

## Sustainable Forest Management in the Democratic Republic of Congo through Its Forestry Policy

MBUANGI LUSUADI Maurice<sup>1</sup>, ILUNGA MUYUNGU Sylva<sup>2</sup>

<sup>1</sup>Professor, Kasa Vubu Boma University, DRC

<sup>2</sup>Professor, University of Kisangani, DRC

### ABSTRACT

Nowadays, sustainable forest management (SFM) is a major concern for everyone. Steps are being taken to achieve this. It is through both binding and non-binding texts that international organizations and individual countries enact principles and laws that the will to manage forests sustainably is expressed. The Democratic Republic of the Congo, with its substantial forest resources and its desire for sustainable management, is committed to this approach. That's why it has signed up to several international conventions and ratified agreements. Internally, several texts regulate SFM. This study was carried out with the aim of highlighting the DRC's major concern regarding the sustainable management of its forest. It was thus found that, through international agreements, conventions, its fundamental law, its forestry code and a number of decrees, the DRC is very concerned about the sustainability of its forest resources. All that remains is to apply the relevant provisions.

**Key words:** sustainable forest management, forest policy, agreements, conventions, forestry code

### INTRODUCTION

Sustainable forest management (SFM) in the Democratic Republic of Congo (DRC) remains a major concern for its improved conservation. Indeed, the DRC has forest resources of at least “2 million km<sup>2</sup>, about half of which is covered by closed canopy rainforest and the other half by open forest and wooded savannah. This forest is home to some 10,000 plant species, 409 mammal species, 1,117 bird species and 400 fish species. Thus, these forests play a very important role, as they are considered not only as a life support for the population, but also as a pillar of development (McNeely, 2002; Counsel, 2006; MECNT, 2009; FAO, 2016).

And, today, in a context of profound changes occurring across the globe, forest ecosystems provide important services that help populations adapt to climate variability and change (Kengoum, 2014; Boutin *et al.*, 2019).

Indeed, SFM is defined as the use of forest land in such a way and at a rate that maintains its productivity, regeneration capacity, vitality and potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national and global levels, and that does not cause damage to other ecosystems (Nielsen & Rice, 2004)

In the DRC, however, logging is experiencing enormous difficulties, especially in meeting ecological, social and economic functions. This means that its operators, both formal and informal, are less concerned about sustaining all these functions (Megevand *et al.*, 2013). Thus, in a context marked by a large population ranging from 80 to 85 million inhabitants; demographic growth approaching, in 2017, a rate of 3.2% per year; a fairly high youth unemployment rate of up to 46.1% (INS, 2018); difficult living conditions, especially in rural areas, forests are increasingly in demand to meet the daily needs of populations through the services they can provide (Sabuhungu, 2016; Kuma, 2020) and their sustainable management is compromised.

To put an end to this situation, the Congolese state, at both national and local level, is taking certain measures to preserve this forest. The aim of this article is therefore to take stock of the regulations governing the Congolese forestry sector in order to highlight what is actually being done and whether or not this management is sustainable. This will enable us to identify ways of improving SFM or making it more concrete.

### MATERIALS AND METHODS

This study was carried out in the Democratic Republic of Congo (DRC). This country has a surface area of 2,345,409 km<sup>2</sup> and a population of 70 million (UNFP, 2010). The annual population growth rate is 3.1% (DSCR, 2011) and has remained above 3% for the past four decades, peaking at 3.3% in the 1970s. This places the country among Africa's high-growth nations.

Around 70% of the DRC's population lives in rural areas and depends on slash-and-burn agriculture. Forests occupy more than 60% of the country's territory and account for more than 60% of the Congo Basin's forests, making it the world's second largest tropical forest massif after Amazonia. With an estimated 128 million hectares of natural forest, the DRC has almost 10% of the world's total natural tropical forests, and almost 45% of those in Africa (OSFAC, 2010).

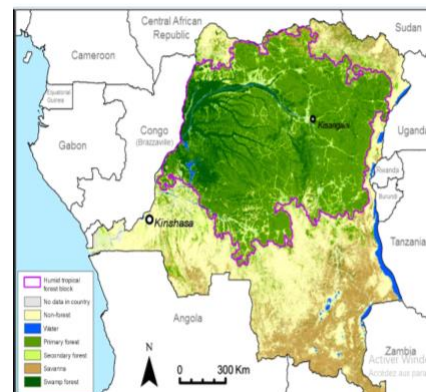
The DRC, by virtue of its geographical position and size, is subject to great climatic variability: equatorial climate, humid tropical climate, tropical climate with marked dry season, and mountain climate.

In the equatorial zone, the rainy season lasts more than 10 months, while on either side of the equator, it varies from 6 to 10 months a year, depending on distance from the equator. Conversely, the dry season is short in the equatorial zone (less than two months) and gets longer the further you are from the equator.

In terms of vegetation, the country's various plant formations include swamp forests, dense rainforests, dense dry forests, mountain forests, open forests and different types of savanna



**Figure 1. Positioning of the DRC in Africa**



**Figure 2: Forest cover map of the DRC (Molinario *et al.*, 2017)**

To obtain the results of this study, the literature review was used to cross-reference and analyze the various provisions and principles guaranteeing sustainable forest management. Reference was made to a number of international agreements and conventions ratified and signed by the Democratic Republic of Congo. A review of certain national legal provisions through the DRC Constitution of 2006, revised by law 11/002 of January 20, 2011, law 011/2002 of August 29, 2002 on the forestry code and ministerial decrees on logging in the DRC.

---

## RESULTS

### **Sustainable Forest Management in the DRC through International Agreements and Conventions**

The Democratic Republic of the Congo is a signatory to several agreements and conventions aimed at ensuring that its forests are managed sustainably. Far from analyzing them all, five have caught our attention. These are the International Tropical Timber Agreement (November 2006), the Convention on International Trade in Endangered Species of Wild Fauna and Flora “CITES” (1976), the Convention on Biological Diversity “CBD” (December 1994), the Paris Agreement (2015) and the REDD+ process.

Indeed, from September 5 to 7, 2022, numerous forest management stakeholders (scientists, authorities, NGOs, international organizations, local communities, private sector, etc.) gathered in Yangambi around the theme “Contribution of the forests of the Congo Basin and other tropical basins of the planet to the fight against climate change: state of play and perspectives”. The conference was held as part of the preparatory work for the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), organized by the DRC in partnership with Egypt. At the end of the meeting, the participants prepared a declaration summarizing the various points of alert raised during the exchanges and discussions, concerning the management of forest resources and biodiversity, but also protected areas or biosphere reserves, soils, water resources, carbon credits and energy (<https://www.atibt.org>).

As far as COP 27 is concerned, it saw significant progress on adaptation, with governments agreeing on how to advance the global target on adaptation, which will be concluded at COP 28 and feed into the first global assessment, improving the resilience of the most vulnerable. New pledges, totaling over 230 million USD, were made to the “Adaptation Fund at COP 27”. These pledges will help many more vulnerable communities to adapt to climate change through concrete adaptation solutions. COP 27 President Sameh Shoukry announced the Sharm el-Sheikh Adaptation Program, which strengthens the resilience of people living in the most climate-vulnerable communities by 2030. UN Climate's Standing Committee on Finance has been asked to prepare a report on doubling adaptation funding for consideration at COP 28 next year. (<https://unfccc.int>).

It is therefore worth noting that with the signing of these agreements and conventions, the DRC has committed to harmonizing its laws with the relevant provisions of these international instruments (Vundu & Kalambay, 2013).

#### ***The International Tropical Timber Agreement***

The International Tropical Timber Agreement governs the operation of the International Tropical Timber Organization. It was adopted on January 27, 2006 in Geneva by the United Nations Conference for the Negotiation of a Successor Agreement to the International Tropical Timber Agreement, 1994.

The objectives of the International Tropical Timber Agreement are “to promote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests, and to promote the sustainable management of tropical timber producing forests” (International Tropical Timber Agreement, 2006).

This means that the International Tropical Timber Agreement aims to provide a framework for effective cooperation between tropical timber-producing and consumer countries. It also aims to encourage the development of sustainable development policies and the conservation of tropical forests and their genetic resources. The Democratic Republic of Congo signed these agreements on July 21, 2010.

---

***The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)***

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), or the Washington Convention, was drafted in response to a resolution adopted by the IUCN General Assembly in 1963. The text of the convention was adopted at a meeting of representatives from 80 countries held in Washington (USA) on March 3, 1973, and came into force on July 1, 1975.

CITES is an international agreement between states. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species to which they belong. CITES is binding. This means that the parties are obliged to apply it. However, it is not a national law; it is a framework that Parties must respect, and to do so, they are required to adopt legislation that guarantees, at national level, its respect.

The Democratic Republic of the Congo has been a signatory to the Convention since October 1976, and ICCN is responsible for controlling all imports, exports and re-exports of species covered by the Convention, by means of a permit system.

***The Convention on Biological Diversity***

The Convention on Biological Diversity (CBD) of December 1992 set itself the objectives of the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding (CBD, 1992).

The Democratic Republic of the Congo signed the Convention on Biological Diversity on June 11, 1992. It deposited its instrument of ratification with the United Nations in New York on December 3, 1994. And, in accordance with Article 36 of the Convention, it came into force for the DRC on March 3, 1995.

***The Paris Agreement***

The Paris Agreement, of December 12, 2015, adopted by 196 countries, and entered into force on November 4, 2016, is a legally binding international treaty on climate change. The discussions held during this meeting resulted in a historic agreement committing all these countries to reducing their greenhouse gas emissions.

The aim of this agreement is to stabilize global warming due to human activities at the Earth's surface “well below” 2°C by 2100, compared with the temperature of the pre-industrial era (reference period 1861-1880), and to continue efforts to limit this warming to 1.5°C. This will give us the means to avoid a runaway climate (Meinshausen *et al.*, 2009; Mbuangi, 2022).

The Paris Agreement is therefore a milestone in the multilateral process to combat climate change, because for the first time, a binding agreement has brought all nations together around a common cause, to undertake ambitious efforts to combat climate change.

The Paris Agreement was ratified by the DRC through Law n°17/009 of November 21, 2017 authorizing the ratification by the Democratic Republic of Congo of the Paris Agreement under the United Nations Framework Convention on Climate Change, signed in New York on April 22, 2016.

***The REDD+ process***

The Reducing Emissions from Deforestation and Forest Degradation (REDD+) mechanism was launched in the DRC in January 2009, with the first joint mission of the United Nations REDD+ Organization (ONUREDD) and the World Bank's Forest Carbon Partnership Facility (FCPF) in Kinshasa. The management bodies were set up by the Ministerial Order of November 26, 2009. Its preparation phase took place in 2010, and it was

in November 2012 that the Council of Ministers adopted the National REDD+ Framework Strategy (REDD+ Investment Plan, 2015).

In effect, this process was set up to mitigate GHG emissions and reduce poverty while contributing to the sustainable management of forest resources and the enhancement of environmental services. The strategy aimed to stabilize forest cover at 63.5% of the national territory by 2030, and maintain it thereafter. The investment plan set out the priorities for implementation over a six-year period, from 2015 to 2020. For the DRC, this process is a means of improving forest governance (Kipalu & Mukungu, 2013; Mpoyi *et al.*, 2013).

#### ***The United Nations Framework Convention on Climate Change (UNFCCC)***

The UNFCCC, which came into force in 1994, took an important step away from the 1987 Montreal Protocol, which obliged member states to act in the interests of human security, even in the face of scientific uncertainty.

The Convention also set the objective of stabilizing greenhouse gas (GHG) concentrations at a level that would prevent dangerous anthropogenic interference with the climate system. It went on to specify that “this level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner”.

The DRC has been a signatory to this convention since June 11, 1992, and acceded to it on January 9, 1995.

#### ***The United Nations Convention to Combat Desertification (UNCCD)***

Whether it's the United Nations Convention on Biodiversity (CBD) or the three Rio conventions, the important contribution of forests is recognized.

At the same time, international regulations on the timber trade have also been developed, notably with the International Tropical Timber Agreement of November 18, 1983, amended, in part under the influence of the Rio Conference, by the agreement of January 26, 1994, modified by the 2006 agreement.

However, even if international efforts have intensified to improve the Rio political consensus, there is still no real international consensus on the legal framework for forests, and forests remain, alongside soils and chemicals, the only material fields of the environment not covered by an international treaty, despite some one hundred and fifty multilateral treaties in the environmental field (Priour & Doumbe-Bille, 1996; Olivier, 2015; Torre-Schaub, 2019).

### **Sustainable Forest Management in the DRC through Its Constitution**

The Constitution of the Democratic Republic of the Congo of February 18, 2006 emphasizes firstly that “The State exercises permanent sovereignty over the soil, subsoil, waters and forests, over Congolese air, river, lake and maritime spaces, as well as over the Congolese territorial sea and the continental shelf” (Const. Art 9).

This article underlines the notion of “permanent sovereignty over natural resources”, as enshrined in United Nations General Assembly Resolution 1803 (XVII) of December 14 1962. Under this principle, “the State decides in the last instance and in complete independence on the fate of the natural resources found on its territory and on the economic activities carried out there” (Salmon, 2012). Through this principle, the state has permanent, constant, exclusive and inalienable sovereign powers over these natural resources and related economic activities.

In his work on the principle of permanent sovereignty, which remains an outstanding reference, Schrijver (1997) conceives of “natural resources” as “natural materials that are useful to man or could be useful in conceivable technological, economic or social circumstances”.

The State also has permanent, constant, exclusive and inalienable sovereign powers over these natural resources and related economic activities (Sakai, 2017).

Secondly, the Constitution of the DRC (Article 53), recognizes the right of all people to a healthy environment conducive to their full development. The State is responsible for protecting the environment and people's health. In the event of pollution or destruction resulting from an economic activity, compensatory or remedial measures and the modalities for their implementation shall be determined (Article 54).

Thirdly, the Constitution (Article 123) lays down the fundamental principles governing land, mining, forestry and real estate, as well as environmental protection and tourism.

### **Sustainable Forest Management through the Congolese Forest Code**

The forest code is also an important document for regulating forest management. In the Democratic Republic of Congo, however, the forest was managed for many years under the 1949 decree. Prior to this decree, however, several steps had been taken.

During the colonial era, when the Independent State of Congo was created, the texts governing forests during the colonial period were essentially utilitarian (Sakata, 2009). Environmental management rules were closely linked to land law. Thus, given the importance of rubber during this period, its exploitation was one of the most heavily legislated areas. And, as Tshimpanga (2017) has written, the first decree - enacted on October 17, 1889 - was issued in the field of natural resources and concerned the exploitation of rubber and other plants. After rubber exploitation, several texts followed and further regulated the industrial exploitation of Wood (Sakata, 2012).

We had to wait for the decree of April 4, 1934, which was the first legal instrument on forestry issued by the Belgian Parliament. This decree, supplemented by the decree of June 13, 1936, attempted to put all indigenous peoples on an equal footing as regards forest access and use rights. In the meantime, the world war intervened and the demand for latex rose sharply (Le Roy, 1982; Sakata, 2009).

After the Second World War, following the significant contribution made by the Belgian Congo to the production of latex for European industry, the colonial authorities were obliged to adapt forestry legislation. The forestry decree of April 11, 1949 was drawn up and promulgated.

Twenty-five of the decree's forty-six articles were devoted to timber harvesting, and the letter and spirit of the decree reflect the economic and utilitarian nature of its drafting, while ignoring moral, ecological and social values (Le Roy, 1983). Similarly, the decree failed to take into account the social plight of local populations and environmental concerns.

The 1949 decree - while recognizing indigenous peoples' "rights of use" (Title 2, Article 2) - denies them any formal responsibility for managing the forests in question. It attributes all Congolese forests and the resources they contain to the Belgian Crown (Le Roy, 1982).

Because of its nature, this decree provoked conflicts between the local population and loggers. The source of these conflicts was the allocation of forests "without local consultation, without equitable benefit for the riparian populations or for the country, and without consideration for alternative uses" (Sakata, 2012). Over the years, the decree became outdated, ineffective and unsuited to the political, economic and social context, and above all to the global and sub-regional environment (Le Roy, 1983).

From 1980 onwards, although the decree had not been repealed, the Congolese forestry sector was governed by a set of standards and procedures issued by the Ministry of the Environment and Nature Conservation in 1984 and 1986, entitled "Forest allocation inventory standards", "Standards for logging inventories" and "Forestry manager's guide" (Trefon, 2006).

Since these instruments had no binding legal value, any dispute brought before the court brought the parties back to the 1949 decree. This situation had become anachronistic in relation to global, regional and sub-regional developments in forest sector management (Tshimpanga, 2017).

What's more, given that several countries in the sub-region, such as Cameroon (in 1994) and Congo Brazza (in 2000), have adopted or modernized their forestry legislation, and under the impetus of international organizations, it was becoming urgent for the DRC to put in place a legislative framework adapted to the changing world and its national forestry potential.

In response to both internal and external demands, and the rise in illegal logging practices, a new forestry code - the first in post-colonial Congo - was promulgated in 2002, through Law no. 011/2002 of August 29, 2002. For many researchers, this forestry code constituted an institutional framework capable of relaunching sustainable forest management (Trefon, 2008).

And, in a break with previous texts, this law innovates on the following points: community participation in forest resource management, mandatory management of forest concessions, revision of forest concession allocation methods, improved forest exploitation control procedures and the creation of consultation frameworks (Kabaka, 2018).

Indeed, according to the Congolese forest code, local communities must participate in the management of forest resources. Everyone agrees that the participation of local communities in the management of forest ecosystems remains one of the essential elements at the heart of the sustainability of forest resources. (Chorfi, 2008; Nyange, 2015; Mbuangi, 2016).

The management of forest concessions is therefore an obligation to carry out operations aimed at defining technical, economic, legal and administrative measures for forest management, with a view to perpetuating the forest and deriving maximum benefit from it. Forest management is also the determination of how a forest is to be cultivated and the number of holdings, with the aim of ensuring, through periodic felling, a more or less constant flow of timber in terms of quantity and quality (Vundu & Kalambay, 2013).

Article 83 of the Forestry Code stipulates that forest concessions are allocated by auction. Exceptionally, it may be by mutual agreement, in accordance with article 86 of the present law. Adjudication is a legal act by which purchasers or contractors are placed in free competition, i.e. a modality for the sale of a good put up for auction by a judge, notary or civil servant, awarded to the person offering the highest price, whereas the "gré à gré" market is where transactions take place directly between the seller and the buyer.

According to Vundu and Kalambay (2013), the allocation of forest concessions by auction is the rule, while that by mutual agreement, the granting of forests by letter of intent or by supply guarantee agreement, an exception. This is in line with government contracts. In fact, these contracts must generally be awarded by tender, and can only be awarded by mutual agreement, i.e. by amicable concession, in exceptional cases.

The direct agreement method of award led to the signing of a concession contract with specifications as set out in the Forestry Code and its implementing texts, particularly with regard to social and environmental obligations.

With regard to forest exploitation control procedures and the creation of consultation frameworks, under the terms of articles 111 and 112, local community forests are exploited under the supervision and technical control of the public administration, on the one hand, and on the other, in addition to usage rights, local communities may exploit their forest, i.e. harvest timber.

With regard to the framework for consultation, article 35 stipulates that the planning, implementation and monitoring of forestry research work are carried out in consultation with

the departments and bodies of the various ministries and other institutions concerned, each acting within the limits of its competence, while article 73 stipulates that the division of the forest estate into forest management units is carried out by ministerial decree, on the proposal of the forestry administration, after consultation with all the administrations concerned.

According to Article 22 of the 2002 Congolese Forest Code, and Decree no. 14/018 of August 02, 2014 setting the terms and conditions for the allocation of forest concessions to local communities, a local community may, at its request, obtain as a forest concession some or all of the protected forests among the forests regularly owned under custom. The procedures for allocating concessions to local communities are determined by decree of the President of the Republic. Allocation is free of charge.

This legal provision also concerns the rights recognized to local communities, who can, in complete security, access the forest resources of their terroir and participate in forest management in general.

However, due to the disorder that reigns in the allocation of forest concessions in the DRC, and in reaction to the report of the Inspection Générale des Finances (IGF), the Deputy Prime Minister in charge of forests issued Ministerial Order n°15/22 of April 5, 2022 suspending illegally granted logging and conservation concession contracts. She also issued Ministerial Order n°016/22 of April 20, 2022 establishing and operating the ministerial commission responsible for reviewing all logging and conservation concession contracts granted to date by the Democratic Republic of the Congo.

### **Sustainable Forest Management in the DRC through Ministerial Decrees**

In addition to the Forest Code, sustainable forest management in the DRC is the subject of a number of ministerial decrees. These include Ministerial Orders n°24/CAB/MIN/EDD/AAN/WF/05/2019 regulating deforestation permits (JO.RDC, 15 July 2019), n°84/CAB/MIN/ECN-DD/CJ/00/RBM/2016 of 29 October 2016 laying down conditions and rules for timber exploitation, n°85/CAB/MIN/ECN-DD/CJ/00/RBM/2016 of 29 October 2016 relating to the artisanal forestry unit (J.O.RDC., 2016), n°034/CAB/MIN/EDD/03/03/BLN/2015 of July 3, 2015 setting out the procedure for drawing up, verifying, approving, implementing and monitoring the management plan for a timber production forest concession, n°105/CAB/ECN-T/15/JEB/009 of June 17, 2009, n°034/CAB/MIN/ECN-T/15/JEB/08 of August 22, 2008 and n°35/CAB/MIN/ECN-EF/2006 which was completed by n°105/CAB/ECN-T/15/JEB/009 of June 17, 2009.

Ministerial Order no. 024/CAB/MIN/EDD/AAN/WF/05/2019 regulates the deforestation permit, setting out the formalities for applying for it, the procedure for issuing it, and the obligations incumbent on its holder.

Ministerial Order no. 85/CAB/MIN/ECN-DD/CJ/00/RBM/2016 of October 29, 2016, relating to the Artisanal Forestry Unit, reflects the concern for sustainable forest management, as it concerns the application of management in accordance with the requirements of the Forestry Code, for the creation of permanent production forests.

Ministerial Order no. 84/CAB/MIN/ECN-DD/CJ/00/RBM/2016 of October 29, 2016 on the conditions and rules for timber exploitation sets out the rules for the procedure for creating the said unit and for its management (Art. 1), the allocation of timber cuts that may be made there, and the definition and procedure for taking charge of socio-economic infrastructures for the benefit of local communities bordering the artisanal forest unit concerned.

Ministerial Order 034/CAB/MIN/EDD/03/03/BLN/2015 of July 3, 2015 sets out the procedure for drawing up, verifying, approving, implementing and monitoring the management plan for a timber production forest concession.



Other decrees, older than those mentioned above, reflect the concern for sustainable management of the Congolese forest. These include Ministerial order n° 35/CAB/MIN/ECN-EF/2006, which was supplemented by order n° 105/CAB/ECN-T/15/JEB/009 of June 17, 2009, setting out the model documents required prior to any logging operation. These include the ordinary logging permit, the artisanal logging and carbonization permit, the harvesting permit, the special logging permit, the artisanal logger's certificate of approval, the worksite logbook, the forest product circulation permit and the quarterly declaration form.

Article 9 of this decree stipulates that “the firewood cutting and carbonization permit is issued to any Congolese member of a local community living in a rural area. It confers on its holder the right to cut, in the forest of the local community to which he belongs, wood intended for use as firewood or to carry out carbonization operations with a view to marketing his products. The permit sets the maximum volume of wood that may be cut in any one calendar year. Only one firewood cutting and carbonization permit per year may be issued to each person. The permit is valid for one year, from January 1 to December 31. The firewood cutting and carbonization permit is issued by the Territory Administrator of the forest area after consultation with the local forestry administration”.

To gain access to this permit, “the applicant for any cutting or harvesting permit is required to complete an ad hoc form drawn up and supplied by the administration in charge of forests” (Article 16).

Article 17, on the other hand, stipulates that “...for firewood cutting and carbonization permits, a certificate from the customary authority endorsed by the local administrative authority indicating membership of the community owning the forest in which exploitation is planned, and the residence of the applicant...”.

Article 32 states that “all exploitation of forest resources is subject to compliance with the principles of sustainable, ecologically rational, economically viable, technically efficient and socially equitable management”.

Ministerial Order no. 034/CAB/MIN/ECN-T/15/JEB/08 of August 22, 2008 regulating the harvesting of certain forest products. Article 11 states that “when the exploitation of certain species located in a forest concession is likely to cause a disturbance to the balance of the forest's biological diversity, the provincial forestry administration may, on the basis of a specific inventory, set aside the said species or subject their exploitation to appropriate restrictions”. In such cases, the provincial governor is empowered to issue a decree.

## CONCLUSION

These various texts show that the Democratic Republic of Congo is willing to make SFM a reality. However, even if international efforts have intensified to improve on the Rio political consensus, there is still no real international consensus on the legal framework for forests, and forests remain, alongside soils and chemicals, the only material fields of the environment not covered by an international treaty, despite some one hundred and fifty multilateral treaties in the environmental field (Prieur & Doumbe-Bille, 1996; Olivier, 2015; Torre-Schaub, 2019).

Unfortunately, there are a number of obstacles to its realization. At the Brussels conference (February 26-27, 2017) on SFM in the Democratic Republic of Congo, for example, participants admitted that the forest is a source of covetousness and conflicts of use abound (Trefon & Croizer, 2007). Hence, as noted by Babamba (2017), the difficulty of reconciling economic profitability and sustainable development, the encouragement of the private sector and respect for the public good, the general interest and the protection of minorities, the modernity of exploitation techniques and the maintenance of indigenous peoples' traditions.

That's why we're considering appropriate solutions to avoid an irreversible ecological catastrophe.

Among these solutions, we recommend the following:

- Raising awareness of SFM among the Congolese population
- Implementing strategies to promote and exploit forest products
- Popularizing the forestry law
- Raising awareness of good forest governance among decision-makers

#### REFERENCES

- Constitution of the Democratic Republic of the Congo as amended by Law n°11/002 of 20/01/2011 revising certain articles of the DRC Constitution of 02/18/2006, DRC J.O, special number, 2011 of February 5, 2011.
- Convention on Biological Diversity “CBD” (December 1994).
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1976).
- International Tropical Timber Agreement (November 2006).
- Kabaka, I. (2018). *2002 forest reform and people's rights in the Democratic Republic of Congo. Analysis of the evolution of forest law in its legal, fiscal, ecological and socio-economic aspects* (PhD thesis). University of Pau and Pays de l'Adour, Pau, 236 p.
- Kayembe, F. (2019). *Deforestation and forest degradation in the DRC: causes, dynamics and responses*. Conference presented at Knowledge Sharing Workshop: REDD+Policy and politics in DRC, October 16 - 17, 2019, 11 p.
- Kipalu, P. & Mukungu, J. (2013). *Status of the REDD+ process in the Democratic Republic of Congo*. Forest Peoples Programme - DRC, 12 p.
- Law n°. 011/2002 establishing the forest code in the Democratic Republic of Congo, 2002, in Officiel Journal, special issue of November 6, 2002.
- Le Roy, E. (1982). The objectives of French or Belgian colonization. *African Legal Encyclopedia: Property Law*. Lomé, Dakar, Abidjan: NEA: 85-95.
- Le Roy, E. (1983). Close to the king, the court. *Annales*, 38, 21-41.
- Le Roy, E., Karsenty, A. & Bertrand, A. (1996). *Land tenure security in Africa. For viable management of renewable resources*. Paris: Karthala, 388 p.
- Mbuangi L. M (2022). *Socioeconomic and ecological issues of wood carbonization in the outskirts of the city of Boma (Kongo Central) in the Democratic Republic of Congo*. Unikis, 205 p.
- Mbuangi, L. M. (2016b). *Participation in sustainable natural resource management: Current constraints of local communities in the RBL in the Democratic Republic of Congo*. Saarbrücken: European University Editions, 100 p.
- Megevand. C. et al. (2013). *Deforestation dynamics in the Congo Basin. Reconciling economic growth and forest protection*. World Bank Report, 201 p.
- Nielsen, E. & Rice, R. (2004). Sustainable forest management and direct incentives for biodiversity conservation. *Third World Magazine*, 1, 129-152. <https://doi.org/10.3917/rtm.177.0129>.
- Olivier, L. (2015). Cop 21: *What repercussions for forest exploitation?* COP 21 plenary session for the adoption of the Paris agreement, AGRIPO.
- Order n° 034/CAB/MIN/EDD/03/03/BLN/ 2015 of July 3, 2015 establishing the procedure for developing, verifying, approving, implementing and monitoring the development plan for a forest concession for timber production.
- Order n° 105/CAB/ECN-T/15/JEB/009 of June 17, 2009, n° 034/CAB/MIN/ECN T/15/JEB/08 of August 22, 2008.

- Order n° 84/CAB/MIN/ECN-DD/CJ/00/RBM/2016 of October 29, 2016 laying down conditions and rules for the exploitation of timber.
- Order n°85/CAB/MIN/ECN-DD/CJ/00/RBM/2016 of October 29, 2016 relating to the Artisanal Forestry Unit (J.O.DRC., 2016).
- Order no. 35/CAB/MIN/ECN-EF/2006, supplemented by order no. 105/CAB/ECN-T/15/JEB/009 of June 17, 2009.
- Paris Agreement (2015) Orders n° 24/CAB/MIN/EDD/AAN/WF/05/2019 regulating deforestation permits (JO.DRC, 15 July 2019).
- Prieur, M. & Doumbe-Bille, S. (1996). Law, forests and sustainable development. *Proceedings of the 1st scientific days of the Network "Environmental law" from AUPELF - UREF, Limoges, brulant-Brussels*, 434-437.
- Sakai, L. (2017). *Permanent sovereignty over natural resources and the international protection of Human Rights. Law*. Panthéon-Sorbonne University - Paris I; São Paulo University. Faculty of Law, 687 p.
- Sakata, G. (2009). Natural resource sector reform: history, issues and assessments. *Africa of the Great Lakes of Africa, Directory 2008-2009*, 269-288.
- Sakata, G. (2012). *Congolese forest code and its implementation measures*. Paris: L'Harmattan, 272 p.
- Salmon, C. (2012). *Study on human - forest ecosystem interactions and their evolution as a function of the REDD+ program in the RBL* (Master's thesis). University of Gembloux, Gembloux, 110 p.
- Schrijver, N. (1997). *Sovereignty over natural resources - Balancing rights and duties*. Cambridge University. 452 p.
- Torre-Schaub, M. (2019). *What legal protection for forests?* Sorbonne: Université Paris 1, 32 p.
- Trefon, T. (2006). Industrial logging in the Congo: is a participatory approach possible? *Governance and the environment in Central Africa*. Royal Museum for Central Africa, 73-85.
- Trefon, T. (2008). Forest sector reform in the Democratic Republic of Congo: social challenges and institutional weaknesses. *Contemporary Africa*, 227(3), 81-93.
- Tshimpanga, O. (2017). *Individual artisanal exploitation of timber in the former Orientale Province (DRC) between 2010 and 2012, a neglected form of social forestry* (Doctoral thesis in Agronomic Sciences). Kisangani, Unikis, 190 p.
- United Nations (1992). *Convention on Biological Diversity*, 30 p.
- Vundu, M. V. & Kalambay, L. G. (2013). *Forest code commented and annotated*. Kinshasa, 153 p.