humans have changed forest ecosystems more than in any other historical period. The transformation of forests into agricultural land and grazeland and the general conversion of forest ecosystems have played their part in economic development. Unfortunately not all regions nor groups of people have benefited and therefore many have faced socio-cultural, economic and environmental harm.³

Forests play a great role in the battle against climate change. As said, forests function as carbon sinks by absorbing CO₂ from the air. Water cycle is also dependent on forests, since forests return water vapor to the atmosphere. In addition, forests protects soils from the sun and

¹ https://www.nrs.fs.fed.us/pubs/jrnl/2013/nrs_2013_pan_001.pdf

² http://www.un.org/esa/forests/wp-content/uploads/bsk-pdf-manager/83_FACT_SHEET_FORESTSANDPEOPLE.PDF

³ Ibid

so from drying out. Deforestation leads to the release of all the absorbed CO₂ back to the atmosphere and to forest lands to become barren deserts.⁴

The world's human population is estimated to increase to 9 billion people by 2050 and the demand on the numerous goods and services offered by forests is likely to grow. Since forests and forestry affects everyone, sustainable forest management is a key for meeting the needs of humanity also in the future. It aims to the management of forests in ways that benefit people and the environment both now and for the future generations.⁵

Definition of Key Terms

Sustainability

There is no universally agreed definition for sustainability. Therefore sustainability can be described in several ways. "A sustainable future is one in which a healthy environment, economic prosperity and social justice are pursued simultaneously to ensure the well-being and quality of life of present and future generations. Education is crucial to attaining that future."⁶

Sustainable forest management (SFM)

Sustainable forest management is a dynamic and evolving concept. It aims to maintain and enhance the economic, social and environmental value of all types of forests, for the benefit of present and future generations.³ Sustainable forest management is monitored and it can be confirmed by certification progress.⁷

Deforestation

Forests all around the world are under threat from deforestation. Deforestation is caused in several ways including forest fires, clear-cutting for agriculture, unsustainable logging for

⁴ <https://www.nationalgeographic.com/environment/global-warming/deforestation/>

⁵ <http://www.cpfweb.org/32819-045ba23e53cbb67809cef3b724bef9cd0.pdf>

⁶ Learning for a Sustainable Future - Teacher Centre

⁷ https://ec.europa.eu/growth/sectors/raw-materials/industries/forest-based/sustainable-forest-management_en

timber and degradation due to climate change. 13 million hectares of forest is being lost every year. This impacts people's livelihoods and poses a threat to a wide range of plant and animal species, which threatens the biodiversity.⁸

Afforestation

Afforestation is the founding of a forest or a stand of trees to an area where there was no previous tree cover. Afforestation is often connected with the term reforestation, which is the reestablishment of tree cover either naturally or artificially. Both afforestation and reforestation enhance the carbon capture as well as carbon sequestration and help to preserve the biodiversity. Afforestation has been argued to be an unsustainable way to boost sustainability.⁹

Forest degradation

There is no universally agreed definition for forest degradation. However, there are numerous equivalent definitions for the concept. What is usually meant by forest degradation is the long-term reduction of the overall potential supply of benefits from the forest, which includes carbon, wood, biodiversity and other goods and services.¹⁰ Forest degradation is different from deforestation.¹¹

Biodiversity

Biodiversity or biological diversity means the variety of life found on Earth or in a particular place on Earth. Biodiversity is often measured by the count of species in the area. Furthermore, biodiversity includes the genetic variety within all species and the variety of ecosystems species create.¹²

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<https://web.archive.org/web/20110615044847/http://www.globalchange.umich.edu/globalchange/2/current/lectures/deforest/deforest.html>

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<https://web.archive.org/web/20120314232003/http://dictionaryofforestry.org/dict/term/afforestation>

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<http://www.fao.org/docrep/009/j9345e/j9345e08.htm>

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eSchooltodayeschooltoday.com/forests/what-is-forest-degradation.html

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<https://www.britannica.com/science/biodiversity>

Climate change

Climate change means changes in climate, caused by the heat-trapping gasses, for example CO₂, released to Earth's atmosphere. These changes in climate include the increased temperatures, but also changes like sea level rise, melting of glaciers, extreme weather conditions and shifts in flower and plant blooming.¹³

Carbon dioxide (CO₂)

Carbon dioxide is a minor but very important component of the atmosphere. It is released through natural processes, such as respiration and human activities such as deforestation, land use changes and burning fossil fuels. Carbon dioxide is the most important long-lived cause of climate change.¹⁴

Carbon sink

Carbon sink means a flow of carbon, which removes carbon from the atmosphere. Growing plants are carbon sinks for as long as they grow. These growing plants sequester CO₂ as a part of photosynthesis.¹⁵

Criteria and Indicators (C&I)

Criteria and indicators are tools used to define, guide, monitor and estimate progress towards sustainable forest management. C&I provide a framework that characterizes the major components of SFM, while also recognizing forests as ecosystems that provide a broad range of environmental, economic and social benefits to the society.¹⁶

Reducing Emissions from Deforestation and Forest Degradation (REDD+)

¹³ <https://climate.nasa.gov/resources/global-warming/>

¹⁴ <https://climate.nasa.gov/causes/>

¹⁵ <https://smy.fi/en/glossary/carbon-sink-carbon-storage-hiilinielu-hiilivarasto/>

¹⁶ <http://www.fao.org/forestry/ci/en/>

REDD+ aims to spur developing countries to take action in the fight against climate change by stimulating developing countries to reduce emissions from deforestation and forest degradation, conserve forest carbon stocks, sustainably manage forests and enhance forest carbon stocks. Developing countries will receive result-based payments for verified emission reductions.¹⁷ UN-REDD Programme partners with developing countries to support them in establishing the technical capacities needed to implement REDD+.¹⁸

Forest certification

A voluntary process through which a separate third party “certifier” sets standards for the forest management and production. This way consumers are informed about the sustainability of the forests from which their wood and other forest products origin.¹⁹ Only around 10% of the world’s forests are certified.²⁰

Explanation of the Question

Before sustainable forest management

Humans have always been dependent on forests and forest resources. Forests were the habitat of the first evolutionary ancestors and have remained a meaningful part of the environment of the human family tree. Human societies have been closely related to the accessibility of forests and forest products for most of recent history.²¹

Before the concept of sustainability humans had a carefree attitude while benefiting from forests. The idea was to benefit from the forest as long as the supply lasted. Wood was struck where and whenever it was needed and possible. As mentioned before, forests offer numerous of benefits. Wood was used for building, for heating, for cooking and for the production of utensils. From the 18th to the 19th century wood was the most significant raw material.²²

¹⁷ [Fact Sheet - About REDD](#)

¹⁸ <https://www.unredd.net/about/what-is-redd-plus.html>

¹⁹ <http://www.fao.org/sustainable-forest-management/toolbox/modules/forest-certification/basic-knowledge/en/>

²⁰ <https://www.metsagroup.com/en/Sustainability/sustainable-forestry/forest-certificates/Pages/default.aspx>

²¹ <http://forestindustries.eu/print/137>

²² <https://www.unece.org/fileadmin/DAM/.../globaloutlook021002.ppt>

However, the wood felling did not remain without consequences. It was predictable, that the society would be posed to a great threat due to the clear-felling and devastation of large areas, which caused an alarming wood scarce. At the beginning of industrialization forests were in a weak condition and it was clear that something had to be done. In the 19th century all the felled areas were afforested again, sustainably.²³

The afforestation of the 19th century lead to surface sustainability - as forest area was felled, it was afforested immediately. The necessity to conserve and manage the world's forests in the context of protecting the global environment was not recognized earlier than in the late 1970s. By the end of the 1990s, demands were made for criteria and indicators to be used to evaluate the level of forest sustainability and through timber certification.²⁴

Deforestation and forest degradation

Deforestation and forest degradation are the largest issues in global land use. Over half of the tropical forests worldwide have been destroyed since the 1960s. Traditionally the estimates of deforestation are based on the forest area cleared for human use. Deforestation can affect the forest areas in distinct ways. For example, when clear-cutting all the trees are felled, which ruins the forest completely. However, sometimes even partial logging and accidental fires thin out the trees enough to change the forest structure completely.²⁵ In developed countries forests are replaced to boost urbanisation - by turning forests into residential areas, and in developing countries to boost the economy in unsustainable ways - by for example turning forests into strip mines.²⁶

Both deforestation and forest degradation have notable global consequences. To list some, forests function as carbon sinks when growing. When forests are burned, they release the absorbed carbon dioxide back to the atmosphere. The release of the greenhouse gas alters the global climate.²⁷ It is estimated that 1.5 billion tons of CO₂ are released to the atmosphere due to deforestation, mainly by cutting and burning forests, every year. Globally forest degradation and loss account for 17.5% of all CO₂ emissions. In 2008 United Nations'

²³ Ibid

²⁴ <http://www.fao.org/docrep/ARTICLE/WFC/XII/MS10-E.HTM>

²⁵ <https://www.britannica.com/science/deforestation>

²⁶ <https://www.youtube.com/watch?v=la1ZZol0CeM>

²⁷ Ibid

Reduction of Emissions from Deforestation and Degradation (REDD+) programme was founded and it was the first joint global UN programme on climate change.²⁸

In addition, biodiversity is threatened due to the fact that 80% of biodiversity is within forests. Deforestation also impacts directly to many poor living in remote areas who undergo massive loss of income, since millions depend on forests to survive.^{29 30}

The implementation of sustainable forest management

Sustainable forest management emerged from the Forest Principles and Chapter 11 of Agenda 21 at the United Nations Conference on Environment and Development (UNCED, known as the Earth Summit), in Rio de Janeiro in 1992.³¹ The principles captured the general idea of sustainable forest management at that time. Ever since, numerous sets of criteria and indicators have been set to evaluate the implementation of SFM at all levels, including global, regional, country and management units. In 2007 the United Nations General Assembly adopted the Non-Legally Binding Instrument of All Types of Forests. Since there had not been a similar instrument, it demanded international commitment to promote implementation of sustainable forest management with a fresh approach that would bring together all stakeholders.³²

In 1994 The Montréal Process Working Group (MPWG) was launched and immediately began the development of a set of criteria and indicators to cover temperate and boreal forest zones within the working group's member countries.³³ The international consensus on the main elements of SFM appears to be growing. Now there are seven main criteria which function as the framework for SFM. The criteria and indicators (C&I) also further acknowledges the wide range of economic, social and environmental benefits that SFM provides the society with.³⁴

The challenges of sustainable management of all types of forests

²⁸ <https://www.climateandweather.net/global-warming/deforestation.html>

²⁹ Ibid

³⁰ <http://www.fao.org/forestry/livelihoods/en/>

³¹ <https://sustainabledevelopment.un.org/?menu=1300>

³² <http://www.fao.org/docrep/v6585e/v6585e07.htm>

³³ https://www.montrealprocess.org/The_Montreal_Process/About_Us/history.shtml

³⁴ <http://www.fao.org/sustainable-forest-management/toolbox/modules/ci-a-tool-for-enhancing-sfm-from-policy-to-practice/basic-knowledge/en/>

The implementation of SFM is an ongoing challenge all around the globe, due mainly to limited capacity and lack of enabling conditions. Another stumbling block is the lack of awareness of the knowledge on the implementation of SFM.³⁵ However, FAO has created a Sustainable Forest Management Toolbox to help with this issue. The SFM Toolbox compiles of a large number of tools, case studies and other resources, found online. It has been created to provide forest owners, managers and other stakeholders with easy access to those resources for the implementation of SFM.³⁶

Key Member States and NGOs Involved and Their Views

Food and Agriculture Organization of the United Nations (FAO)

FAO's approach to SFM implementation is based on the 1992 Forest Principles. The support of FAO is mostly people-centered and it aims to increase society's on environmental, social and cultural aspects. In addition, FAO's support to the C&I processes are linked to the seven framework elements defined by UN General Assembly.³⁷

United Nations Development Programme

UNDP supports efforts to uphold resilient forest ecosystems to benefit local economies, conserve biodiversity and address climate change in ways such as providing technical help and policy advice to developing countries. United Nations Development Program Global Environmental Finance (UNDP-GEF) supports 69 countries through 89 projects on protecting forests and ecosystems. The financial aid given accounts for 499\$ USD. Furthermore, together with FAO UNDP encourages countries to enact and implement policies and measures to REDD+.³⁸

United Nations Environment Programme

³⁵ <http://www.fao.org/forestry/sfm/85086/en/>

³⁶ <http://www.fao.org/sustainable-forest-management/toolbox/en/>

³⁷ <http://www.fao.org/forestry/sfm/en/>

³⁸ <http://www.undp.org/content/undp/en/home/sustainable-development/environment-and-natural-capital/forests.html>

UNEP is a global environmental authority that sets the global environment agenda and promotes the implementation of the environmental extent of sustainable development.³⁹ UNEP takes also part in collaboration for REDD+.

Russian Federation

On the territory of Russia is one-fourth of the world's reserves of wood, which makes Russia the largest forest country in the world. That being said, forest area covers around 45% of the total area of the country. Russia supplies wood to the whole world.⁴⁰ However, the potential of Russian forests is not fully exploited and therefore Russia's share of the global forest product trade is only 4%. The increase in active forest management measures prevent unfavourable forest succession and ensure sustainable forest management in the country. The transition to SFM has been gradual due to various difficulties, adapting to market relations and international requirements related to SFM being the major ones.⁴¹

Brazil

Brazil has the second largest forest area in the world. However, Brazil has also the greatest loss of forest area annually, mostly caused by deforestation of Amazonia.⁴² The forestry trends emerging in Amazonia are unsustainable selective logging, plantations and to a very limited extent, sustainable forest management. The most common form of forestry in the area is selective logging. Amazon faces several barriers - environmental, social and economical, in order to establish sustainable forestry. Anyhow, sustainable forestry in Amazonia has a great potential, and it can be achieved.⁴³

Canada

Canada has 9% of the world's forests. The country's area covered up by forests adds up to 42%. Therefore forests are a major source of wealth for Canadians, providing wide range of economic, social and environmental benefits.⁴⁴ In Canada, laws, regulations and policies

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https://wedocs.unep.org/bitstream/handle/20.500.11822/25765/SDG15_Brief.pdf?sequence=1&isAllowed=y

⁴⁰ <http://www.fao.org/docrep/016/i3020e/i3020e00.pdf>

⁴¹ <http://www.fao.org/docrep/013/i1757e/i1757e.pdf>

⁴² <https://news.mongabay.com/2005/11/world-deforestation-rates-and-forest-cover-statistics-2000-2005/>

⁴³ <http://www.fao.org/docrep/ARTICLE/WFC/XII/0429-B1.HTM>

⁴⁴ <https://www.nrcan.gc.ca/forests/industry/products-applications/13317>

support sustainable forest management. Canada has updated these laws, regulations and policies to meet the globally known sustainable management standards and practices.⁴⁵

Timeline of Events

18th century	Careless forestry, sustainability was not taken into account.
19th century	The beginning of sustainable forest management by the means of surface sustainability.
The late 20th century	Growing environmental awareness and consumer demand. ⁴⁶
June, 1992	Rio de Janeiro Earth Summit (UNCED) was held and the Forest Principles were adopted in the Agenda 21
1994	The Montréal Process
	Millenium Summit, which led to the elaboration of eight Millennium
September, 2000	Development goals (MDGs) to reduce extreme poverty. Goal 7: Ensure environmental sustainability
	World Summit on Sustainable Development, South Africa. Adoption of The
2002	Johannesburg Declaration on Sustainable Development and the Plan of Implementation
	UN General Assembly adopts the Non-legally Binding Instrument on all Types
2007	of Forests.
2008	UN-REDD Project launched by FAO, UNDP and UNEP
	United Nations Conference on Sustainable Development (Rio+20), Rio de
June, 2012	Janeiro, Brazil. Member States adopted the outcome of document “The Future We Want” in which was decided that a process to develop a set of SDGs. ⁴⁷
September, 2015	Un Sustainable Development Summit: Adoption of the 2030 Agenda for Sustainable Development, with 17 Sustainable Development Goals ⁴⁸
December, 2015	Paris Agreement on Climate Change ⁴⁹

⁴⁵ <https://www.nrcan.gc.ca/forests/canada/sustainable-forest-management/13183>

⁴⁶ Timeline until this point <http://forestindustries.eu/print/137>

⁴⁷ Timeline until this point <http://www.cfa-international.org/userfiles/files/Forestry%20timeline.pdf>

⁴⁸ <https://sustainabledevelopment.un.org/sdgs>

⁴⁹ Ibid

UN Involvement, Relevant Resolutions, Treaties and Events

- World Charter for Nature, 28 October 1982, A/RES/37/7 ⁵⁰
- Combating Deforestation, Agenda 21 Chapter 11 ⁵¹
- Transforming our world: the 2030 Agenda for Sustainable Development, 21 October 2015, A/RES/70/1 - All the United Nations Member States adopted The Agenda for Sustainable Development. It provides a shared blueprint for peace and prosperity for humanity, now and into the future.⁵²
- UNDP's Sustainable Development Goals. - Drawing attention especially to SDG15 and SDG13: Goal 15 is on life on land. On behalf of forests, it aims to “protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”. ⁵³ Goal 13 is on climate change. Sustainable management of forests to halt deforestation and degradation has a meaningful role in the battle against slowing down climate change and global warming. ⁵⁴

Possible Solutions

Political commitment

To promote sustainable forest management, halt deforestation and restore degraded forest, the governments must play their part. Commitment is required, since sustainability - especially environmental sustainability, can not be achieved in a short period of time.

Corruption is a common obstacle. Therefore the main improvement is cracking down corruption and so enforce fair forest conservation rules. This is a major step towards stopping illegal logging and improving unsustainable forest management to more sustainable. As a matter of fact, this step is also important to prevent organized crime and even armed conflicts, both which could be fueled by illegal logging and unsustainable forest management.

⁵⁰ <http://www.un.org/documents/ga/res/37/a37r007.htm>

⁵¹ <http://www.un-documents.net/a21-11.htm>

⁵² <https://sustainabledevelopment.un.org/sdgs>

⁵³ <https://sustainabledevelopment.un.org/topics/forests>

⁵⁴ <https://www.un.org/sustainabledevelopment/climate-change-2/>

Worldwide political cooperation in terms of forming an internationally binding law to enhance sustainable forest management and forestry is a potential solution. In fact, the lack of internationally binding rules is an obstacle when carrying out SFM globally.⁵⁵

Raising public awareness

Raising public awareness on sustainable forest management is the key to the full implementation of sustainable forest management. Information on the usage and the condition of forests inspire citizens around the world to take action. It is indeed necessary to highlight, educate and remind humanity of the importance of forests. Since everyone is dependent on forests, everyone should be aware of the effects that the unsustainable forestry and unsustainable forest management have on humanity and Earth, as well as on their future.

Awareness can be raised by several methods, such as but not limited to, including forest studies (such as sustainable forest management and sustainable forestry) to the curricula of primary, elementary and high schools, online databases and learning possibilities (such as FAO's SFM Toolbox), spreading information via media and especially social media. Also, by raising the awareness of policy makers, sustainable results in policymaking can be achieved.

Taking action for an environmentally sustainable future

By raising public awareness, people can start to act for achieving a sustainable future. A sustainable future won't be accomplished by a few small steps taken by individuals, but millions of small steps, which then add up to major movements in favour of a sustainable future. On behalf of sustainable forest management, there are myriad small steps to be taken.

Individuals can make sure that the forest-derived products bought are fully made from post-consumer materials. Furthermore, buying goods from companies that have committed to forest-friendly policies by having a credible forestry certification highlights the valuation of responsible and sustainable forestry. In addition, informed food choices, including plant-based diet and reduction of animal-based products help saving forests, so that no forest must be cut for agricultural purposes. Humans are social animals and taking action inspires others to follow. In that way, few small steps can escalate to a grand movement.

⁵⁵ https://www.fs.fed.us/nrs/pubs/qtr/qtr_nrs90/qtr-nrs-90-chapter-4.pdf

Forest management planning

Forest management planning is a fundamental part of SFM. Planning contributes to sustainable, continuous, economically efficient and ecological forest use.⁵⁶ However, forest management planning requires knowledge and information that is not available to all stakeholders of forestry. Taking care of spreading information on forest management planning could potentially help the progress of sustainable forest management.

Certifications

The importance of certified goods and services originating from forests must be highlighted. Certifications help the consumers make sustainable choices. Promoting international certification system and encouraging forest owners, families, communities and states, to apply for certifications such as Programme for the Endorsement of Forest Certification (PEFC), are crucial steps on the path to SFM.

⁵⁶ <http://www.fao.org/docrep/ARTICLE/WFC/XII/1053-C5.HTM>

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