REDD+ benefit sharing mechanisms in the Democratic Republic of the Congo

Legal and institutional frameworks, policy implementation, and project experiences

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CIFOR
Jl. CIFOR, Situ Gede
Bogor Barat 16115
Indonesia
T +62 (251) 8622622
F +62 (251) 8622100
E cifor@cifor-icraf.org

ICRAF
United Nations Avenue, Gigiri
PO Box 30677, Nairobi, 00100
Kenya
T +254 (20) 7224000
F +254 (20) 7224001
E worldagroforestry@cifor-icraf.org

cifor-icraf.org

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List of abbreviations

AFD	Agence Française de Développement/French Development Agency
AfDB	African Development Bank
ART-TREE	Architecture for REDD+ Transactions
AVEC	Association villageoise d'épargne et de crédit/Village Savings and Loan Association
CAFI	Central African Forest Initiative
CARG	Agricultural and Rural Management Council
CCBS	Climate, Community and Biodiversity Standard
CDF	Congolese francs (DRC)
CIFOR	Center for International Forestry Research
CO2eq	Carbon dioxide equivalent
COP	Conference of Parties to the UNFCCC
CRP-FTA	CGIAR Research Program on Forests, Trees and Agroforestry
CSOs	Civil society organizations
DRC	Democratic Republic of the Congo
ERPA	Emissions reduction purchase agreement
ERs	Emissions reductions
FAO	Food and Agriculture Organization of the United Nations
FLD	Local Development Fund/Fonds de Développement local
FONAREDD	Fonds National REDD+/National REDD+ Fund
FPIC	Free, prior and informed consent
GDP	Gross domestic product
GFW	Global Forest Watch
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit/German Corporation for International Cooperation
HIMO	Haute intensité de main d'œuvre
IBRD	International Bank for Reconstruction and Development
IKI	International Climate Initiative
JAFTA	Japan Forest Technology Association
JICA	Japan International Cooperation Agency
LDC	Local development committee/Comité de développement Local
LDP	Local development plan/Plan de développement local
MEDD	Ministère de l'Environnement et du Développement Durable/Ministry of Environment and Sustainable Development
MPTF	Multi-Partner Trust Fund
MRV	Monitoring, reporting and verification
NDC	Nationally Determined Contribution
NFERL	National Forest Emissions Reference Level
NFMS	National Forest Monitoring System
OCEAN	Organisation Congolaise des Ecologistes et Amis de la Nature
PES	Payment for environmental services
PIREDD	Project intégré REDD+/REDD+ integrated project
PMU	Project management unit/Unité de gestion de projet
REDD+	Reduction of emissions from deforestation and forest degradation in developing countries; the role of conservation, sustainable management of forest and enhancement of forest carbon stocks in developing countries

UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNHCR	United Nations High Commissioner for Refugees
UN-REDD	United Nations-REDD Programme
USD	United States dollar
VCS	Verified Carbon Standard
VCUs	Verified Credit Units
WWF	World Wildlife Fund
WWC-ERA	Wildlife Works Carbon-Ecosystems Restoration Associates

Executive summary

Since 2009, the Democratic Republic of the Congo (DRC) has joined global climate change mitigation efforts in implementing the reduction of emissions from deforestation and forest degradation and enhancement of forest carbon stocks (REDD+) initiative. While REDD+ has created financial incentives for the DRC to protect its forests, its implementation on the ground is constrained by the lack of functional benefit sharing mechanisms. There is also limited information on the REDD+ benefit sharing mechanisms designed and adopted by the DRC legal framework and projects. This working paper aims to address these knowledge gaps by conducting a policy and literature review and undertaking key informant interviews with main stakeholders in the DRC.

Our findings show that REDD+ benefit sharing is governed by multiple policies, including sectoral policies as well as specific policies for REDD+. All of these existing policies put a strong emphasis on the compliance of delivering effective benefit sharing mechanisms as part of REDD+ project approval. However, there is no clear requirement on how these benefit sharing plans are assessed to get endorsement. Regulations on the REDD+ benefit sharing mechanisms have progressed significantly over the last 10 years, achieved particularly through increased inclusivity by broadening the REDD+ beneficiaries from just government agencies to include communities and project proponents. The fact that REDD+ benefit sharing mechanisms are being linked to carbon market development through different fund-based approaches, means that multiple pathways for REDD+ projects and their benefit sharing mechanisms can be integrated into master planning. However, the inoperability of the national REDD+ and carbon project registration system. Multiple fund-based approaches are tied to REDD+, carbon projects and multiple policies from different sectors governing REDD+ projects create a great challenges for stakeholders when interpreting and implementing REDD+ benefit sharing on the ground.

Currently, there are more than 20 REDD+ initiatives on the ground. While the government is waiting for the Mai Ndombe project to offer lessons learnt from the only benefit sharing mechanism to date before it formulates national REDD+ benefit sharing mechanisms, there is little information on the effectiveness of Mai Ndombe and other REDD+ initiatives in this regard. As a result, REDD+ policy making in the DRC has fallen short of learning from REDD+ projects and initiatives. While this working paper aims to capture what is known in terms of how different projects design their REDD+ benefit sharing mechanisms, future research is needed to assess their effectiveness on the ground to deliver both emissions data and social outcomes (as stated in the objectives of most REDD+ projects).

1 Introduction

The Democratic Republic of the Congo (DRC) has a surface area of 2,345,409 km², the largest among the Congo Basin countries, and it's territory is richly endowed with natural resources. Besides immense reserves of ores, water, arable lands, and oil, the DRC has 152 million ha of forests, which represents 10% of the world's tropical forests and more than 62% of that of the entire African continent (DRC 2021). These forests are sinks of 85 gigatons of CO_2e, and remove an estimated 822 Mt CO_2e each year (World Bank 2023). The economy of the DRC is built around the agriculture (including forestry), industry, and services sectors. In 2019, agriculture and forestry accounted for more than 64% of national employment and contributed to 20.3% of national GDP in 2020 (World Bank 2020).

The DRC has a large population, estimated in 2021 at 91.994 million inhabitants with a population growth rate of 3.1% (DRC 2021). Its average density is 39.5 inhabitant per square kilometre of land area, unequally distributed across the country (World Bank 2021). In 2020, 64% of the DRC population was living in rural areas (World Bank 2020) and nearly 54% of the population and industrial activities relied heavily on natural resources and on the 80 million hectares of arable land to sustain the national economy and local livelihoods (Trefon and De Putter 2017). These activities put increasing pressures on the forested land that are distributed throughout the country's agroecological zones.

The availability of arable lands compared with the growth in population in the DRC have been decreasing since 2014, while forest loss has increased over the last two decades. Between 2001 and 2020, deforestation was estimated at 5.1% of the country's primary forests. More specifically in 2020, the country lost 1.21 Mha of national forests. Under the current deforestation rate, the country is losing 6% of forest annually (World Bank 2023). Main drivers of deforestation and forest degradation in the DRC include: the development of road infrastructure, agriculture, uncontrolled logging for fuelwood, and industrial logging to open transport routes, as well as immigration from neighbouring countries such as Angola, Burundi, Congo, Central African Republic, Rwanda, South Sudan, Tanzania, Uganda, and Zambia (UNHCR 2021).

The DRC has been actively engaged with the international initiative for REDD+ within the framework of the United Nations Framework Convention on Climate Change (UNFCCC) (DRC 2012). The REDD+ mechanism was officially launched in the DRC in January 2009, with the first joint mission carried out in conjunction with the United Nations REDD Programme (UN-REDD) and the Forest Carbon Partnership Facility (FCPF) of the World Bank (Mpoyi et al. 2013; Kengoum et al. 2020; Ntirumenyerwa and Cliquet 2020). The principle of REDD+ is to reward tropical countries for their efforts to reduce deforestation and forest degradation by putting in place an enabling environment and investing in sectoral actions aimed at addressing the root causes of deforestation and forest degradation. Decision 1/CP.16 Paragraph 70 identifies the five types of activities used to achieve REDD+ objectives: reduced emissions from deforestation, reduced emissions from degradation, conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks.

Since 2009, REDD+ in the DRC has reached different milestones. The instruments under development are progressively embedded into the existing legal framework. The country validated its national framework strategy and created the National REDD+ Fund (FONAREDD) in 2012. After the first letter of intent (LoI) was signed in 2016, a second LoI was signed between the Central African Forest Initiative (CAFI) and the DRC. It covers the period from 2021 to 2031 with an initial commitment of

USD 500 million from multiple donors for the first five years aiming at "*working in partnership with the goal of halting and reversing forest loss and land degradation by 2031, while ensuring sustainable development and promoting inclusive rural transformation, in accordance with the Glasgow Leaders' Declaration on Forests and Land Use*" (CAFI 2021). In 2022, more than 20 REDD+ projects were in place in the DRC.

While there are many policy initiatives and projects aiming to reduce deforestation, stakeholders' main concerns in the DRC are how benefits derived from these initiatives and projects will be shared, and what their impacts on stakeholders, local communities and emission reduction outcomes will be. The 2012 national REDD+ Framework strategy clearly stresses that, *"REDD+ projects aimed at generating carbon credits and selling them on the voluntary carbon market are particularly complex and costly to implement (methodologies to follow, studies to be carried out, validation by accredited bodies located abroad, etc.). This considerably limits its scope because many potential project leaders do not have the means or capabilities needed to develop and implement such projects or are put off by their complexity. The uncertainties associated with fluctuations in the carbon markets also represent a particularly dissuasive additional risk factor. The development of a more affordable incentive mechanism therefore appears particularly useful for the implementation of REDD+."* (DRC 2012, 118). Moreover, there is an acknowledged discrepancy between the DRC's endowment with natural resources and the poverty in the country (Engelbert 2003; ISF 2008; Wilbeaux 2013; Trefon and De Putter 2017; Matata and Tsasa 2019). In 2018, 73% of the population – representing about 60 million inhabitants – was living in extreme poverty with less than USD 1.90 a day (World Bank 2023). Moreover, despite the fact that several REDD+ initiatives have been designed and launched, only a few have met their objectives and there is little empirical evidence of their impacts on the ground (Trefon 2017; Matata and Tsasa 2019).

This paper aims to contribute to addressing this knowledge gap by reviewing and analysing the legal framework on benefit sharing in the DRC as well as by analysing how REDD+ benefit sharing mechanisms are being employed by different REDD+ projects.

2 Analytical framework

The concept of benefit sharing existed in natural resources governance before REDD+. In the 1960s, the United Nations (UN) declared that the right of peoples and nations to their permanent sovereignty on their wealth and natural resources, must be implemented in the interest of their national development and the well-being of the State (UN 1962). The access and benefit sharing (ABS) implemented within the framework of the Convention on Biological Diversity provides a first common agreed definition of the concept. It is defined as “the way in which genetic resources may be accessed, and how the benefits that result from their use are shared between the people or countries using the resources (users) and the people or countries that provide them (providers)” (CBD 2010, 3). Within REDD+, *benefit sharing* refers to the distribution of direct and indirect net gains from the implementation of REDD+ (Luttrell et al. 2013; Pham et al. 2013; Wong et al. 2016). Net gain is important in the context of the REDD+ benefit sharing mechanism because stakeholders often discuss benefits, but overlook the costs associated to obtain these benefits. If the costs are higher than benefits, it is unlikely that environmental service providers would be willing to participate in REDD+ because of the absence of incentives to shift from business-as-usual (BAU) short-term incomes and benefits, to more sustainable practices with mostly longer-term outcomes.

REDD+ implementation provides monetary and non-monetary benefits for environmental providers (those actors that change their business behaviour to keep trees and forests standing), but also involves two main types of costs: (1) implementation and transaction costs, or the direct expenses incurred for a country in setting up a REDD+ system and implementing the necessary policies; and (2) opportunity costs, or the foregone profits from the best alternative forest and land use (Pham et al. 2013). The costs refer to not only economic terms, but also social costs involved in implementing REDD+ (e.g., maintaining indigenous traditional practices and social norms). In many cases, social incentives (e.g., community crowd-out effects; social norms) are more important than actual economic compensation.

We adopt the 3E (effectiveness, efficiency, and equity) framework as it is one approach to assessing both the outcomes and the process of a benefit sharing mechanism (Luttrell et al. 2013; Pham et al. 2014; Wong et al. 2016). When designing a payment distribution/benefit sharing mechanism for REDD+, the 3E framework can be a useful tool to compare and evaluate different approaches to distributing payments:

- ***Effectiveness***. Does the payment structure lead to improved well-being (e.g., change in income), enhanced participation (e.g., increase in level of participation of different social groups), and improved environmental conditions (e.g., increase in forest cover or forest quality), in a reasonable time frame? Effectiveness also relates to the environmental, social, and economic outcomes or performance of the benefit sharing mechanism.
- ***Efficiency***. Is the payment structure made in the most cost-saving and efficient way? What are the administrative and social costs associated with the benefit sharing mechanism? Expensive structures may reduce the benefits incurred from a process/project and thus disincentivize the actors willing to participate or actors already participating in a given process or project.
- ***Equity***. Does the payment structure consider adequate compensation relative to the costs incurred by different actors? Does the payment structure take stakeholders’ voices into account? Equity should be examined through three aspects:
  - Procedural refers to participation in decision making and negotiation of competing interests.
  - Distributive refers to the allocation of benefits and costs between different stakeholders.
  - Contextual setting refers to existing political, social, and economic conditions of the country (e.g., power structure and dynamics; existing rights and benefit distributions).

Harmonizing these three objectives is not always easy, as trade-offs amongst them are often a necessity. For example, ensuring all stakeholders participate in decision making (equity) might lead to higher transaction and implementation costs (efficiency). A generic approach to benefit sharing is therefore not appropriate, as different countries, regions, communities, individual households, and businesses encounter different circumstances, preferences, and needs that shape their choice of benefit distribution sharing options in different ways (Chapman et al. 2014). This implies that stakeholders, in full participation, need to make informed decisions about these trade-offs as well as decision factors. The benefit sharing is also influenced by the existing legal framework and the country context as well as the type of nested system used for REDD+ in a given country. Nesting refers to the various approaches aimed at creating a common accounting system and/or crediting system to integrate existing REDD+ projects into national programmes, or applying it directly within the existing programme approach including to benefit sharing (Hamrick et al. 2021).

Yet, key legal structural elements that need to be developed for any benefit sharing mechanism must include answers to the following questions:

- What is the legal framework on benefit sharing and how is the benefit sharing mechanism aligned and embedded in existing institutions and legal frameworks?
- How are benefits and costs defined?
- How are beneficiaries determined?
- How are incentives structured (e.g., scale, type of financing model, type of intervention), and how are benefits distributed (criteria, process, and timelines)?
- How can safeguarding principles support benefit sharing arrangements (such as measures to ensure transparency and public participation)?

This paper will address each of these questions in the context of the DRC.

3 Research methods

This study adopts a multi-method research approach and includes a literature review, semi-structured interviews, experts' own observations, and legal analysis. First, we reviewed international and domestic laws and policies on the REDD+ benefit sharing mechanism in force in the DRC, scientific papers, available documents, and reports from donors, projects, and governments on REDD+ projects in the DRC. This literature review aims to take stock of existing findings, analyses, and lessons learnt on how the benefit sharing mechanism is currently being designed and implemented in the DRC. Second, we conducted semi-structured interviews with 19 key informants (3 governmental actors, 4 donors, 10 civil society organizations (CSOs), and 2 project developers) who are deeply involved in formulating REDD+ policies, project design, and implementation in the DRC. These semi-structured interviews with actors aimed to understand stakeholders' perceptions on the existing benefit sharing mechanism schemes, opportunities, and challenges for effective, efficient, and equitable REDD+ benefit sharing in the DRC and how these can be improved to achieve expected REDD+ outcomes.

4 National legal and policy frameworks on REDD+ benefit sharing

REDD+ benefit sharing is governed by both natural resources management/environment policies (Annex 1) as well as specific REDD+ policies/forest carbon market policies (Annex 2). Our policy review shows that REDD+ benefit sharing mechanisms in the DRC are still being developed and refined by different instruments, illustrating both the opportunities and challenges encountered by countries when they implement REDD+.

A nested approach. In the DRC, REDD+ performance-based projects are nested into the national REDD+ framework. Policies to date clearly show the DRC approach in mainstreaming and sharing benefits of REDD+ payments across governance levels. The fact that both the central government and provincial governments are specified as beneficiaries in current REDD+ benefit sharing policies will provide strong financial incentives for them to take part in REDD+. However, the institutional and legal framework of the decentralization of state revenue might adversely affect the management of REDD+ benefits by decentralized provincial and state entities in the DRC. This framework remains weak, as it is highly dependent on the provisions of the Organic Law of 07 October 2008 organizing the composition and functioning of decentralized entities and their relations with the state and provinces. Article 105 of this law provides that the decentralized entities' financial resources include funding from the central government and from the National Equalization Fund, amongst others. But to date, it remains unclear how these will link to REDD+ benefit sharing. The transfers to the provinces by the central state are based on the justice principle, meaning that the central government retrocedes more to the provinces that contribute the most. However, the resources that go through the National Equalization Fund are rather based on the principle of equity, where the poorest decentralized entities are paid more than the richest ones.

A strong emphasis on complying with benefit sharing mechanism requirements as part of REDD+ and the carbon approval process. Ministerial Order No. 047 /CAB/MIN/AAN/MML/05/2018 regulates that the failure to comply with the safeguards and the benefit sharing plan will lead to the suspension or withdrawal of the registration certificate. This gives a strong signal for project investors to pay special attention to and compliance with delivering a benefit sharing plan. However, there is no clear requirement on how these benefit sharing plans should be assessed.

Progressive changes towards greater inclusion by clearly identifying who are REDD+ beneficiaries. Clear progress on moving toward a more inclusive benefit sharing mechanism has been recorded in the DRC. In 2018, Ministerial Order no. 047 /CAB/MIN/AAN/MML/05/2018 states that to ensure effectivity of the competent entities and the REDD+ registry keeper, the portion of the REDD+ benefits reserved for the Congolese State in the benefits from the sale of carbon certificates by private operators would go only to specified government agencies including the Public Treasury (the General Directorate of Administrative, Property, Judicial and Investment Revenues; DGRAD), the competent agency responsible for carbon project registration, the central administration of the ministry having forests in its attributions, and local government. In 2023, Ordinance Law no. 23/007 of 03 March 2023 amending and supplementing law no. 11/009 of 09 July 2011 on the fundamental principles of environmental protection insists on two groups of actors: Indigenous People; Local Communities (1) ; the investor and project manager (2) as REDD+ beneficiaries who should share REDD+ and carbon benefits. Law no. 22/030 of 15 July 2022 on the protection and the promotion of the rights of the Indigenous Pygmies People as well as other environmental policies (shown in Annex 1 place a strong emphasis on participatory decision making and the inclusion of Indigenous Peoples and local communities).

National scheme was developed based on a proof-based pilot. Although the DRC has multiple legal frameworks providing different principles on REDD+ benefit sharing mechanisms, only the Mai-Ndombe jurisdictional programme is endowed with a completed and validated benefit sharing plan document providing specific insights on how REDD+ benefits from the programme will be distributed (Annex 3). All stakeholders interviewed shared that this scheme will serve as a model for future REDD+ benefit sharing mechanisms in the DRC and stakeholders are analysing its lessons learnt for future REDD+ projects. Yet, there is little information and data to date on how these schemes have been implemented.

Unclear which national institution is responsible for regulating the REDD+ benefit sharing mechanism. As can be seen from Annex 1, the REDD+ benefit sharing mechanism is also influenced by sectoral policies including those involving agriculture, forestry, and land law. The key challenge now, as all interviewees pointed out, is that it is unclear which agencies are in charge of implementing the national benefit sharing scheme given the existence of multiple actors and funds in relation to carbon revenues in the DRC.

Table 1. Newly created funds in the DRC and their claimed budget share of carbon revenues

Fund	Creation	Source of income
National REDD+ Fund (FONAREDD)	Article 4.4 of the Decree 09/40 du 26/11/2009 on the establishment, the composition and the organization of the implementing structure of REDD+ process	5% of the state's share of the carbon market benefit sharing (article 3 interministerial order no. 006/CAB/MINETAT-MIN/EDD/EFM/TSB/02/2023 and no. 120/CAB/MIN.FINANCES/2023 of 15 September 2023 on the distribution of the state share on the benefits derived from the sale of carbon credits.
National Forest Fund (FFN)	Law No. 011/2002 of 29 August 2002 on the Forest Code and Decree No. 09/24 of 21 May 2009 on the creation, organization and operation of the FFN (Fonds Forestier National/National Forest Fund)	The financial resources of the National Forest Fund come from: 10% of government revenues from environmental services: carbon credits, Clean Development Mechanism (CDM), reducing emissions from deforestation and forest degradation (REDD)
Environment Intervention Fund	Decree no. 20/031 of 31 October 2020 establishing the statutes, organization and operation of a public establishment called the Environmental Intervention Fund "FIPE"	The resources of the FIPE are made up of: • environmental services, namely: - 100% of funds earmarked for environmental rehabilitation as a result of mining, hydrocarbons and other activities - 50% of the pollution tax • remuneration for environmental services
National Fund for Territorial Administration	Decrees nos. 21/08 and 21/09 of 30 December 2021 on the creation, organization and operation of the National Agency for Spatial Planning (ANAT) and the National Fund for Spatial Planning (FONAT)	
Authority for the regulation of the carbon market	Ordinance Law no. 23/007 of 3 March 2023 modifying and completing Law no. 11/009 of 9 July 2011 on fundamental principles relating to the protection of the environment	Article 17 ter: The resources of the authority for the regulation of the carbon market are made up of: (...) b) a share of the resources from the sales of carbon credits c) a share of the carbon tax

These include the Carbon Market Regulatory Authority on the one hand, and several funds on the other (Table 1). However, according to most interviewees, there is an absence of clear coordination of the several newly created funds that claim shares of carbon revenue in the DRC. Moreover, these interviewees also highlighted that these mechanisms do not explicitly require the principle of sharing benefits for local communities of REDD+ project sites. In addition, the multiplication of institutions at national level claiming shares of carbon revenue as part of their budget source in the DRC is raising concerns about the capture of carbon and REDD+ revenues at the national level at the expense of the local level. This might explain actors' concerns about the silence of the 2023 regulation that focused on the state share of carbon revenues, and remained totally silent about the local communities' shares of carbon and REDD+ benefits. The unsolved issues so far include addressing the difficulties around implementing decentralized governance of the state share of these revenues so that local institutions have access to their share of the REDD+ benefits. The DRC Government has included a carbon tax in the national regulation for achieving the national carbon emissions reductions. The revised 2023 law on the fundamental principle relating to the protection of the environment defined the carbon tax as a tax to be paid by any person or organization whose activities emit greenhouse gases (GHGs) beyond thresholds determined by sectorial ministries. The implementation of this tax remains incomplete. But use of this fiscal tool to realize the objectives of the Nationally Determined Contributions (NDCs) is under debate, with actors fearing that the implementation of this financial instrument will impact the capacity of local actors to effectively benefit from REDD+.

Incompleteness of institutional and legal frameworks. There is a national effort to endow the DRC with a strong legal framework for REDD+. The extensive legal reforms that have resulted to provide the DRC with enabling environment for REDD+ raised the issue of integration and coordination of the policy outputs as far as benefit sharing is concerned. However, to date, it remains both incomplete in some aspects and outdated in others, thus justifying a large, but still uncertain revamp of the institutional and legal framework, including for the carbon market. An example is that several ministerial regulations still have to be finalized to ensure the effectivity of the already completed legal framework, while other critical sectors such as the forest sector still await the application of their strategic and legal reforms within the framework of REDD+. Law no. 22/030 of 15 July 2022, on the protection and the promotion of the rights of the Indigenous Pygmy Peoples still awaits the implementing decrees. Article 44 of this newly adopted law guarantees Indigenous Pygmy Peoples the right to fully enjoy benefits derived from environmental services on lands they traditionally own, occupy, or use. Stakeholders interviewed claimed that the experiences of past legal reforms led to the fear that burdensome administrative protocols and other competing and vested interests hamper the effectiveness of both existing policies and those still under design. The effectivity of this law is conditional on the implementation of a number of orders that have yet to be announced by the competent government unit. According to a respondent, the draft of this 2022 law was already available in 2010, and negotiations for its implementation lasted more than a decade. It is expected that the implementing decrees will happen in due course to allow Indigenous Pygmy Peoples to effectively benefit from REDD+. However, the issue of the capacity to implement or oversee projects and access their REDD+ benefits remains a challenge in a context where these communities at the local level remain as spectators to the ongoing policy processes.

REDD+ in the national carbon market framework. The REDD+ benefit sharing narrative in the DRC over time has been overshadowed by the carbon market debate, leading to a growing interest in the commodification of forest- and non-forest-based carbon rather than to reduced emissions and their effects. This situation has progressively led to the idea that such carbon commodification may lead to increased social conflict and render the forests' carbon content worthless (Osborne 2015). The private sector has shown growing interest in the forest carbon business. As a consequence, exploitation of forest concessions converted into forest conservation businesses has increased, progressively involving both the banking sector and large-scale agricultural companies. It remains unclear what impact this will have in the realization of REDD+ co-benefits in the country.

5 Overview of REDD+ related projects in the DRC

5.1 REDD+ project classifications and existing projects to date

In the DRC, Article 2 of the 2018 Ministerial Order on REDD+ investments makes a distinction between three types of activities pertaining to REDD+. The first are *REDD+ projects*. They are referred to as projects that demonstrate their contribution to REDD+ objectives and valorize their reduced emissions directly to result-based compensation mechanisms, be they fund or carbon market. The second are *REDD+ initiatives* that are described as demonstrating their contribution to REDD+ objectives, but do not valorize their reduced emissions to a compensation mechanism. These reduced emissions are meant to be valorized at the national level. REDD+ initiatives can target sectorial activities or activities that set enabling conditions. The third and last are designated as *initiatives aligned to REDD*+ and described as traditional development projects that can have an impact on drivers of deforestation and forest degradation and which aim to align their intervention with REDD+ objectives. When labelled as being aligned with REDD+, these projects will be required to justify their contribution to REDD+ objectives. However, they will not be subjected to the same level of exigencies as REDD+ projects. The 2018 ministerial order includes these three types of activities in its definition of REDD+ investment in addition to the jurisdictional REDD+ programme. According to Article 2 of the 2018 ministerial order, REDD+ investment is "*a set of activities contributing to the reduction of emissions due to deforestation and forest degradation, the increase of carbon stock, the conservation of carbon stock and the sustainable management of forests*" (DRC 2018).

Accounting for REDD+ investments in the DRC faces the difficulty of the absence of a well-maintained registry. A REDD+ official in the DRC admitted that the national REDD+ registry was not operational at the moment of data collection. REDD+ projects registry was rather manual, and not all projects were registered systematically. In the absence of an effective REDD+ projects registry, the REDD+ projects listed here (Table 2) – including the former, ongoing, and planned REDD+ projects and initiatives in the DRC – is compiled based on the best available knowledge but may not be comprehensive. It is also important to note that only the Mai-Ndombe project benefit sharing plan has been approved and validated, while projects implemented within PIREDD were and are still not required to have a benefit sharing plan.

A review from different sources shows that in the DRC between 2009 and 2023, there has been a minimum of 45 REDD+ initiatives and projects related to REDD+, of which 25 are either suspended or ended, 18 are ongoing, and 1 is simply planned (Table 3). REDD+ projects in the DRC often have multiple objectives, including improving policies and forest governance (30%), capacity building (49%), and carbon sequestration outcomes (21%). Besides REDD+ projects, several projects are now registered as forest conservation concessions. This includes former forest exploitation concessions that have turned into forest conservation concessions. Since 2020, a minimum of 24 forest conservation concession titles have been granted in the DRC (see Tables 2–4).

A senior official explained that PIREDD (REDD+ project) are just classical projects where investments are defined and realized by communities with the support of experts, and where benefit sharing plans are not required for PIREDD under FONAREDD. A visible manifestation of this issue is ensuring the permanence of the projects and initiatives. In the case of the PIREDD Plateaux, dozens of hectares of planted trees were burned by communities whose payments were disrupted because of the end of the project implemented by WWF. As reported by Berk and Lungungu (2020), some communities declared

Table 2. REDD+ projects and programmes in the DRC during 2009–2022

Project name	Start date	End date	Project value (USD million)	Implementer
INTEGRATED PROGRAMMES AND PROJECTS				
1. South Kwamouth REDD+ integrated agroforestry pilot project	2011	2016	4.3	NOVACEL
2. Luki Reserve integrated pilot project around the biosphere reserve	2011	2018	2.3 (EUR)	WWF Belgium
3. Mambasa integrated pilot project	2011	2016	2.9	WCS
4. Ecomakala integrated REDD+ pilot project	2011	2013	2,495	WWF Belgium
5. Lukenie pilot project	2011	2014		Agritrop
6. Maringa-Lopori-Wamba landscape integrated REDD+ pilot project				African Wildlife Foundation
Kaponda integrated REDD+ project				Premi Congo
7. Mbuji-Mayi/Kananga REDD+ Project (MBKISS REDD+ project)	2015	2022	21.5	Fondation Daniel Mdimba; CEILU-APROBES-KASAI vert; OCEAN-OSAPY-ADIKIS
8. Plateau integrated REDD+ project (PIREDD Plateau)	2014	2020		World Bank
9. Support programme for the development of degraded forests and savannahs	2019	2024	15	French Development Agency
10. Mai-Ndombe integrated project	2017	2022	30	World Bank
11. Plateau REDD+ initiative	2016	2018		WWF-DRC
12 Mongala REDD+ integrated project	2019	2023	7	ENABEL
13. Maniema REDD+ integrated project	2021	2026	30	GIZ
14. Equateur REDD+ integrated project	2019	2023	10	FAO
15. Sud-Ubangi REDD+ integrated project	2017	2021	7	World Bank
16 Kwilu REDD+ integrated project	2018	2023	4	JICA
17. Ex-Orientale REDD+ integrated project	2017	2022	33	UNDP
18. Programme de gestion durable de l'agriculture	2018	2022	3	FAO
19. Kolomami PIREDD is potentially to be funded by CAFI through FONAREDD in the new partnership with the DRC (CAFI 2020)	No data available	No data available	No data available	ENABEL
20. LEAF programme in Tshuapa Province	No data available	No data available	No data available	No data available
SECTORAL PROGRAMMES				
21. National Forest Monitoring System	2019	2021	10	FAO
22. Land Reform Support Program	2018	2022	6.9	ONU-HABITAT
23. Sustainable Consumption Program and Partial Substitution of Wood Energy	2018	2023	15	UNDP
24. Support Programme for Spatial Planning Reform	2017	2022	8	UNDP

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Table 2. Continued

Project name	Start date	End date	Project value (USD million)	Implementer
25. Civil Society Support Program	2016	2022	3	UNDP
26. Indigenous Peoples Support Program	2019	2022	2	World Bank
27. Family Planning Scale-Up Program (PROMIS-PF)	2019	2022	33	UNOPS-FNUAP

Table 3. REDD+ projects under result-based payment in the DRC

Project name	Start date	End date	Project value (USD million)	Implementer
1. The Mai-Ndombe REDD+ project	2011	2036		WWC
2. The Mai-Ndombe REDD+ ERPA	2016	2021	70	World Bank
3. Isangi REDD+ pilot project Projet de reboisement et de deforestation évidée d'Isangi	2009	2038	2.2	OCEAN JADORA-CEMCO
4. Conservation forest concession for the valuation of environmental services associated with a REDD + project in the Province of Tshuapa, Territory Befale, Sector of Lomako	2020	Suspended by Ministerial Order no. 008/CAB/VPM-MIN/EDD/GAP-TSB-PDK/01/21 of 08 December 2021, suspending the Conservation concessions attributed to TradeLink pending the legal review	No data available	TradeLink Sarl
5. Conservation forest concession for the valuation of environmental services associated with a REDD + project in the Province of Tshuapa, Boende Territory, Wini Sector.	2020		No data available	TradeLink Sarl
6. Conservation forest concession for the valuation of environmental services associated with a REDD + project in the Province of Tshuapa, Befale Territory, Sector of Befumbo	2020		No data available	TradeLink Sarl
7. Conservation forest concession for the valuation of environmental services associated with a REDD + project in the Province of Tshuapa, Boende Territory, Djera sector	2020		No data available	TradeLink Sarl
8. Conservation forest concession for the valuation of environmental services associated with a REDD + project in the Province of Tshopo, Basoko Territory	2020		No data available	TradeLink Sarl
9. Conservation forest concession for the valuation of environmental services associated with a REDD + project in the Province of Tsopo, Isangi Territory, Isangi and Opala Sectors	2020		No data available	TradeLink Sarl

that 2 years had passed without them receiving payments for planting trees and that they had suffered food scarcity because of restrictions placed on women's livelihood to accommodate the projects. Such a case raises two issues: the feeling of inequity around REDD+ benefits sharing within projects and initiatives, and the lack of information on what a REDD+ benefit really is, and under which conditions it can be earned.

A number of concessions have been granted for conservation in the DRC since 2020 with no further data available on the periods (see Table 4). While the recent revision of the titles provides that most of these conversions are legal, some respondents regret the absence of a legal framework to provide a legal background for this conversion process.

Table 4. Forest conservation titles in the DRC as of March 2023

Company	Location and area (ha)	Status
Safbois	• Tsopo - Isangi = 243,408 - Isangi = 73,278	Granted
Kongo Forest Based Solution (KFBS)	• Mai-Ndombe - Oshwe = 154,850 - Oshwe = 219,220 - Oshwe = 288,452 - Oshwe = 191,913 - Oshwe = 211,238 - Oshwe = 72,378 - Inongo-Bikoro 292,283 - Kutu = 213,983 - Kutu 238,297 • Equateur - Bolomba = 110,668 - Inongo-Lukolela = 218,927 - Bolomba = 156,757 • Sud-Ubangi - Equateur/Sud-Ubangi = 286,752 • Tshopo - Isangi-Yahuma = 288,652 • Mongala - Lisala = 150,703	Granted
Somicongo Forest Conservation (SARL)	• Mai-Ndombe - Inongo = 294,014	Granted
Ecosystem Restoration Associates (ERA)	• Mai-Ndombe - Inongo = 294,014	Granted
Ets MOTEMA	• Equateur/Tshuapa - Ingende = 179,473 - Igende-Monkoto = 210,247	Requested migration from production to conservation title
KMS “KANATA”	No data available	Reported by Ministry of Environment and Sustainable Development (MEDD) to own several conservation titles not registered with the forest administration
SORFA	• Basoko Territory, Tsopo Province: contract nos. 001/23 (SORFA), 004/23 (SORFA)	Granted

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Table 4. Continued

Company	Location and area (ha)	Status
SOCODEV	• Contract no. 007/23 of 24 July 2023 for forest conservation concession: 226,126 ha in the Province of Tsopo, Territory of Banalia, Sector Bamanga. Length of the contract is 20 years renewable upon demand • Contract no. 008/23 of 24 July 2023 for forest conservation concession: 291,046 ha in the Province of Tsopo, Territory of Banalia, Sector Baboro. Length of the contract is 20 years renewable upon demand	Granted
ERA Congo	• Contract no. 002/23 of 4 March 2023, covering 188,835 ha in Equateur Province, Basankusu Territory, signed with Ecosystem Restoration Associates Congo (ERA)	Granted
WWC Congo	• Contract no. 003/23 of 4 March 2023, covering 299,995 ha in Nord-Ubangi Province, Businga Territory, signed with Wildlife Works Carbon Congo (WWC Congo)	Granted

Source: Data from various sources

5.2 Sources of funding for REDD+ projects in the DRC

An assessment of the 27 REDD+ projects and programmes identified in the DRC show that promoters in the DRC rely on three funding streams. The majority rely on public grants, then come private funds. Mixed grants (coupled public and private) are only a minor source of funding for REDD+ projects (Figure 1).

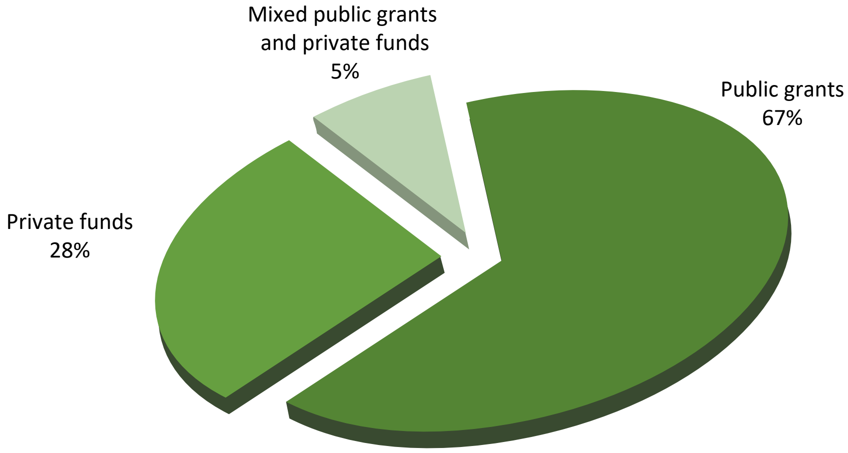

Figure 1. Sources of funding for REDD+ projects, programmes, and initiatives in the DRC (authors' analysis)
Source: Authors' analysis

Public and private funding sources are mobilized through different channels:

- **Sales of carbon credits**: The investor already has systems for sales of carbon credits and uses the money earned to fund a new or an existing project/programme.
- **Equity or own proponent capital**: The project proponent invests its own financial resources or capital to fund the project.
- **Donations (from individual, non-governmental organization (NGO), firm, foundation):** A third party provides money without expecting a return on investment to support the implementation of the project. The money is managed for REDD+ as agreed with the donor, but based on the receiver institutions' procedures.
- **International aid/grant**: The international aid/grant money is given to REDD+ investors without the granter expecting a financial return on the investment. However, in these cases, the grants are managed based on the purposes, principles, and fiduciary procedures settled and/or validated by the donor. This occurs, for example, for all PIREDD-funded initiatives under CAFI through FONAREDD.

The overall funding of REDD+ projects in the DRC are from international sources. In some cases, there is co-funding by national and international institutions as in the case of the Kwilu integrated project funded by both CAFI/FONAREDD and the Japan International Cooperation Agency (JICA); or the Maniema Integrated REDD+ project co-funded by both the governments of Germany and the DRC.

All REDD+ projects involving private for-profit organizations are all co-funded. This is so for the Mai-Ndombe project by WWC, the Ibi Bateke/IBI Village project, and the Maringa Lopori Wanba Landscape project. Even in the case of the Isangi project where the MEDD is involved, no national public fund has invested in the project. In these cases, funders are private corporations, and potential Verified Credit Unit buyers.

5.3 Financial scale of REDD+ projects

Based on an estimation of the disclosed budget of 25 completed and still ongoing REDD+ projects and various initiatives, a total minimum of USD 384 million was budgeted for REDD+ projects and initiatives in the DRC in 2023. The country signed a second agreement with CAFI with a first commitment of USD 500 million. These figures do not include data about private REDD+ projects that remain mostly undisclosed. Project budgets vary enormously from one project to another as can be seen in Figure 2. More than three-quarters of the projects' budgets analysed are above USD 5 million.

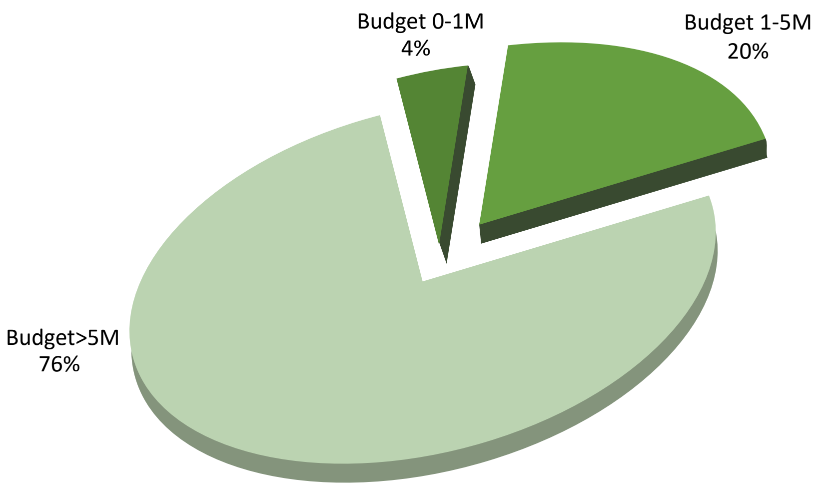

Figure 2. Overall budget size distribution of projects, programmes, and initiatives (in million USD)

Table 5. Budget of and disbursement to REDD+ projects and programmes under FONAREDD (as of data on 31 July 2023)

Organization	Approved budget (real-time) (USD)	Transfers (real-time) (USD)	Refunds (real-time) (USD)	Expenditure (USD)	Balance (real-time) (USD)
AFD	26 999 378.00	14 000 000.00	0.00	2 343 642.26	11 656 357.74
ENABEL	12 000 000.00	9 000 000.00	0.00	6 338 756.22	2 661 243.78
FAO	23 000 003.00	22 299 916.00	–32 607.09	20 373 076.24	1 894 232.67
GIZ	30 000 000.00	15 000 000.00	0.00	8 589 699.43	6 410 300.57
IBRD	39 000 000.00	36 000 000.00	0.00	24 798 377.80	11 201 622.20
JICA	3 999 607.00	3 999 607.00	0.00	2 919 807.45	1 079 799.55
UNCDF	6 957 049.68	4 959 317.84	0.00	4 037 333.78	921 984.06
UNDP	68 209 884.32	56 513 099.31	0.00	38 465 088.99	18 048 010.32
UNFPA	8 729 120.00	10 727 486.00	0.00	8 818 063.85	1 909 422.15
UNHABITAT	6 999 490.00	6 999 490.00	0.00	6 734 714.56	264 775.44
UNOPS	24 270 880.00	32 272 514.00	0.00	22 810 865.00	9 461 649.00
Total	**250 165 412.00**	**211 771 430.00**	**-32 607.00**	**146 229 426.00**	**65 509 397.00**

Source: MPTF (2023). (Consulted 31 July 2023).

Regarding the 11 initiatives overseen by FONAREDD and placed under the financial management of the United Nations Development Programme-Multi-Partner Trust Fund (UNDP-MPTF) (for which data are the most consistent), the distribution of budgets shows that 10 out of 11 projects' reported budgets are above USD 5 million. As of 31 July 2023, the total approved budget under the MPTF was USD 250,165,412, unevenly distributed as far as net funded, transfer, and expenditures are concerned (see Table 5).

The funding within REDD+ of payment for environmental/ecosystem services (PES) in the DRC is from two sources: donors on the one hand and the DRC Government on the other. According to the latest figures, as of 29 March 2022, the MTPF recorded commitments from two donors: an amount of USD 246,088,332 from the CAFI national investment framework, and USD 4,063,013 from the Swedish International Development Cooperation Agency. One hundred percent of the commitments from both CAFI and Sweden has been disbursed so far (UN-MPTF 2023). FONAREDD raised USD 250,151,344 and forwarded USD 202,344,477 to implementing agencies. The latter spent 72% of the amount received from FONAREDD. It remains unclear how many financial resources the DRC Government has invested so far in REDD+ projects. As fundings provided by donors are grants to the DRC State, the financial resources placed under FONAREDD auspices are considered as public funding, although the administrative agent (the UNDP) in charge of managing the funding is not a national public body.

All past and ongoing REDD+ initiatives in the DRC are considered when putting in place national capacity for REDD+, with a cumulated budget of USD 189 million. This amount is twice the value of that of projects aiming at policy change, which totalled USD 95 million at the time of data collection. However, this gap is significantly reduced when the average funding is considered for projects in each category. It can also be noted that for projects targeting policy change and those aiming at capacity in place for REDD+, the average budget of projects is USD 10.5 million. The DRC is still recruiting agencies for the implementation of REDD+ initiatives under the second agreement with CAFI.

The World Bank signed an emissions reduction purchase agreement (ERPA) with the country and committed to purchase not less than 11 million ER units from the Mai-Ndombe ERP. To date, no disbursement has been made and it is not clear to actors why these payments have not yet been made. One reason raised by a respondent is that the country did not fulfil all the required conditions.

These include having a benefit sharing plan and a functional REDD+ registry. The validation of the benefit sharing plan in 2022 for the Mai-Ndombe ERP was not sufficient. The country is still struggling to operationalize its national REDD+ registry. In the meantime, the Ecosytems Restoration Associates Congo/Wildlife Works Carbon (ERA-WWC) project issued payments to the project's stakeholders, including local communities. But it is not clear to date what conditions have been considered for payments, and the amounts paid to various stakeholders have not been disclosed, leading to suspicions about what conditionalities underly the payments. Moreover, Berk and Lungungu (2020) observed that within the project, payment was not consistent within and across villages.

5.4 Costs

Most key respondents interviewed highlighted that the question of the cost of realizing avoided deforestation is still high on the research agenda, but very low in policy debates in the DRC.

In general, projects description documents in the DRC (referred to as PRODOC) use different categories to describe the costs incurred by the implementation of REDD+ projects:

Operational costs – refer to costs that are key to meeting the objectives and results of the action, including the verifiable deliverables/outputs. Based on information from respondents of the study, within REDD+ PES projects implemented in the DRC, operational costs sometimes involve all costs and may include payments for staff and for service providers or various contractors. They also include grants paid to sub-grantees. Among the latter are local community members and organizations that are paid based on their involvement in the implementation of project activities as contractors.

Management costs – are the identifiable costs incurred by the management, the coordination, the monitoring and evaluation relating to the implementation of the project actions, or as justification of the expenses.

Structural costs (not considered) – refer to the expenses that the beneficiary supports to achieve its social goals. Although the structural costs are influenced by the implementation of the project's actions, they are not part of the budget of the action. However, according to projects such as Mongala PIREDD, structural costs are not eligible as part of a project's costs and thus should not be considered. For other projects, it is not clear from the information publicly available what costs are not to be considered.

Distributional costs – can be grouped into four categories: (i) operational costs, (ii) management costs, (iii) contractual services, and (iv) transfers and grants. More specifically, a set of five projects involving field project activities (PIREDD Mongala, PIREDD Kwilu, PIREDD Equateur, PIREDD Mai-Ndombe, and PIREDD Sud-Ubangi) funded by FONAREDD have been analysed to observe the distribution of the expenditures of the amounts effectively received as of end of March 2022 (see Figure 3). When observed at the projects level, the distribution of expenses shows that costs are unevenly distributed from one project to another, as shown in Table 6.

Within the framework of the benefit sharing plan of the Mai-Ndombe Emissions Reduction Program, only operational costs are presented as key to determining the net result-based reduced emissions payments (DRC and FCPF 2022).

Projects and initiatives are still mainly focused on the operational or budgetary costs at the project level that include both types of implementation costs (direct expenses incurred in setting up a REDD+ system, and those involved in implementing the necessary policies and activities undertaken to reduce deforestation and degradation). The Mai-Ndombe Program benefit sharing plan has explicitly presented the operational costs as those to be deducted from gross reduced emissions payments to determine the net result-based payment. A principle posed in the Mai-Ndombe benefit sharing document is the

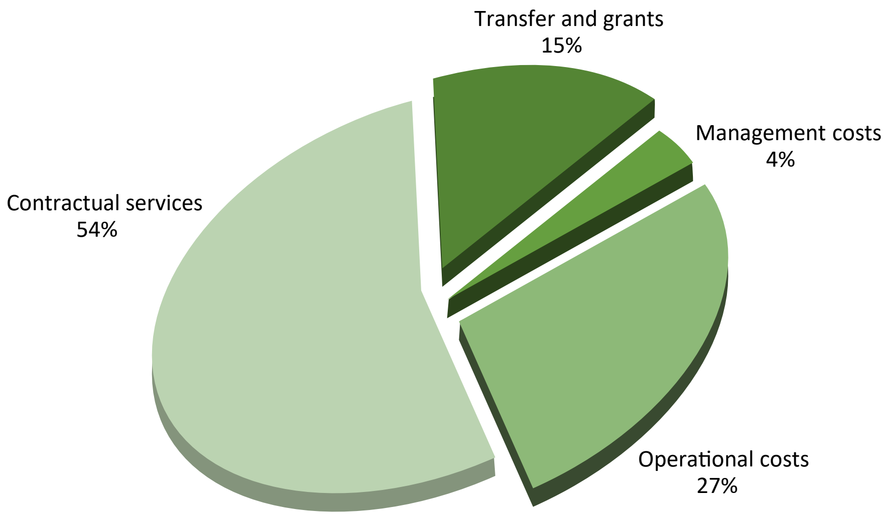

Figure 3. Distribution of costs per type in REDD+ projects, programmes, and initiatives in the DRC

Table 6. Distributions of costs in a set of PIREDD projects

	PIREDD Mongala	PIREDD Sud-Ubangi	PIREDD Kwilu	PIREDD Equateur	PIREDD Mai-Ndombe
Funds transferred >>>> (million USD)	9,000,000	4,000,000	**3,168,041**	6,000,000	20,000,000
Total expenditures (million USD)	4,992,084.47	1,432,363.01	997,416.38	5,576,656.49	12,403,936.63
Types of expenditures					
Operational costs	63%	13%	57%	36%	7%
Management costs	9%	0%	18%	7%	0%
Transfers and grants	15%	0%	8%	56%	0%
Contractual services	13%	87%	17%	1%	93%

Note: The expense figures used in this table are those from the MPTF update as of 29 March 2022.

equitable distribution of the ER programme's costs and benefits among the programme stakeholders. However, a definition of operational costs may cover a large set of items that the project implementer can include. A respondent to the study stressed that projects implemented by foreign organizations tend to have very high operational costs as they regularly require the expertise of international experts, whose fees are far more expensive than local expertise. As a response, a donor participant to the study argued that: "local expertise is cheap, but it is rare to find and sometimes, it did not met [sic] the required profile for REDD+ as a new topic". This raised an efficiency issue, as the experiences of the various projects can lead to extensions of the definition of what costs are, to include various items just for the sake of increasing what is considered to have been paid as expenses, and thus reduce what goes as benefit to be shared with other stakeholders.

Bush et al. (2024) argued that policy makers are facing two challenges around decision- making to achieve forest conservation, namely (i) the determination of the level of opportunity costs that will result in a desired behavioural change, and (ii) the equitable sharing of benefits and socio-economic factors affecting welfare values. Benefit sharing aims to distribute direct and indirect net gains from the implementation of REDD+. However, these gains can only be determined against the various costs incurred by the design and implementation of a project or initiative, which are not fully studied and included in most REDD+ initiatives. However, DRC stakeholders do not share a common understanding of REDD+ costs and can categorize costs differently or mix them up. This may lead to a potential risk, as pointed out by Luttrell et al. (2012, 131), that: "Inappropriately mixing different types of costs, different actors and scales can result in misleading estimates of net benefits". Also, the DRC context features the description by Streck and Parker (2012,114) who stress that: "In many cases, particularly where they have been proposed by national governments or other interested stakeholders, cost estimates are driven more by a desired result than by rational analysis".

The policy process in the DRC so far has given priority to investors and ignored opportunity costs incurred by communities whose livelihoods are affected by the project. A recent study by Bush and colleagues (2024) exploring the financial and social costs of avoided deforestation in the DRC shows that: "as measured by minimum WTA compensation, the opportunity cost of forest conservation was almost as much as 50% of total annual household income and nearly 13 times more than the financial cost value of forest goods".

Our findings show that the costs of implementing REDD+ have not been fully estimated in the DRC, and notably, opportunity costs are often unknown in REDD+ projects. Moreover, our findings also found that REDD+ projects in the DRC have a strong focus on both monetary and non-monetary payment. Non-monetary benefits are critical in the DRC (Samndong 2017; Morgan et al. 2023). However, as Morgan et al. (2022) pointed out, the challenge is to ensure that non-monetary benefits generated by these projects will not only provide social benefits such as job creation and improving forest governance, but also 'the *Basket of Benefits*' would offer ecosystem services to local communities if forests were protected. Providing comprehensive value and benefits of REDD+ in the DRC is challenging and an estimation of their worth depends on valuation approaches. The UN-REDD (2015, 31) tried to map the multiple direct and indirect benefits of REDD+ in the DRC. They concluded that: "it appears that the total value of the main forest benefits that have been assessed (watershed protection services, fuel wood, bushmeat, and soil erosion control) is currently around USD 34,000 million a year (the majority of which relates to watershed protection services)". The authors stress that "many forest benefits in DRC have not been included in the figures (e.g. water quality, education, local climate, recreation, crop pollination, plant foods and medicines), whereas the global median includes some of these, along with values for carbon (UN-REDD 2015, 31). Estimations from Maniatis (2008) of forest carbon stock per hectare in the DRC was USD 1,211/ha leading the UN-REDD to the conclusion that the forest value per hectare in the DRC might be USD 1,418, far beyond the global average of USD 441/ha reported by Ninan and Inoue (2013). Despite these conclusions, there is not an official valuation of DRC's forest that allows a realistic determination of opportunity costs and potential benefits incurred from their conservation through REDD+. Consequently, the entire discussion in the DRC remains focused on carbon benefits. A consequence of this can be associated with Osborne's (2015, 1) results finding that "the centralization of forest governance and decision-making into the hands of project implementers and brokers, the necessity for legible land rights and boundaries, and the technical requirements for measurement, calculation, and monitoring of carbon have reshaped forest governance in ways that have undermined the social and ecological benefits often associated with common property management schemes". Moreover, as observed in South America (Schroeder and Gonzáles 2019), it is to be feared that REDD+ interventions in the DRC repeats the oversimplification of local dynamics and complexities whose considerations could help address REDD+ benefit sharing-related concerns.

5.5 Benefits

The national framework REDD+ strategy stresses that: "The benefits here [within REDD+] include not only any financial benefits resulting from the sale of carbon credits, but also more generally the financial benefits as well as in kind of the implementation of REDD + (e.g. support for the improvement of carbon credits). (DRC 2012, 72). Be they carbon or non-carbon based, benefits derived from the implementation of a REDD+ project in the DRC are either monetary or non-monetary.

Monetary benefit

There are several concepts associated to monetary direct benefits as revealed in the different projects analysed. In the case of Kwilu PIREDD, the concept of "*result-based payment*"[1] is used to describe the payment made by the project to the six leaders (animateurs) in charge of supporting, sensitizing, and animating the implementation of activities by local communities. A total duration of 171 months was budgeted for them in this specific project. It is on this basis that these leaders are paid USD 200 per month. The concept is slightly different in the Oriental PIREDD where the project document refers to the model of "payment for environmental/investment services"[2] (UNDP 2017, 46). In the Orientale PIREDD, the 'cash-for-work' concept is used.

In all the above cases, the idea is to pay a financial counterpart for the services provided by the various stakeholders in the implementation of the project, including the executing agency, the project beneficiaries, or the service providers. A government respondent argued that: "REDD+ benefits can take different forms, the most important being that there is a financial reward that is paid to anyone who did an effort contributing to reduced emissions". But another respondent also warned that: "for communities, there is not an agreement" regarding communities' shares of benefits sharing, "there are projects were [sic] communities are entitled 15 to 20%, but this remains on the paper as those projects have not made sales yet".

Non-monetary benefits

Different REDD+ projects also place a strong emphasis on non-carbon benefits (Table 7). In general, the non-monetary benefits for most REDD+ schemes in the DRC focus on improving forest governance (e.g., strengthen land use planning and tenure securities), infrastructure provisions, job creation,

Table 7. Type of non-monetary benefits derived from a set of REDD+ projects in the DRC

Project	REDD+ benefit
Mai-Ndombe PIREDD	• **Improved forest governance** such as supporting the structuration of local institutions, including the local management committee (Comité Local de gestion); the local monitoring committee (Comité local de suivi); capacity building for stakeholders; and institutionalization of the agriculture value chain (corridor towards Kinshasa) • **In-kind payment** such as provision of school classrooms, health facilities, road maintenance and bridge repair, improved seed quality
Equateur PIREDD	• **Improved forest governance** such as land ownership securitization, supports the implementation of the local development plan and simple management plan, improves structuration of local institutions, including local development committees, and supports the creation of the Village Savings and Loan Association (AVEC) • **Rehabilitation of communication infrastructure**

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1 Translation of «paiement des services au résultat».

2 Translation of «modèle des "paiements pour Services Environnementaux/investissements''.»

Table 7. Continued

Mongala PIREDD	• **Improved forest governance** such as establishment of multi-stakeholder platforms, e.g., the Agricultural and Rural Management Council (CARG), improved control capacity, capacity building of whistle blowers and local communities, was put in place and facilitates the implementation of a value chain for agriculture production • **Job creation for local communities** • **Provision and improvement of agricultural seeds**
Kwilu PIREDD	• **Improved forest governance** such as improved capacity building of local administrative entities, and strengthened tenure securities through obtainment of land titles by landowners involved in the project • **Job creation for local people**
Ex-Orientale PIREDD	• **Improved forest governance** such as capacity building of local administration service, support to clarify and register land ownership rights of local communities, facilitation of the access to financial services • **Job creation** • **Improved seeds for agriculture**
Mbuji-Mayi/ Kananga and Kisangani REDD+ integrated project-PIREDD/ MBKIS	• **Improved forest governance** through capacity building, land tenure securitization through: - Design of land use plans - Job creation - Structuration of the value chain in relation to agriculture and charcoal production. In most areas in the DRC, a key challenge to agriculture is to move production from farms to the market of the nearest large cities such as Kinshasa for the Mai-Ndombe PIREDD, etc.

Sources: Data from this table were collected from each project's presentation document.

and ecological services from protected areas. Improving forest governance is seen by key informants interviewed as a critical factor for REDD+ project success. A respondent stressed that: "in many cases, local elites are those that threaten the most local communities members ownership over land. Since they have money, they can spoil weak communities' members. Consequently, it was key to ensure this to enable the communities' members to secure their benefits during and after the project".

According to a study respondent: "the data to evaluate and monitor non-carbon benefits are difficult to collect and might make the project heavier both for the populations and for the projects proponents since the projects have a limited timeframe".

Carbon benefits

Carbon benefits are referred to in the Mai-Ndombe REDD+ Benefit Sharing Plan and are defined as relating to the carbon that is not emitted or that is restored, in tons of carbon dioxide equivalent (CO_2eq) or forest areas (hectares). It also refers to the quantity of emissions avoided, or carbon sequestered above the 'business-as-usual' scenario, after appropriate deductions are made for leakage and impermanence (UN-REDD 2023). According to this definition, carbon benefits are not just about selling carbon credit to any markets. As expressed by a national expert we consulted: "one cannot talk about REDD+ Carbon benefits in these cases" as REDD+ goes beyond carbon to address societal matters. Article 3 of the 2018 REDD+ homologation decree is clear about the fact that "The State acknowledges exclusive property right over Congolese emissions reductions units to REDD+ investors as soon as they are homologated".

Within the REDD+ project under PIREDD+, there is no sale of reduced emissions on any national or international market. Reduced emissions fall under the category of REDD+ initiatives according to a 2018 ministerial decree. As stressed by a government representative: "*PIREDDs are classic grant* *projects; we do not sell carbon credits*".[3] In the MBKIS PIREDD, the project document anticipated the development of an MRV system to "monitor carbon generated by the project and promote payment for environmental services (PES)" (BAD 2013, 3). The document also stresses that: "The MRV will be the important tool for validating the carbon that will be placed on the market" and carbon credit sales will generate a net value of income of 656,6 millions [sic] CDF" (BAD 2013, 10-11). Assessing carbon benefits in PIREDD under the PES scheme in the DRC is a more complex task since no formal MRV mechanism is required from project implementers under this scheme. The MRV system aims to measure, report, and verify the results-based actions against which payment will be made.

5.6 Determination of beneficiaries

Narratives about who should benefit from REDD+ vary amongst projects and locations. However, most project documents examined refer to key groups of actors that should receive benefits from different REDD+ projects:

- Government actors: Article 26 of the 2018 Ministerial Order on the accreditation of REDD+ investments projects provides as follows:

    "The bearer of the REDD+ investment negotiates with the stakeholders an agreement and a benefit-sharing plan according to the principles and models included in the manual in appendix I. In order to ensure the functioning of the competent structure and of the national REDD+ registry keeper, the distribution key of the portion reserved for the Congolese State of profits resulting from the sale by private economic operators of certificates carbon linked to the process of reducing emissions from deforestation and forest degradation (REDD+) presented as follows:

    1. Public Treasury (DGRAD): 30% (in addition to taxes and royalties)
    2. Competent structure and registrar: 30%
    3. Central administration of the ministry having forests in its attributions: 20%
    4. Local administration: 20% (in addition to taxes and fees)."

Figure 4. REDD+ money management fluxes structure in the DRC (source: authors)

- Service providers (NGOs, Cooperatives, Private entities, etc.)
- Local actors (LDC, local development partner, and Agricultural Rural Management Council (CARG))
- Local community members.

The Mongala project document anticipated that the 'relais communautaires' (members of the community acting as links/brokers between the project and the community) would be recruited. The recruitment process provides three modalities: 1) a call for tender; 2) an actors' diagnostic to identify resources persons or organizations; and 3) the selection of 'relais communautaires' based on criteria determined with the provincial coordination for the environment. Regarding the main beneficiaries in this project, they are distributed into three types: farmers and foresters (including artisanal miners), and their families; the provincial services of Mongala and the technical services concerned with the theme of the intervention; and local communities and Indigenous Peoples.

Another concept used is 'Bénéficiaire-contractant' or beneficiary contractor. According to a respondent, these types of beneficiaries are those that benefit from grants to the project for carrying out activities and/or overseeing the operation of one or more bodies pursuing a goal of general interest with a view to contribute to the achievement of the results and objectives of the intervention. The Mongala PIREDD project document stresses that the 'Bénéficiaire-contractant' can be a public actor at the central and national level or be associated with decentralized entities; they cannot also be from for-profit private organizations whose objectives align with the project's actions (ENABEL 2019).

3 Translation of «Les PIREDD sont des projets classiques à la subvention; on ne vend pas de crédit carbone».

Within the Equateur PIREDD, the determination of the beneficiaries was largely influenced by using the high labour intensity approach (HIMO).[4] HIMO is an approach recommended by the International Labor Organization and aims to create jobs for locals of the place where the project is implemented. Consequently, the beneficiaries are the local community members recruited for specific activities.

In the Oriental PIREDD, beneficiaries include both actors of deforestation and forest degradation, and those who have already adopted sustainable practices. This includes public bodies, administrative units, private investors, customary entities, and households including women, youth, and Pygmies (Mbuti).

In the PIREDD in the DRC, the concept of 'priority targets'[5] is used to identify those who will benefit from actions implemented within the framework of a project, but many other concepts are used depending on projects and proponents. In the Kwilu project, the project document presents the beneficiaries of the PES as the project proponent, and the community organizations through their representatives (FONAREDD 2019).

In the case of the project implemented by the French Development Agency in the Tsopo and Kwilu Provinces, the direct beneficiaries are: (i) farmers organizations, which include several sub-categories: family, and small- and medium-sized agricultural enterprise owners of 5 to 10 ha land; (ii) economic actors in commercial sectors; (iii) professional associations; (iv) NGOs; (v) local development committees bringing family-owned farms together; and (vi) local development funds' managing committee, based on social clauses that represent agriculture exploitations that operated in the rural development zones and that are able to collaborate with the forest concessionaire.

Regarding the determination of who the beneficiaries of REDD+ are, the Mai-Ndombe programme benefit sharing plan is limited to those who are entitled to financial benefits. They include the entities involved in the governance of the programme, namely the provincial government and the project management unit; then the local communities and Indigenous Peoples; and last, the private promoter of the project as far as they comply with homologation procedures. It is not clear what will be the impact of the inclusion of non-carbon benefits in the definition of who the beneficiaries are. But it can be anticipated that stakeholders such as CSOs that support Indigenous Peoples and Local Communities (IPLCs) might potentially be considered as beneficiaries of REDD+ initiatives as the law provides them with a door to participation in any environmental-related process.

5.7 Structuration of payments

Contractual relationship

The financial transactions related to REDD+ activities in the DRC are carried out in different contractual and agreement formats:

- The contract between the DRC Government and the project developers (including donors and other international governments about the modus operandi, the description of the activities, and the roles of different project's stakeholders)
- The contract between the project developers and the financial services providers
- The contract between the project developers and the institutional and organizational development service providers
- The contract between the project developers and the local implementing agencies
- The contract between the project developers and the beneficiaries (including rural communities) on both in-kind and in cash payment, the cash, and the in-kind contributions.

4 Translation of «haute intensité de main d'œuvre».

5 Translation of «cibles prioritaires".

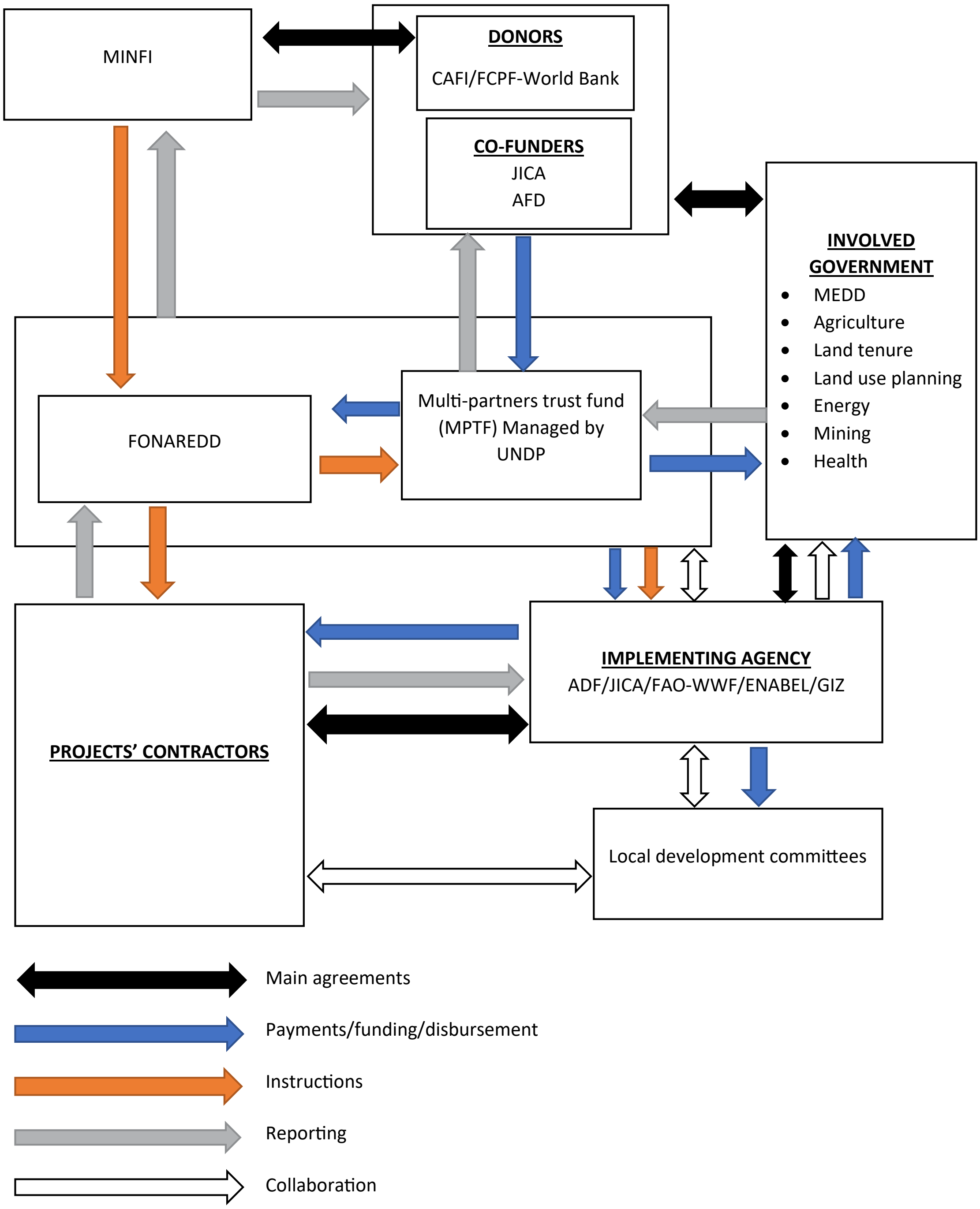

Figure 4. REDD+ money management fluxes structure in the DRC

Source: Authors

For the first contractual relationship, REDD+ money flows from the national to the project level under a PES scheme in the DRC functions following a complex model described in Figure 4.

According to this model, after the agreement is signed with the Ministry of Finance, disbursement is paid by the donors, or the co-funding agency, to the Multi-Partner Trust Fund (MPTF), a UN centre of

Figure 5. Flow of REDD+ donor funds to first- and second-tier country recipient
Source: Mbot'ekola and Michel (2016)

expertise on pooled financing mechanisms. In the DRC, the MPTF is managed by the UNDP country office. The DRC Government signed an agreement with the MPTF to act as administrative agent of the fund through the UNDP. "As such, the UNDP receives the fundings from donor, including CAFI, and forwards it to implementing agencies under the instruction from the Ministry of finance, which is the president of the FONAREDD Steering committee" (FONAREDD 2019).

From the latest assessment of REDD+ money fluxes in the country (Figure 5), the DRC government agencies received most of the REDD+ funding between 2009 and 2014. An update of this assessment is ongoing by FONAREDD to inform about the situation around REDD+ money fluxes in the country up to 2019.

Payment criteria

Different REDD+ projects in the DRC adopt different payment criteria and approaches:

- **Payment following national REDD+ benefit sharing framework**: Within the framework of the MBKISS project, the management of the benefits was anticipated to be based on the national REDD+ benefits sharing framework through the PES mechanism (BAD 2013).
- **Payment per tree:** In the case of the Kwilu project, the scheme is called 'payment per tree'.[6] According to this model, applicable to peasants/farmers, payments are done annually based on the following activities: putting the tree in the ground, replacement of missing trees, and protection of plantations through firewalls. The accounting is done by both the project proponent and a leader (animateur) from a different project area, and the payment is made by the unit in charge of the PES payment.
- **Carbon credit:** The Kwilu project estimations of the price of tons of carbon is based on that of the Mai-Ndombe project, which is USD 5/tCO_2e (FONAREDD 2018).

6 Own translation of «Paiement par arbre".

Table 8. Frequency of payment for REDD+ projects in the DRC between 2016 and 2021

Project name	Frequency of payments
Mai-Ndombe REDD+ project by WWC	Submit a yearly progress report with audited financial statement at the latest by 31 March the year following the financial year concerned
Civil Society Support Programme	4 times: 2016; 2018; 2021 (2 times)
Land Reform Support Program (PARF)	4 times: 2017; 2018; 2021 (2 times)
Promoting Sustainable Forest Management by Strengthening Indigenous Peoples' Rights and Participation in REDD+ / World Bank (TF071553)	1 time: 2017
Support for the Reform of the Development of the Territory (PARAT)	3 times: 2017; 2018; 2021
FONAREDD Executive Secretariat, 00105166, 00117888	6 times: 2017; 2019 (3 times); 2020; 2021
South Ubangi REDD+ Integrated Programme (PIREDD South Ubangi)	1 time: 2017
Oriental Integre Program (Ituri, Tshopo and Bas-Uele)	1 time: 2017
PIREDD Mai-Ndombe	1 time: 2017
PIREDD Kwilu	2 times: 2018; 2019
Energy	2 times: 2018–2019
Sustainable Agriculture and Livestock Management Program	3 times: 2019 (2 times); 2021
Family Planning Scale-Up Program (PROMIS)	2 times: 2019
PIREDD Mongala	2 times: 2019; 2021
PIREDD Equateur	1 time: 2019

5.8 Time and frequency of payment

Table 8 gives an overview of different approaches to frequency and time of payment of REDD+ projects for beneficiaries in the DRC between 2016 and 2021.

The timing of the PES in REDD+ are largely influenced by the typology of payments used by projects in the DRC. Three types of payments can be observed:

- *Ex ante payments* are made before the activity is implemented. They mostly relate to funding without the implementer having to provide prefinance.
- *Intermediary payments* relate to the payments made to a beneficiary within the course of the project either as an addition to an ongoing task as in the case of instalment payments, or when beginning a new task within the project.
- *Ex post payments* refer to any payments made after the contract or the task is completed by the actor in charge.

These payments can be made annually as mentioned above but can also be broken down into different instalments. For example, in the Mongala PIREDD, the payments are structured into two stages:

- *Instalments of advances*. In this case, activities are implemented upon receipt of funding by FONAREDD. This model is applied in the case of the Oriental PIREDD, where the various supports are specified after diagnosing the sectors using three steps: (i) supporting the economic functioning of the sectors, (ii) organizing consultation meetings of the actors (small producers and buyers), and (iii) providing working capital for the purchase of products, storage, and processing equipment to the actors on the basis of criteria defined and agreed upon with local communities. In the Orientale

PIREDD, the most visible model used for payments is 'cash-for-work' combined with saving. This model is implemented within the framework of the implementation of the simplified natural resource management plan (PSGRN)[7] designed for the project. The project also used the 'revolving fund' to support income-generating activities. In this specific case, the fund is meant to ensure the financial sustainability of the project. The scheme of payment through instalment of advances is also used. Regarding the Equateur PIREDD, the type of payment depends on the type of activity. For agroforestry, payments to the beneficiaries follow two models: the first is the 'resilience fund approach' and the second is payment for environmental services (PES). These funds are managed using the Village Savings and Loan Association (AVEC)[8] mechanism. AVEC is an instrument for the instalment of advance payment option since eligible projects can benefit from loans to implement activities contributing to carbon emissions reductions in the project area. Once benefits of the activity are realized, the loan is paid back. Regarding communication infrastructure rehabilitations, the HIMO approach is chosen and is characterized by the principle of 'food-for-work'.[9]

- *Reimbursement payment*. This option refers to the situation where the implementing agency prefinanced the activities.

The payments related to REDD+ projects and initiatives in the DRC showcased three momenta: the first is *ex ante payment* also known as *up-front payments,* that take the form of advances. The added value of these payments for REDD+ in the DRC context is the support that the payments provide to actors when there is a lack of funding at both governmental and community levels to initiate a REDD+ project. The second is *intermediary or interim payment* and the third is *ex post payment* when the project, or the initiatives are completed. These three instances are the consequence of the project schemes. In the case of result-based projects, ex ante payments can only be applicable to the 4% of non-result-based payment that the benefit sharing plan entitles the Indigenous Peoples (2%) and the Local Communities (2%) (DRC and FCPF 2022). In the case of incentive-based projects, these payments can be anticipated in the project design to address the challenge of lack of resources. It thus acts as an incentive to encourage and maintain participation of communities and community-based organizations in projects and initiatives.

As observed in the case of the Mongala PIREDD, some payments were made in advance of the implementation of the activities, while others were made ex post upon completion of specific activities or tasks depending on the type of contract involved. According to a respondent, because of the lack of financial capacity by communities, the ex post payments mostly were made by services providers with the capacity to prefinance the activities. In most cases, up-front payments and intermediary payments remain the options applied to communities that are reputably poor. A respondent reported that: "in cases where funding provided to communities for activities is not sufficient, in most cases they will stop activities until a new payment is made". It was observed in a project, that communities claimed not to have been paid just because of a delay in the payment of an instalment. In the case where AVEC is used as a payment mechanism, the timing of the payment depends on the eligibility to the fund within the project calendar timeframe. Even in the case of project contractors who are willing to prefinance, FONAREDD (2019) highlights the fact that the bank sector in the DRC is still underdeveloped, and the financing directed to the forest and agriculture sectors remains difficult to access as banks are mainly located in the main cities such as Kinshasa and Lubumbashi.

In the case of the Kwilu project, for example, the PES is done as additional support to project proponents based on the number of trees following the payment per tree model described in Section 5.7. Payments are made annually over the 4-year project period. The amounts are between USD 21.84 and 50.00 per hectare depending on the agroforestry model chosen.

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7 Translation of «Plan simple de gestion des ressources naturelles».

8 Translation of «Association villageoise d'épargne et de crédit».

9 Translation of « travail contre nourriture».

In the absence of a solid bank system and the low access rate of local communities to the banking system in the DRC, project proponents have innovatively ensured that payments are made effectively to the various beneficiaries. In the case of the project by the French Development Agency in the provinces of Kwilu and Tshopo, support to innovate the bank system has been included in the proponents' activities. The objective was to reduce transaction costs while bringing the banks and communities together by enhancing existing services.

5.9 Payment modalities

The forms that payments relating to REDD+ projects and initiatives have taken in the DRC have been innovative in many circumstances. However, this has created confusion among stakeholders about what is payment as a benefit, and what is payment as a service fee. A respondent to the study argued that within the PIREDD –, that is, initiatives that do not use a benefit sharing plan because they are REDD+ initiatives – "the cash-for-work and the food-for-work payments happened because of the existence of the REDD+ project and provided alternatives that shifted the community members from putting additional pressure on the forests. For this reason, it is a benefit payment". Another argued that "the money that is paid to the community because of the trees they planted and maintained, though it is a service fee, can be considered a benefit from REDD+ initiative because it is REDD+ that brought that opportunity and this revenue shifted the community members from putting pressure on surrounding forest resources". This bias is somehow supported by the interpretation of the provision of the benefit sharing plan section on performance-based payments that stress that: "payments will support funding of activities to the benefit of local communities and indigenous peoples … and the project pays communities for Ecosystem Services as a reward to their participation and results to the implementation of PIREDD" (DRC 2022, 8). But the World Bank and FCPF (2016, 8) Manual is quite clear about the difference between what entails opportunity costs, implementation costs, transaction costs, and institutional costs. And according to this classification, the payments discussed here fall into the category of implementation costs, specifically the "reforestation/afforestation, agroforestry input and management costs" and "sustainable management practices". This shows the importance of actors' representations as far as REDD+ benefits are concerned.

5.10 Support of safeguarding principles of benefit sharing arrangements

The DRC has made significant progress in finalizing its Safeguards Information System (SIS). The incompleteness of the SIS affected the submission of the result-based payment proposal to the Lowering Emissions through Accelerating Forest Finance (LEAF) Coalition in July 2021. The Government of DRC has thus prioritized its efforts in several domains: strengthening its definition of national, social, and environmental standards as an interpretation of Cancun Safeguards; identifying principles, criteria, and indicators to ensure the integration and compliance of social and environmental considerations; and developing the Social and Environmental Strategic Assessment and Management Framework (SESA and ESMF, respectively), as well as complementary policy frameworks following the requirements under the FCPF. The country now has its SIS website , which documents the safeguards-related advances and showcases important achievements.

Despite the existence of a SIS, a respondent claimed: "it is easier on the paper, but on the field, it is challenging to collect and report information despite project managers do their best due to the local constraints such as poor communications means and internet penetration, and sometimes it is costly and time consuming". The national REDD+ registry is not yet active. A manual registry is held at the National REDD+ coordination and only a few project proponents are willing to declare themselves. On 10 January 2023, the ministry in charge of environment and sustainable development issued the note N/REF 001/CAB/VPM-MIN/EDD/EBM/TWBD/02/2023 requiring national and international companies and organizations implementing carbon credit-generating activities to identify themselves to a dedicated office for a census. Yet, very few have complied to date.

Our review of project documents shows that several risks have been identified by project proponents as threatening the effective, efficient, and equitable implementation of benefit sharing in REDD+ projects and initiatives regardless of their model (incentive-based or performance-based). These risks are mostly of a fiduciary nature.

For example, in the Support Programme for the Development of Degraded Forests and Savannahs implemented by the French Development Agency, it was anticipated that there was a risk that women could be excluded from the financing of the project by the National Selection Committee. Another risk was related to the sensitivity of local organizations involved in the project and their capacity to cope with market variations. In this specific case, particular attention is paid to the type of partnerships that engage local community organizations with the private sector. It was also anticipated that there could be calendar shifts as far as payments are concerned, leading to delays and difficulties in maintaining project deadlines. The last risk identified was the fluctuation of the prices of agriculture raw materials (such as cocoa and coffee). The project developed the concept of 'technical and economic advice for family farms (CEF)'.[10] The CEF role is to provide the project's stakeholders with the production of technical and economic references adapted to different types of farms and terroirs. Another concept proposed in this project is the 'risk sharing logic', which refers to the idea of distributing the risks in such a way that the benefits of a given actor are not totally drowned out by a shock.

Within the Kwilu PIREDD implemented by the JICA, risks identified by the project include the risk of having the payments misused by the projects' agents or by the leader of the beneficiary community entity. As was the case for the Mai-Ndombe REDD+ project, this risk is enhanced in cases where elites are involved in local communities' representatives' bodies. Other risks are conflicts between beneficiaries and non-beneficiaries within a given community, conflicts between a member of a community entity and its leader, and hold-ups during the transportation of cash for payments.

Respondents interviewed also raised issues of accountable representatives for community groups involved in a benefit sharing mechanism and the absence of accountable and legitimate processes for stakeholders to discuss and come to agreement on payment criteria. For example, in the case of the Mai-Ndombe ER Program, a respondent interviewed raised the issue that criteria for the allocation was not accepted by all stakeholders, but was still being implemented leading to a lack of bind-in of many political stakeholders.

Key informants interviewed also shared that stakeholders in the DRC have a great fear of stakeholders seeing REDD+ benefits being captured by elites, at the expense of local communities whose livelihoods are directly impacted by each choice of options for forest-based emissions reductions. And there is fast growing involvement of a national elite in REDD+ investments. This fear is partly due to the important costs required to invest in REDD+, which prevent local communities and Indigenous Peoples from taking advantage of community forestry to grasp a share of the forest carbon market. A governmental respondent expressed fears that the marginalization of local actors observed in the forest exploitation sector is being repeated under the forest conservation for REDD+.

Although gender equity is an important part of ensuring equitable benefit sharing, Samndong and Kjosavik's (2017) analysis of REDD+ in Equateur Province reveals that women have limited information about REDD+, compared with men. The mechanisms used to establish new village organizations for REDD+ exclude women from decision-making in the ongoing REDD+ pilot projects. Bargaining power of women for equal inclusion in decision-making processes and for sharing benefits is constrained by existing social norms. These norms include local access to land and material resources; the existing gender division of labour; local perceptions regarding the roles, contributions, and responsibilities of women; and the dominant positions of men in rural settings.

10 Translation of «Conseil technico-économique à l'Exploitation Familiale (CEF)».

Despite the design of a grievance and complaint mechanism, respondents interviewed claimed that safeguarding benefit sharing in the DRC is still far from preventing REDD+ falling short of its objectives. Article 28 of the 2018 ministerial order on REDD+ investments projects makes compliance with benefit sharing a condition of REDD+ projects' validity. Failure to comply may lead to homologation withdrawal. But even in the case of implemented activities, an assessment of the benefits derived from the numerous REDD+ initiatives and projects shows that they remain only partially distributed and the modalities for their accounting at national level as per the provisions of the 2018 ministerial order definitions are still to be discussed. Several projects that do not comply with the provisions of the ministerial order regarding benefit sharing continue to operate and the institutions in charge of overseeing the compliance do not have the means to fully operate as intended.

According to community forestry regulations in the DRC, communities at the local level can be granted 50,000 ha of forest concessions for both conservation and exploitation activities. However, at the time of our data collection in the DRC, no REDD+ projects have been implemented by local communities through the mechanism of community forestry. Moreover, there is not a specific framework that safeguards local communities from the externalization of the management of their forests. Institutional settings for full and effective consultation remain weak and dysfunctional, and the equitable benefit sharing mechanism in the DRC is hindered by a power imbalance amongst the actors (Samndong 2017). Within the ongoing REDD+ projects, both incentive and performance-based ones, the DRC has chosen to involve non-carbon benefits as part of the benefits to be considered. However, these benefits are subjected to a minimum safeguards requirement as observed by Menton et al. (2014) and Wong et al. (2016). Even within the Mai-Ndombe project, criticism on the benefit sharing mechanisms and weak inclusion and protection of IPLCs is widely seen (Lungungu 2022). Providing support to the structuration and the revival of local communities' platforms in the projects areas and ensuring legitimacy of their representativeness in REDD+ projects are key contributions for effective and equitable benefit sharing. These platforms are effective in many of the project sites while in other sites they once existed but are no longer active. Samndong (2018, 401) reported that in some areas where those platforms were not effective, "the project organizers and the customary authorities made the decision for the village to join REDD+ without a signed agreement". Furthermore, despite the many cases where claims are managed effectively, there remain cases where the complaint and grievance mechanism is reported to be weak and needs more transparency and information and/or capacity building to local communities. In a project in Mai-Ndombe Province, it was reported that certain communities claimed they did not receive their share of benefits and did not know who to complain to (Berk and Lungungu 2020). Effective REDD+ implementation requires addressing power dynamics within traditional structures (Samndong 2017).

6 Conclusion

Our working paper presents an overview of both the legal framework driving REDD+ benefit sharing mechanisms as well as REDD+ initiatives with their own benefit sharing designs. Our findings show the progress the DRC has made in terms of advancing its framework on a REDD+ benefit sharing mechanism, notably on ensuring REDD+ beneficiaries are better included, linking REDD+ with carbon market development, and emphasizing benefit sharing mechanisms as a key part of REDD+ and carbon project approval and registration processes. However, it also shows challenges the DRC needs to overcome in terms of clarifying its legal framework on which agency is responsible for REDD+ benefit sharing, for strengthening the safeguards mechanism, and for monitoring mechanisms that avoid elite capture and reduce the risks of payments being misused. The DRC needs to ensure that inclusive decision-making will allow local communities to take part in and determine which appropriate benefit sharing mechanisms fit with their preferences. REDD+ initiatives, including Mai Ndombe and other REDD+ projects can offer rich lessons learnt for future REDD+ benefit sharing mechanisms. However, further research is required to scientifically assess their effectiveness. Setting up a national REDD+/carbon project registration and approval process is essential to systematically recording information from different REDD+ projects and increasing transparency in information sharing.

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Annexes

Annex 1. General legal framework and policies governing natural resources management in the DRC

Year	Policies	Provisions on benefit sharing mechanism	Implication for REDD+ benefit sharing mechanism
2002	Law no. 011/2002 of 29 August 2002 on the Forestry Code	Article 22 provides that local communities are entitled to the right to community forests Article 89 provisions state that a negotiated social agreement must be signed between the rural communities and the riparian logging concession. The content of these negotiations known as 'social clauses', are included in the management plan as a compulsory part of it. The said rural communities should have recognized customary claims overlapping with the concession.	This means only communities have recognized customary right and would be eligible to receive REDD+ payments if a REDD+ project is implemented in a logging concession area.
2011	Law no. 11/002 of 20 January 2011 revising revision of certain articles of the Constitution of the Democratic Republic of the Congo of 18 February 2006	Article 175: "…The share of national revenues allocated to the provinces is set at 40%. It is deducted at source. The law determines the nomenclature of other local revenues and how they are allocated distribution".	This might involve that 40% of the State's share of REDD+ benefits will be reverted to provinces from which the revenue has been produced. The 2023 order on the distribution of the State's share remains silent on this.
2008	Organic Law of 07 October 2008 organizing the composition and functioning of decentralized entities and their relations with State and Provinces.	Article 104 provides that the finances of a decentralized territorial entity are separate from those of the province. Article 105 stresses that the financial resources of a decentralized territorial entity include own resources, resources from national revenue allocated to the provinces, the resources of the National Equalization Fund and exceptional resources, and the decentralized territorial entity establishes the mechanisms specific to their recovery.	Decentralized territorial entities in the DRC include City, Council, Sector, and Chiefdom. They are different from the Province which is rather considered a national-level component. These entities' financial resources come from the central government based on the provisions of the Organic Law of 16/001 of 03 May 2016 organizing the composition and functioning of central power, provinces, and decentralized entities.
2011	Law no. 11/011 of 13 July 2011 relating to public finances	Article 17: "Finance laws determine, for a financial year, the nature, amount and allocation of resources and charges of the State, taking into account an economic and financial equilibrium which they define."	It is through this law, that the State can put in place incentives to support REDD+ investments and this ensures the viability of the investments and derived benefits.

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Annex 1. Continued

Year	Policies	Provisions on benefit sharing mechanism	Implication for REDD+ benefit sharing mechanism
2011	Law no. 11/009 of 09 July 2011 on the fundamental principles of environmental protection	Article 8. Everyone has the right to access available, complete, and accurate information relating to the environment, including information on hazardous substances and activities and on measures taken for their prevention, treatment, and disposal, as appropriate. The State, the province and the decentralized territorial entity shall make available to the public any information relating to the state of the environment. The modalities of access to information as well as the means of appeal in case of unjustified refusal to provide the information are defined by a decree deliberated in the Council of Ministers. Article 9. Everyone has the right to participate in the decision-making process concerning management of natural resources. The public shall participate in the process by which public authorities formulate environmental policies, programmes, plans, and regulations relating to the environment within a defined transparent and equitable framework implemented by the said authorities. The public concerned also has the right to participate, from the outset and throughout, in the decision-making processes which affect its existence or may have a significant effect on the environment, in particular planning decisions, authorizations to start up a project or activity, authorizations to build or operate classified facilities, emissions and environmental and social impact studies. The public has the right to be informed of the final decision.	This law sets out firm principles of the grievance handling system and transparency required when it comes to a REDD+ benefit sharing mechanism. REDD+ benefit sharing mechanism needs to be available for the public to access and the public and stakeholders have the right to take part in the decision-making process.
2014	Law of 11 February relating to the conservation of nature	The preamble of the law confirms that the revision of the 1969 ordinance law did not address the contemporary challenges of the sustainable development and fight against poverty, the participation of riparian populations in the management of protected areas and their capacity to draw the legitimate benefits derived from it. Article 35 states that the act of decommissioning shall be subject to an environmental and social impact assessment accompanied by its duly approved management plan and measures to offset or mitigate the negative impact of the decommissioning on biodiversity conservation objectives.	The environmental and social assessment can provide the basis for the calculation of opportunity costs incurred by local communities and Indigenous Peoples within the framework of REDD+ projects. But to date, the consideration of these costs in REDD+ remains to be dealt with.

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Annex 1. Continued

Year	Policies	Provisions on benefit sharing mechanism	Implication for REDD+ benefit sharing mechanism
2018	Ministerial Decree no. 072 / CAB / EDD / DRCE / 00 / AAN / 2018 of 12 November 2018 setting the model agreement constituting the social clause	The Annex setting the model agreement constituting the social clause of the specifications of the forest concession contract provides both the framework and a list of socio-economic infrastructure and services that the concessionaire should realize as part of the compliance to the law provisions on social obligations. It is not clear whether this specific regulation is applicable to conservation projects.	Within the framework of REDD+, non-monetary items can follow the model of this experience of social clauses that are negotiated before the implementation of REDD+ projects. The conditions for the implementation of such a model within REDD+ could be learnt from the experience of the forestry sector.
2020	Decree no. 20/031 of 31 October 2020 on the environmental response fund	Article 2 stipulates that the Fund can fund all or part of a project on the conservation of biological diversity and protection of forests.	This is not provided in the text, but this fund provides an opportunity to support up-front investments for REDD+ projects by local communities. It can also provide support in the case of the withdrawal of a certificate to ensure the continuity of a project. Conditions for these opportunities can be explored.
2022	Law no. 22/030 of 15 July 2022 on the protection and the promotion of the rights of the Indigenous Pygmies People	This law recognizes the customary rights of Indigenous populations by adopting a new law on the Promotion and Protection of the Rights of the Indigenous Pygmies Peoples. Article 44. Indigenous Pygmies People have the right to full enjoyment of all natural resources, woody and non-timber, as well as benefits derived from environmental services on lands traditionally owned, occupied or used. Articles 45 promotes the participation of the Indigenous People respectively for the definition of priorities and strategies on the development, the use, and the control of the land and its resources that they traditionally possess, occupy, and use. Article 47. Indigenous Pygmies People have the right to benefit from appropriate benefits, resulting from the commercial exploitation by a third party of the lands and natural resources they traditionally own, occupy, or use, based on specifications.	Indigenous Pygmies People are legally defined as key beneficiaries of environmental projects including REDD+.

Annex 2. Specific policies on REDD+ benefit sharing mechanisms

Year	Policies	Provisions on REDD+ benefit sharing mechanism	Implication for REDD+ benefit sharing
2023	Ordinance law no. 23/007 of 03 March 2023 amending and supplementing law no. 11/009 OF 09 July 2011 on the fundamental principles of environmental protection	Article 25: "An Environmental Intervention Fund is created. The Fund will finance environmental research, training, environmental protection studies, the fight against climate change...". Article 17 bis: "A carbon market regulatory authority is set up in the DRC. The mission of the regulatory authority is to: promote the participation of public and private players, as well as local communities, in the production, purchase, sale and resale of carbon credits, in accordance with the conditions laid down by law…" Article 17.4.: "….To comply with international carbon market standards, in particular the principle of fairness and transparency, profits from the sale of carbon credits are shared between the following entities: • the Public Treasury; • the competent dedicated structures and the registrar; • local communities/indigenous peoples • the investor or project promoter; • the central administration of the relevant ministries; • the local administration of the project area…."	The FIPE is aimed to fund the fight against climate change, including REDD+ through forest protection projects. But the mechanism remains to the defined. The resources for the operation of the FIPE include, among others, remunerations for environmental services. This ordinance law identifies those that are entitled to profits from the sales of carbon credits in the DRC. This goes beyond REDD+ to include any other non-forest-based carbon credits that can involve any other institution and keeper of the registry.
2023	Decree no. 23/22 of 14 June 2023 on the creation, organization and the functioning of a public body called the Carbon Market Regulatory Authority	Article 4: The missions of the Carbon Market Regulatory Authority are: …to promote the participation of public and private actors and the local communities in the activities on the production, the purchasing, the sale and the resale of carbon credits according to the conditions determined by the law.	The Carbon Market Regulatory Authority will organize the carbon market. And the credibility of the market will thus depend on the quality of this organization. The better the market the better the confidence of the investors, and the greater the value of carbon credits from REDD+ projects on the international market.
2012	The national REDD+ framework strategy in the DRC	The national REDD+ benefit sharing mechanism design will be informed based on the experience of the field projects. All REDD+ projects implemented in the DRC must be validated by an external independent body to ensure they fulfil the standards requirements.	The standards required will aim to ensure the credibility of the carbon credits to guarantee the effectivity of sales and consistency of benefits.

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Annex 2. Continued

Year	Policies	Provisions on REDD+ benefit sharing mechanism	Implication for REDD+ benefit sharing
2018	Ministerial Order No. 047/CAB/MIN/EDD/AAN/MML/05/2018 of 9 May 2018 setting the approval procedure for REDD+ investments in the Democratic Republic of the Congo	Article 29. From the date of certification, the REDD+ project or programme holder has a period not exceeding 4 years to obtain validation of its activity from an approved independent auditor according to the procedures of a well renowned carbon national or international standard. Article 31. If, after 4 years from the date of obtaining the certificate of registration, the REDD+ project or jurisdictional programme has not been validated by an independent auditor, the registrar is required to withdraw the certificate.	The withdrawal of the certificate granted to a REDD+ operator means a disruption in REDD+ benefits payments. It is not clear what happen once this withdrawal happens.
2018	Ministerial Order No. 047 / CAB/MIN/AAN/MML/05/2018	Article 1 provides the objectives of the ministerial order. One of its objectives consists of determining measures to ensure the benefit sharing in the context of a REDD+ investment project. This could be considered as one of the objectives to achieve the ultimate goal of the ministerial order on the establishing of the terms and the conditions prior to and mandatory for the certification of REDD+ investments as well as the procedure for the establishment and management of the national REDD+ register of the Democratic Republic of the Congo. Article 2.14 provides the definition of the benefit sharing plan as arrangements for the distribution of monetary and non-monetary benefits among stakeholders in the context of REDD+ investment projects. Article 26 determines the stakeholders and their quotas. Article 28 supports that the failure to comply with the benefit sharing plan implies the suspension or the withdrawal of the certificate of homologation of the REDD+ investment projects. Article 28 states that: "The regulator may, for failure to comply with the safeguards, the benefit sharing plan or failure to verify the investment as provided in investment as provided for in Article 31 below of this decree, require the registrar to suspend or withdraw the withdrawal of the registration certificate in accordance with the conditions set out in the manual in Annex I".	In the absence of specific regulation, the 2018 homologation ministerial order proposed the conditions for the negotiation of the benefit sharing arrangements within the framework of REDD+. And Article 26 specified how the shares of the Congolese State in REDD+ revenues will be distributed. It remains unclear what impact the 2023 interministerial order on the state share of carbon credit revenues will have on this distribution.

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Annex 2. Continued

Year	Policies	Provisions on REDD+ benefit sharing mechanism	Implication for REDD+ benefit sharing
2018	Ministerial Order No. 047 / CAB/MIN/AAN/ MML/05/2018	The investment proposal validation or approval procedures are provided by Articles 15 to 21. More specifically, Article 26 provides as follows: "*The promoter of the REDD+ investment negotiates with stakeholders an agreement and a benefit-sharing plan according to the principles and models set out in the manual in Annex I. In order to ensure the functioning of the competent structure and the national REDD+ registry keeper, the key for the distribution of the portion reserved for the Congolese State of benefits resulting from the sale by private economic operators of carbon certificates linked to the process of reducing emissions due to deforestation and forest degradation (REDD +) is as below:* 1. Public Treasury (DGRAD): 30% (in addition to taxes and fees) 2. Competent structure and registrar: 30% 3. Central administration of the ministry having forests in its attributions: 20% 4. Local government: 20% (in addition to taxes and fees)." (DRC 2018) The benefit sharing plan is defined by Article 2 of this 2018 ministerial order as the arrangements on the distribution of monetary and non-monetary benefits among stakeholders of a REDD+ investment.	
2022	Mai-Ndombe ERPA benefit sharing plan	The benefit sharing plan for the Mai-Ndombe jurisdictional REDD+ programme provides guidelines for benefit sharing. It is limited to the ERP, and does not include the other projects outside the Mai-Ndombe.	The government expects to use the Mai-Ndombe ERP benefit sharing plan to design a national framework for benefit sharing.
2021	Letter of Intent on the Renewal and Expansion of the Partnership for Green Rural Development in the Democratic Republic of the Congo for the period of 2021–2031	The Government of the DRC implements the DRC's National REDD+ Framework Strategy and Investment Plan, in line with its operating principles, that include: A logic of performance in programme implementation. LOI will form the foundation for all activities and ensure to respect: • rights and aspirations of all stakeholders, including local communities and Indigenous Peoples, which shall contribute to improved stakeholders livelihoods and promote gender equality;	To date, the funding from this LOA is the main funding of non-private REDD+ initiatives in the country through the National REDD+ Fund.

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Annex 2. Continued

Year	Policies	Provisions on REDD+ benefit sharing mechanism	Implication for REDD+ benefit sharing
2021	Letter of Intent on the Renewal and Expansion of the Partnership for Green Rural Development in the Democratic Republic of the Congo for the period of 2021–2031	• principles of consultation, participation and transparency in the processes of design and implementation of interventions from the National REDD+ Framework Strategy and Investment Plan, with due regard to UN-REDD/FCPF Stakeholder engagement guidelines and national circumstances, while acknowledging and respecting the role and responsibilities of the State in final decisions. The practical modalities of stakeholder engagement in this context will be defined in a participatory manner in the roadmap validated by the national REDD+ Fund Steering committee before the 1st session of a programme's approval; • the UNFCCC Warsaw Framework, including respect for the Cancun REDD+ social and environmental safeguards, and consistency with the DRC REDD+ national standards.	
2023	Interministerial Order No. 006/CAB/MINETAT-MIN/EDD/EBM/TSB/02/2023 and No. 120/CAB/MIN.FINANCES/2023 of 15 September 2023 fixing the distribution of the State's share on the profit from the sale of carbon credits	Article 3 The share of the State is distributed as follows: • 50% for the Treasury; • 25% for the Province and the Decentralized Territorial Entity generating the carbon credit, 15% for the Province and 10% for the Decentralized Territorial Entity; • 25% allocated to the Environmental Intervention Fund, including 5% to the National REDD+ Fund (FONAREDD) for investment in the forest management sector.	The ministerial order organizes the distribution of the State's share of the Carbon Credits revenues by determining the beneficiary institutions and their quotas in the State's shares. The Order does not address the local communities' and Indigenous Peoples' shares of carbon monetary benefits. Nor does it address the issue of non-monetary benefits. It is not REDD+ specific.

Annex 3. Mai-Ndombe REDD+ benefit sharing plan (BSP) in a nutshell[11]

Article 2 of the 2018 ministerial decision on REDD+ project homologation defines the benefit sharing plan as arrangements made for the distribution of monetary and non-monetary benefits among stakeholders of a REDD+ investment.

Scope of the BSP

The 2022 benefit sharing plan in the DRC is initially designed to apply to the Mai-Ndombe Emissions Reduction Program in the DRC and specifically to the product of the sale of the ER generated by the programme during the period 2019–2024. That is the period of the World Bank ERPA monitoring period. But it is anticipated that the project may have other agreements beyond that with the World Bank capped at 17.5% for the payments to private owners of sub-projects. In its current version, the BSP applies only to monetary benefits.

Principles of the BSP

The objective of the BSP is to equitably distribute costs and benefits of the ERP among stakeholders that facilitate and/or contribute to the implementation of the activities. These benefits are based on verified ERs deriving from the activities of the ERP. They include monetary and non-monetary benefits, but the ER plan only targets carbon benefits. The benefit sharing agreements between the government and project implementers are to be transparent and based on FPIC. The BSP also aims at generating a capacity of stakeholders to reinvest to ensure the sustainability of the projects and initiatives.

Legal basis of the BSP

The BSP relies on the provisions of the REDD+ projects homologation decree. Among the rules it provides are included guidance on procedures for the BSP, and the complaints and grievances mechanism.

Ownership of the ERs

The BSP document provides that the DRC State, through the Ministry of Environment and Sustainable Development is the sole and exclusive owner of all the carbon credits from the programme. These can only be transferred through an explicit agreement. Conditions for property rights transfer from the State to other entities are organised by the 2018 REDD+ project homologation ministerial order.

Beneficiaries of the ERP

The BSP makes a distinction between those who receive payments from the ERP and the entities entitled to benefits from the programme. The ERP BSP identifies two types of beneficiaries that are eligible for benefits from the programme. First are the local communities and Indigenous Peoples (IPLCs). Second is the private sector, which includes owners of forest conservation concessions. Besides these beneficiaries, the provincial government, and the project management unit (PMU), which is the Coordination Unit of the Forest Investment Program (UC-PIF), receive payments for their interventions in the implementation of the ERP. These payments rather take the form of services fees/ operational costs.

11 Source: DRC and FCPF 2022. Plan de partage des bénéfices, Programme des Réduction des Emissions du Mai-Ndombe, République Démocratique du Congo. https://pubdocs.worldbank.org/en/873261657967723237/Final-Plan-de-Partage-des-Benefices-Juin-2022-RDC.pdf

Types of benefits

The ERP distinguishes between carbon and non-carbon benefits. Carbon benefits include monetary benefits paid as a reward for performance and participation in the implementation of the ERP, and non-monetary benefits in the form of technical, political, or financial support to encourage participation in ERP activities. Non-carbon benefits are not included in the BSP, but they have been identified and are considered to be the conservation of biodiversity, the securitization of rights to land and resources, the improvement of better livelihoods of vulnerable groups, and improved and transparent funding and governance.

Distribution of carbon benefits from the ERP

The calculation of benefits of the ERP is based on the formula:

"Gross Profit – Operational Costs = Net Payment Performance-based ERs".

The gross profits include the total volume of payments that the country receives over a given declaration period. The World Bank committed to purchase part of the ERs, and the remaining will be free for sale to other clients. The operational costs are the payments used to implement the ERP activities over the period. These costs are independent on the performance of the ERP and include the running costs of the project management unit, and provincial government, and other operational costs. It is anticipated that the provincial government will receive USD 2 million over a 5-year period for capacity building, sensitization, etc., while the PMU anticipated budget is USD 2.5 million.

Performance-based payments

Two types of investments are eligible for performance-based payments: REDD+ projects by communities or private entities that are registered with the national registry, and rural zones that are involved in integrated REDD+ projects as defined by the REDD+ National Investment Plan.

These payments are to be distributed to final beneficiaries, and Indigenous Peoples and Local Communities. The net payment ERs are then distributed into two categories. A payment of 2% of the Net Payment ERs to Indigenous Peoples and Local Communities respectively will not be based on performance. The minimum payment is between USD 106.000 and 150.000 for Ips and the same for LCs depending on the availability of initial and intermediary advances. The anticipated payment for a project's performance is USD 1.1 million for each group over the 5-year period. The BSP gives this payment priority independently of the performance of the project. The other share is meant for performance-based payment to rural area Indigenous Peoples and Local Communities through integrated REDD+ projects, and to promoters of sub-projects including community and/or private projects based on the verified performance of their activities.

Modalities of the payment

According to the BSP document, payments are made directly to sub-project implementers on behalf of the zone/area having responsibility for their project. They then share the benefits according to the benefit sharing plan of their sub-projects. Within the framework of the World Bank ERPA, the payments to private projects are capped at 17.5% of the nominal value of the purchase planned over the period 2019–2024. As of December 2022, the WWC conservation concession was the only project homologated with 3.8 $MtCO_2e$ per year. The remaining payments after the 17.5% payments benefit Indigenous Peoples and Local Communities of the area known as rural zones in the BSP. The payments are made through the MPTF based on a subsidiary agreement signed between the World Bank and the UNDP.

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REDD+ in the DRC is aimed at providing environmental and socio-economic outcomes. Effective, efficient and equitable benefit sharing mechanism is key in this regard. This study investigates the legal and institutional frameworks, the policy implementation and projects experiences on Benefit sharing. It shows that after a decade of REDD+, there have been efforts to implement the enabling environment for Benefit sharing. However, the country is still to learn from past and ongoing experiences to achieve expected outcomes.

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