

Analysing the narrative and promises of ‘avoided deforestation’ implementation in Central Africa

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SUMMARY

Projects aimed at reducing emissions from deforestation and forest degradation (REDD+) have expanded in Central Africa following carbon certification standards, which were intended to demonstrate the feasibility of payments and rewards earned depending on a measured quantity of avoided deforestation. We used storytelling as a communication concept to analyse the narratives of five main certification standards that accompanied the implementation of REDD+ projects in Central Africa. Our analysis focuses on two storylines: the measurement of avoided deforestation, and payments or rewards. The examination of official documents disseminated by certification standards and the results from a survey of REDD+ stakeholders highlighted a gap between these promises and reality. Our findings show that carbon standards have diffused an idyllic view of REDD+, simplifying methods of measuring avoided deforestation and promising payments, co-benefits and sustainable development. Unkept promises result in disappointment and declining enthusiasm on the part of those involved in REDD+ projects at an early stage.

Keywords: forest governance, deforestation, storytelling, REDD+, carbon standards, eco-labelling

Analyse des discours et des promesses de la mise en œuvre de la «déforestation évitée» en Afrique centrale

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Les projets visant la réduction des émissions issues de la déforestation et de la dégradation des forêts (REDD+) ont été déployés en Afrique centrale suivant les principaux standards de certification et de comptabilité carbone qui ont voulu démontrer la faisabilité et la réalité des rémunérations ou des récompenses au mérite, c'est-à-dire en fonction d'une quantité chiffrée de déforestation évitée ou réduite. Nous utilisons le concept de storytelling pour analyser la narration et les promesses faites par cinq principaux organismes de certification qui ont accompagné la mise en œuvre des projets REDD+ en Afrique centrale. Notre analyse se focalise sur deux storylines (ressorts structurant le récit): la mesure de la déforestation évitée et les paiements ou récompenses. L'examen des documents officiels diffusés par ces organismes et les résultats d'une enquête par questionnaire auprès des personnes impliquées dans des projets REDD+ ont mis en évidence un hiatus entre ces promesses et la réalité. Nos analyses montrent que les standards carbone ont diffusé une vision idyllique et fascinante de la REDD+, avec des méthodes simplifiées de mesure de la déforestation évitée et des promesses de paiements potentiels, ainsi que des co-bénéfices et des retombées en termes de développement durable. La non tenue de ces promesses entraîne une déception et un déclin de l'enthousiasme initial des personnes impliquées dans les projets REDD+.

Análisis de la narrativa y las promesas de la aplicación de medidas de “deforestación evitada” en África Central

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Los proyectos destinados a la Reducción de las Emisiones de la Deforestación y la Degradación de Bosques (REDD+) se han extendido por África Central en pos de estándares de certificación de carbono, cuyo objeto era demostrar la viabilidad de los pagos y recompensas derivados de lograr una cantidad medible de deforestación evitada. Se utilizaron los relatos para analizar las narrativas de cinco de los principales estándares de certificación que guiaron la ejecución de proyectos de REDD+ en África Central. El análisis de este estudio se centra en dos líneas argumentales: la medición de la deforestación evitada, y los pagos o recompensas. El examen de los documentos oficiales difundidos por los estándares de certificación y los resultados de una encuesta a las partes interesadas en REDD+ pusieron de manifiesto una brecha entre esas promesas y la realidad. Nuestros hallazgos muestran que los estándares sobre el carbono han difundido una visión idílica de REDD+, que simplifica los métodos de medición de la deforestación evitada y promete pagos, cobeneficios y desarrollo sostenible. Las promesas que no se han cumplido han dado lugar a desilusiones y a una disminución del entusiasmo de quienes participan en proyectos de REDD+ desde el principio.

INTRODUCTION

Reducing emissions from deforestation and forest degradation, along with the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries (REDD+) is part of a climate-change mitigation policy that emerged early this century. Its purpose is to reduce tropical deforestation – estimated to be responsible for 12–15% of global greenhouse gas emissions (Van der Werf *et al.* 2009, Federici *et al.* 2015) and its contribution to climate change.

REDD+ was created and promoted as an incentive-based policy tool designed to reward forest-rich developing countries that manage to reduce or avoid deforestation at a domestic level (Karsenty and Pirard 2007, Brockhaus *et al.* 2015, Tsayem Demaze *et al.* 2015, Viard-Cr  tat and Buffet 2017). REDD+ is a political approach to fighting deforestation, inspired by the ‘‘compensated reduction’’ of greenhouse gas emissions (Moutinho 2007). This compensation approach has been adopted by international carbon certification standards (e.g. Verified Carbon Standard, Gold Standard and Plan Vivo), which encouraged the implementation of REDD+ in developing countries by disseminating practical guidelines whose ultimate goal was to demonstrate the feasibility of REDD+ projects. In doing so, certification standards substantiated the principle and promise of financial rewards/compensation whose amount would depend on results relating to reduced or avoided deforestation in developing countries, especially for those in sub-Saharan Africa. The enthusiasm for REDD+ in these countries seems to have mainly been based on this promise (Bidaud 2012, Ehrenstein 2013). For many forest-rich countries – such as those in Central Africa, particularly Cameroon – commitment to REDD+ was considered a way to benefit from financial payoffs, not only for deforestation reduction, but also to boost economic and social development (GoC 2013, Ongolo 2015, Tsayem Demaze *et al.* 2015).

Governments and international organisations have played a crucial role in REDD+ implementation. While governments set up infrastructure to facilitate the process (Alemagi *et al.* 2014, Salvini *et al.* 2014, Sunderlin *et al.* 2014), their role has been insufficient with regard to the progress achieved by REDD+ (Sufo Kankeu *et al.* 2020). The private sector then provided support by demonstrating the technical feasibility of such projects. Carbon certification standards would have played a vital role in REDD+ implementation processes, both at the national and local levels. While the debates and negotiations were still taking place in the international arena to precisely define the form and content of REDD+, pilot projects led by these organisations appeared at the end of the first decade of this century. These projects promised payments or rewards based on a verified or measured reduction in deforestation. This article aims to establish whether the promises of the certifying organisations have been fulfilled and whether the payments and rewards are actually attributed within the framework of these projects. Our main aim is to highlight and analyse the REDD+ narrative during the implementation of pilot projects in Central Africa. This implementation was preceded and accompanied by a narrative that we will

describe using the storytelling conceptual framework. The article focuses on REDD+ as it has been advocated and promoted by carbon labelling organisations. The narrative analysed is not that of international bodies (e.g. World Bank, UN) that have promoted REDD+ programmes whose objective is to give developing countries financial help to prepare themselves at an institutional level (Bidaud 2012, Den Besten *et al.* 2014, Tsayem Demaze *et al.* 2015).

Although storytelling has been described and analysed in several studies in the human and social sciences – notably sociology, communication sciences and marketing – it has been examined very little with regard to environmental policy. We assume this concept offers a suitable means to better understand the initial enthusiasm for REDD+ in Central Africa.

Several studies in the social sciences have been devoted to deforestation issues, including REDD+ in Central Africa. Most of them analysed the preparation process and the countries’ commitment to the World Bank REDD+ initiative (Aquino and Guay 2013, Ehrenstein 2013, Ongolo 2015, Tsayem Demaze *et al.* 2015, Viard-Cr  tat 2016). Other studies focused on institutional aspects of forest governance in Central Africa, taking into account the specific case of REDD+ requirements (Alemagi *et al.* 2014, Dkamela *et al.* 2014, Somorin *et al.* 2014). These studies question whether states in this region have the capacity and political interest to effectively implement global initiatives on avoided deforestation, including REDD+. This is particularly relevant as some countries fall into the ‘fragile state’ category (Ongolo and Karsenty 2011, Karsenty and Ongolo 2012, Seyller *et al.* 2016).

By focusing on the storytelling framework, this article provides a complementary perspective to the above-mentioned papers with regard to the politics of deforestation in Central Africa. It is proposed that eco-labelling and forest certification schemes employed the ideas and principles of storytelling to promote REDD+ by leading people to believe that it could be easily implemented and produce financial rewards or payments in line with carbon credits. This use of storytelling principles would explain the launch of the first REDD+ projects in Central Africa in the early years of the past decade.

Following this introduction, Section 2 of the article presents the background and analytical framework by examining the concept of storytelling and by reviewing some significant publications that analyse its use. This literature review allowed us to outline the main characteristics of storytelling. Section 3 describes the methods we used to conduct our research, which mainly consisted of analysing documents and carrying out interviews. Section 4 is devoted to presenting our results and analysis. In Sections 5 and 6, we discuss the main results and conclude the paper by outlining perspectives for future research.

Background and analytical framework

Storytelling as a communication narrative approach

Storytelling refers to the art of telling a story in a way that elicits a positive response from the target audience. This communication technique appeared in the United States in

the 1990s and then spread throughout the world, particularly in Europe, from the 2000s onwards (Bordeau 2008, Salmon 2009). Initially, the technique was mostly used in marketing and business management, but has now become part of political communication, notably during electoral periods. Storytelling can be constructed using different means of communication: written documents, audio and video. The narrative procedures used contain several ingredients: a well-constructed plot, positive values, urgency and the necessity for action and involvement. Storytelling in organisations covers three different aspects: observable data; a method for analysing corporate life; and a management approach relating to innovation, knowledge management and organisational learning (Cueille and Recasens (2010).

Storytelling is so widespread and popularised that it sometimes seems trivial and pejorative. Salmon (2007) considered its growth as worrying, calling storytelling "a machine for building images and formatting minds" (p 5). He considered storytelling to be an instrument of influence, control and manipulation of consumers and citizens in the context of a market economy and neo-liberalisation (Quemener 2012). This pejorative perception is mainly linked to the fact that the narrated stories can be invented, ordinary or heroic, with the objective of seducing the listener and promoting the brand image of a business, a trademark or an institution. This dimension does not obscure the considerable importance of narratives as the subject of study and analysis.

Analysing storytelling in practice: a case of climate changes related issues

The role of stories and narratives was demonstrated to such an extent and in so many disciplines in the human and social sciences that researchers referred to a "narrative turn" in the 1960s and again in the 1980s (Fleury-Vilatte and Walter 2002, Baroni 2016, Veland *et al.* 2018). More specifically, storytelling as a form of narrative and topic of research has been the subject of many publications in communication sciences (Lits 2012, Baroni 2016, de Bideran and Bourdaa 2017), marketing and management (Sempé and Seloudre 2015, Batazzi and Parizot 2016), political science (Salmon 2007, Belletante 2010, Berut 2010) and sociology (Salmon 2007).

The human and social sciences work on storytelling examines organisational narratives, involving the analysis of texts that are normative (such as rules, protocols and charters) or discursive (reports, communication documents and speeches). These texts are developed and disseminated by public or private organisations. According to Denning

(2005); Denning (2011) storytelling in organisations is based on using rational arguments to build three sequences: 1. get people's attention, 2. stimulate desire for change, and 3. convince. This corresponds to staging the three classic sequences: 1. identify a problem, 2. analyse it, and 3. recommend solutions to resolve it. Although environmental problems can be presented according to these steps, there has been very little analysis of them through the lens of storytelling (Moezzi *et al.* 2017).

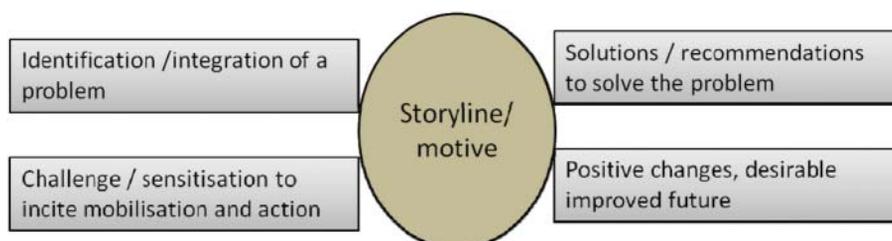
When climate change emerged as a serious global environmental issue in the 1990s thanks to work by the Intergovernmental Panel on Climate Change (IPCC), publications started to show the importance of narrative communication in order to understand the issue and to convince people of the necessity for public action (Kearney and Hays 1994, Daniels and Endfield 2009). In a review, Moezzi *et al.* (2017) analysed the manner in which different forms of narration are used as data and objects of scientific research on climate. The content of such narratives is studied to reveal the structures and storylines around which the actors and institutions organise themselves to produce imaginative forms of collaboration and collective action. Institutions and organisations conceive stories that are disseminated to persuade people to act in a certain way and to adopt behaviour likely to attenuate climate change.

The literature we examined for this background allowed us to develop an analytical framework revealing the main characteristics of storytelling (Figure 1).

Toward four analytical powers of storytelling

The narrative has four pillars that must be identified and analysed in research examining this type of communication. The first pillar is the manner in which the author of the storytelling (public or private organisation, business, etc.) identifies, integrates and represents the problem (perception and reproduction). The second pillar shows the level on which the audience or target public are challenged and sensitised. The third is the storytelling of recommendations intended to resolve the problem. The fourth pillar concerns the narration of positive change and desired future, stemming from the results of the solutions applied following collective commitment and mobilisation. The four pillars are connected to each other by one or more storylines, in other words the motifs that structure the story by simplifying the problem and its solutions. Analysing a narrative communication to show how it relates to storytelling implies highlighting and explaining these key features. This approach differs from the

FIGURE 1 *Main characteristics of storytelling as narrative communication to be analysed*



taxonomic method used, for example, by Rooney *et al.* (2016), which favours the analysis of the form and content of stories, resulting in to a classification and typology of stories (e.g. romantic, comic, dramatic or, epic). The goal is not to analyse the form of documents or stories. For this reason, we do not use the taxonomic approach. Instead, the aim is to highlight and understand how carbon certification bodies have structured their written REDD+ visions to incentivise the implementation of deforestation reduction projects in Central Africa.

Methods

Document analysis

The analysis focuses on the way in which REDD+ has been promoted and implemented in Central Africa, starting from the hypothesis that this involved storytelling. An emphasis is placed on narrative communication that was produced and disseminated by forest carbon certification standards that supported the implementation of REDD+ projects in Central Africa. These include the Gold Standard; the Verified Carbon Standard (VCS); the Climate, Community and Biodiversity Standards (CCBS); Plan Vivo; and Social Carbon. We identified

11 REDD+ projects that were validated and certified in four Central African countries: the Democratic Republic of the Congo, the Republic of the Congo, Cameroon and Rwanda. The carbon certification standards played a crucial role in setting up these projects at the end of the first decade of this century, when REDD+ was not yet well delineated. These projects were showcases for REDD+ feasibility. To analyse the narrative of these organisations, the conceptual framework that we had developed from our literature review was adjusted and applied. A preliminary reading of the documents produced by the organisations shows that they communicate about REDD+ in a way that emphasises its merits and underlines its feasibility and positive outcomes. Documents produced by labelling standards highlight two main storylines that structure their narrative communication on REDD+ projects (Figure 2): monitoring, reporting and verification (MRV), as well as payment and rewards.

For each of the five organisations, we consulted the most recent versions of their documents addressing these storylines. Fifteen documents were consulted (Table 1), which were mainly technical or methodological. They presented the methods to be implemented to measure deforestation so as to benefit from results-based payments.

FIGURE 2 Analytical approach



TABLE 1 List of documents reviewed

Certifications/standards	Documents consulted	date of publication
Plan Vivo	Plan Vivo Guidance Document for Reducing Locally-Driven Deforestation	July 2015
	Plan vivo standard version 2013	2014
	Plan vivo Guidance manual (V2.0 update 2016)	2016
Gold standard	Guidance technical notes	2017
	PPD template Version 1.1	August 2017
	Land use and forest activities requirement (V1.1)	March 2018
VCS	VCS Standard V3.7	June 2017
	VCS Standardized Methods: Scaling Up GHG Reductions	2013
	VCS + social carbon project development process v3.0	21 May 2014
Social Carbon	Social Carbon Standard v. 5.0	July 2013
	Social Carbon Report (V.4)	August 2013
CCBS	CCB program rules (V.3.1)	June 2017
	CCB Standard (V3.1)	June 2017
	CCB & VCS validation report (V.3.0)	June 2017
	Monitoring report (V.3.0)	June 2017

Survey by questionnaire

From May to September 2018, a survey was conducted by questionnaire with people who had participated in implementation processes of REDD+ in Central Africa. These included technical and financial partners, university researchers, staff of civil organisations, funding representatives, engineers and technical officers, and government workers. Even though most of the respondents from organisations worked in Cameroon, their intervention covered all of the Congo Basin countries, giving them an overview of the entire regional framework. The objective of this survey was to collect these people's points of view and their perceptions of the way by which REDD+ projects have been promoted in Central Africa. A questionnaire was sent to 30 people in all countries of the region, but only 13 experts replied – either by e-mail or via Skype – and all were from Cameroon and the Democratic Republic of Congo. We used our experience of nearly 10 years of REDD+ follow-up in Central Africa to initiate discussions with the respondents. Since 2010, we have led several scientific projects in the region and published several articles on REDD+ (Sonwa *et al.* 2012, Tsayem Demaze *et al.* 2015, Sufo Kankeu *et al.* 2016, Sufo Kankeu *et al.* 2020).

Five sets of questions (Table 2) were asked in order to collect answers that would allow us to analyse the advent of REDD+ and its interpretation in terms of storytelling. This involved targeting the measurement of deforestation and payments or rewards corresponding to quantified deforestation reduction.

MAIN RESULTS

The two storylines of REDD+ discourses in standards

Carbon standards were created to make conventional frameworks with principles and criteria that would allow the testing and measurement of activities and results obtained with regard to carbon credits. A carbon standard is a label certifying that carbon credits are issued for projects that were implemented in accordance with viable environmental and/or social criteria. These standards produce technical guidelines

and model documents to guide project leaders and facilitate the implementation of REDD+ projects. From a few examples presented in their official communication documents, these standards aim to demonstrate the feasibility of REDD+ and to connect forest-dependent communities, states and voluntary carbon markets. Only a few of the organisations that issue carbon certifications in relation to tropical forests have certified REDD+ projects in Central Africa (see Table 3). Among the labels identified, five were selected for this study. In order to highlight and to understand their REDD+ implementation narratives, we briefly describe below the main characteristics of these labels, focusing on the two storylines they used: monitoring of deforestation, and payments or rewards. This has been substantially useful to understand the policy, the business model and the effort to understand the storyline.

Verified Carbon Standard (VCS)

This standard was developed by the Climate Group, the International Emissions Trading Association, the World Economic Forum and the World Business Council for Sustainable Development. Previously known as the Voluntary Carbon Standard, the VCS has been in existence since 2005, the latest standard from 2016 is focusing on aspects relating to land use and land use change. This standard alone is worth 47% of the voluntary carbon market (Hamilton *et al.* 2010). In collaboration with Social Carbon and the CCBS, the VCS developed a new standard integrating social, environmental and biophysical aspects. The technical and methodological guidelines to quantifying carbon and for product development have been merged.

Plan Vivo

One of Plan Vivo's objectives is to improve livelihoods and restore ecosystems, thus allowing payment for ecosystem services. It particularly concerns projects with small rural landowners and communities involved in sustainable management of their natural resources. The projects eligible for this standard must include agroforestry, afforestation, forest

TABLE 2 *Basis of the survey questionnaire*

Questions asked	Affiliations of experts interviewed		Country of expertise
Did your country believe to the promises of compensation and financial rewards for reductions in deforestation? What do you think of these promises?	Technical and financial partners	2	Cameroon
	Research/university	3	DRC, Cameroon, Congo, CAR
Does your country receive rewards or compensation for reducing deforestation? If so, do they correspond to the quantity of deforestation effectively avoided?	Organisation of civil society	2	Cameroon
	Funding structure	1	Cameroon, Congo
In your country, are there REDD+ projects that generate carbon credits?	Engineering office	2	Cameroon, Congo, DRC, Gabon, CAR
	Government	3	RDC, Cameroon
In your country, is there an effective measurement and verification of reductions in deforestation?	Total	13	Cameroon, Congo, DRC, Gabon, CAR
Do you think that the advent of REDD+ in your country consist of storytelling?			

TABLE 3 List of standards with approved project in Central Africa

Standard/certification	Recommendations on MRV	Recommendations on financial payments and rewards	Number of projects approved
Social Carbon	Stipulates that “the reductions of emissions resulting from actions that benefit and improve the living conditions for stakeholders who are involved or interacted with climate change projects”	Encourages the actors to get involved to improve living conditions and “sustainable” livelihoods for local communities. Recommends that the payment for a tonne of carbon should be 7.3 USD.	1
Gold Standard	Monitoring soil organic carbon; model for a proposition of a baseline scenario; description of the monitoring plan; ex-ante evaluation tools; the baseline scenario and matrix for changes in land use are proposed to make this task easier.	Simplification of payment calculation; calculation of the net benefit of activities; taking into account of project additionality (real supplementary effects); recommends that payment for a tonne of carbon should be 12.2 USD.	2
VCS	Collaboration with CCBS and Social Carbon to simplify the process of carbon quantification; development of standardized methods for a simplified estimation of the carbon stock.	Proposition of 5 simplified steps to deliver the carbon credits corresponding to avoided deforestation that has been verified and validated; recommends that payment for a tonne of carbon should be 4.8 USD.	3
CCBS	Encourages the involvement of local communities in the evaluation of biodiversity and carbon estimation and monitoring.	Recommends that small farmers and community projects have access to carbon financing; recommends that payment for a tonne of carbon should be 5.4 USD.	2
Plan Vivo	Simplification of the technical specifications for defining the reference area and level of emission and the carbon stock; takes other ecosystem services into account.	Payments for carbon capture or reduction in greenhouse gas emissions; Payments for catchment basin services, conservation and improvement of biodiversity: 60% of the sum must go to local communities; recommends that payment for a tonne of carbon should be 7 USD.	3

conservation and avoided deforestation (Plan Vivo 2013). Community projects are targeted, organised by rural communities, leading to ecosystem conservation and producing benefits with regard to improved livelihoods. This standard recommends methods of vegetation quantification and monitoring.

CCBS

The goal of the Climate, Community and Biodiversity Alliance is to encourage and promote land management activities that lessen the effects of climate change significantly, improve the well-being of local communities, reduce poverty and preserve biodiversity. Several international NGOs are members of this alliance, including CARE International, the Wildlife Conservation Society, the Rainforest Alliance and Conservation International. The alliance has developed two initiatives:

- The Climate, Community and Biodiversity (CCB) Standards, initiated in 2003, target local projects and associated investments that offer important and credible benefits for the climate, communities and biodiversity in an integrated and sustainable manner (Peters-Stanley *et al.* 2014).

- The REDD+ Social and Environmental Standards (REDD+ SES), which were published in 2010 to support the REDD+ programmes led by the states. They were created on the basis of stakeholder best practices in local projects.

Gold Standard

This initiative was started in 2003 under the aegis of several NGOs (World Wide Fund for Nature, Greenpeace, Helio International and SouthSouthNorth). The Gold Standard is more of a market regulation organisation than a standard providing a framework for projects. It specialises in energy efficiency, renewable energies, waste valorisation, as well as land and forest use. All the projects that are certified with the Gold Standard are supposed to ensure the reduction of emissions and provide other benefits for local communities (Streck 2012).

Social Carbon

This standard, published in 2008, targets the continuous monitoring and improvement of social performances. It therefore favours social aspects in connection with sustainable development. This standard is considered complementary because it is used in addition to other standards, like the VCS.

Social Carbon has developed a series of methods for monitoring, verification and reporting.

An analysis of the documents published by these organisations to encourage the implementation of REDD+ projects shows that they have structured their communication on two storylines (Table 3). In this context, they validated or approved 11 REDD+ projects in Central Africa. It should be noted that until 2018, when the fieldwork component of our research was concluded, REDD+ was still being debated and negotiated in the international environmental arenas. For this reason, the REDD+ projects validated were considered pilot projects or experimental initiatives. The financial cost of MRV certification and the socioeconomic and political context of Central African countries (accessibility, political and social crises) are additional factors that could explain this low number of projects. The two storylines are complementary in that the payment amounts depend on the measured quantity of avoided or reduced deforestation. Methods for measuring deforestation are suggested and recommended, emphasising the need to develop a baseline scenario, in particular via remote sensing. The participation of local communities is advocated by the CCBS. The sums envisaged for the financial payments or rewards per tonne of carbon vary from one standard to another. The highest rate (12.20 USD per tonne) is recommended by the Gold Standard (Table 3).

The storytelling used by these labels can be distinguished from classic storytelling in that it is constructed mainly on a technical dimension (techniques to monitor deforestation reduction and associated carbon emission reduction). It uses the characteristics of storytelling (Figure 2) by insisting on the results in terms of greenhouse gas reduction and on payment and rewards in relation to the carbon markets. REDD+ projects have been restricted to the carbon metric and to the financial valorisation of avoided or reduced deforestation, with limited attention to ways and means of actually reducing deforestation while improving livelihoods.

REDD+ storytelling features

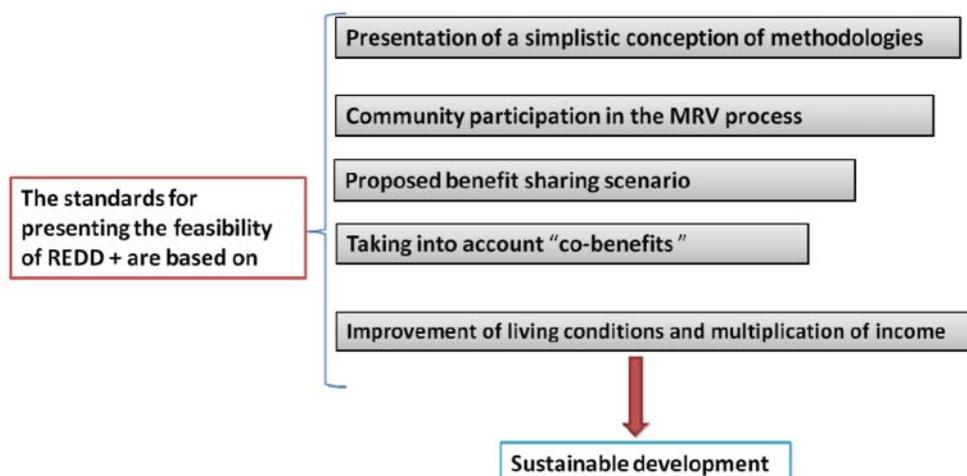
Through their documents, the standards convey the idea that the problem of deforestation could be resolved, helping to

mitigate the more global challenge of climate change. They call on the actors (e.g. states, local populations and NGOs), seeking to convince them that operational methods can be put to use to measure reduced deforestation and qualify for the equivalent payments. By disseminating a simplistic view of REDD+ feasibility, the standards challenge and sensitise the actors to attract their commitment and involvement. Although they identified technical difficulties relating to MRV in their documents, the standards demonstrate that REDD+ is feasible and can bring in money through carbon markets.

The standards recommend solutions based on a technical approach, notably relating to the use of satellite imagery and necessary investigations in the field to evaluate deforestation and carbon stocks. Despite evidence of the methods' complexity (Ochieng *et al.* 2016, Singh 2016), certain standards – including Plan Vivo and the VCS – largely claim that local communities could participate fully in the process of monitoring and verification. Community systems of benefit sharing are recommended. The standards avoid mentioning the complexity of the struggle against deforestation and of fully implementing MRV. It is, however, obvious that the communities that must engaged in the technical carbon-monitoring activities have little chance of success if their skills are not strengthened.

The changes likely to be brought about by REDD+ are scattered throughout the documents developed by the standards. They notably concern the “co-benefits”, which are presented as socioeconomic outcomes of REDD+ and are envisaged in addition to results-based payments. All standards also emphasise changes regarding the struggle against deforestation and climate change (biodiversity conservation, sustainable management of tropical forests and reduction in greenhouse gas emissions). According to the standard documents, by aggregating the environmental and socioeconomic stakes, REDD+ will make it possible to achieve sustainable development. The rhetoric of sustainable development is therefore repeated without explanation and without taking into account the difficulty of achieving this, particularly in forested areas, which provide the revenue and means of subsistence.

FIGURE 3 *REDD+ storytelling presenting sustainable development as a major achievement*



An overview of REDD+ experts points of view

The experts who replied to our questionnaire believed the launching of REDD+ was mainly prepared by affluent states and funders who conceived and deployed communication strategies in such a way that developing countries would support and implement REDD+ projects at national and local levels. According to these experts,¹ the multilateral programmes created specifically for REDD – like UN-REDD and the Forest Carbon Partnership Facility (a World Bank programme) – conceived REDD+ with financial rewards and compensation as an essential element to ensure that it would be supported by developing countries. The envisaged sale of forest carbon generated by REDD+ projects is part of this perspective. For these experts, Central Africa states were reticent about REDD+ and showed their resistance at the end of the 2000s with regard to this concept because it added – with no clear explanation – to other ones that had emerged in the forestry sector (forest certification and sustainable management of forests) and were difficult to implement. These experts also considered that REDD+ had been oversold or misrepresented when the first documents describing it were distributed. The initial emphasis on the financial benefits of REDD+ and the exaggeration of the amount that a tonne of carbon could be worth (around 35 USD at the start) had the effect of focusing attention on this aspect. This did not lead to a rejection of REDD+ but instead to a kind of well-meaning expectation. However, this good will gradually crumbled as the price the markets offered for a tonne of carbon fell to less than 5 USD after the financial crisis of 2008–2009 (Econfix 2012). Although national actors in developing countries have not become completely demotivated, their attitude to REDD+ is characteristically one of waiting without much enthusiasm. According to experts we interviewed, this attitude can be explained by the fact that national actors have not yet given up on receiving international funding for REDD+, particularly as this money seems to represent an increasing sharely significant part of financial aid for development. This is why Central Africa countries applied for bilateral and multilateral programmes that have a banking function, as banking counters making it possible to obtain funding to prepare for REDD+ and to invest in forests, with the prospect of an international forest carbon market.

Academic staff members as well as financial and technical partners believed the support of Central African states for REDD+ showed they are obsessed with the financial “mantra” that it represents and with the opportunities for training and strengthening of their capacities. We cite Cameroon as a clear example because it considers REDD+ as a development tool, as if the objective of reducing deforestation is secondary compared with the financial and socioeconomic benefits expected from REDD+. Without really being convinced that REDD+ would be implemented and provide financial benefits, the experts who monitored the way in which Cameroon integrated this mechanism liken this to Pascal’s wager: the country will lose nothing by including REDD+ in public policies even if it is never implemented.

Experts from civil society and scientific research expressed a different point of view. According to them, national actors and, above all, Central African states joined REDD+ under duress. With REDD+ having become a pillar of international cooperation and development aid, developing countries could not refuse without losing a substantial share of development aid. According to these experts, national actors redefined ongoing projects to give them a REDD+ slant or connotation.

Our investigation showed that the experts interviewed had diverging points of view on whether the advent of REDD+ in Central Africa should be considered as storytelling (Table 4). The term “storytelling” surprised almost all of these experts. While technical and financial partners as well as researchers gave a correct definition, the experts from other categories said they had never heard of the concept and therefore did not know its definition. For technical and financial partners, storytelling is “the overselling of a concept that is not yet well through”, “over-communication about a project or programme”, which could lead to “misunderstandings”, “incomprehension” and even “deception”. For researchers and university experts, storytelling is “excessive communication” and its analysis in political sciences can call on “policy narrative”. Actors from four categories (technical and financial partners; researchers and university experts; civil society organisations; and engineering offices) consider that the advent of REDD+ in Central Africa consisted of storytelling. By contrast, government experts (e.g. people working in the REDD+ technical secretariat, which implements REDD+ for Cameroon’s government) consider support for REDD+ to have been deliberate, with the countries having taken the process in hand and positioned themselves as seasoned negotiators. Nothing more was then imposed on the states during the negotiations (stakeholder conferences) to manage REDD+ implementation.

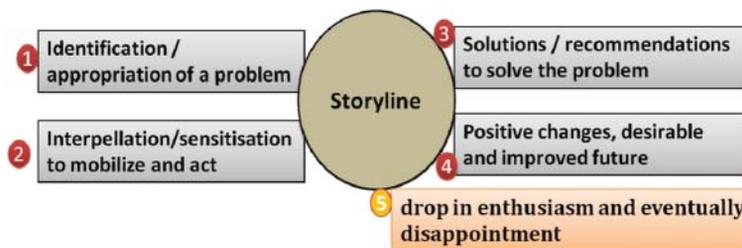
Most of the experts who answered our survey said all the Central African states initially believed the promises of payments and rewards or financial compensation for avoided or reduced deforestation. According to them, the states thought REDD+ would generate funding for the forestry sector while improving living standards in rural areas, thus contributing to reduced instability in these territories. Our survey revealed that none of the experts knew of a REDD+ project in Central Africa for which there had been financial payment and rewards/compensation, even though several projects have been implemented in line with the standards. Despite large investments in the carbon markets, buyers are scarce – as are the payments and compensation – and there is no longer much hope that this will change. It appears as though the concept has lost momentum in Central Africa, confirming our hypothesis that the advent and dissemination of REDD+ consisted of storytelling. Nonetheless, our analysis shows that the conceptualization of storytelling does not cover such a decline in enthusiasm (Figure 4), nor the disappointment generally felt about promises that were not fulfilled.

¹ We firstly globalised the points of view of experts whose opinions converged on the idea of REDD+ in Central Africa. Then we separated the divergent points.

TABLE 4 Synthesis of the key questionnaire responses

Questions asked	Technical and financial partners	Research / University	Organisation of civil society	Funders	Engineering offices	Government
Did your country believe the promises of financial compensation and rewards for reduced or avoided deforestation?	Yes	Yes, but with political calculations for later negotiations	Yes	Yes	Yes	Yes, the States continue to believe and are still committed
Does your country receive rewards or compensation for reduced deforestation? If so, do these correspond to a quantity of effectively reduced or avoided deforestation?	No	No No compensation	No Many hopes were raised at the start of REDD+, but nothing has yet been paid	No, but some verifications by independent experts have been made on pilot projects	No	No
Are there any REDD+ projects in your country that manage carbon credits?	No	No	No	No	No	No, carbon credits were validated, there were no payments
Was your country efficient in the measurement and verification of reduced or avoided deforestation?	No	No	No	No	No	No
Did the advent of REDD+ in your country consist of storytelling?	Yes, because the tools were not set up for success	Yes, because 10 years of experience show that preparation was poor	Yes, REDD+ was imposed and we are still waiting for the benefits	No	Yes	No, because the process was accepted with no constraints

FIGURE 4 Analytical framework of storytelling including an additional fifth characteristic



DISCUSSION

We used storytelling as a conceptual framework to analyse the narrative developed by carbon certification standards for promoting REDD+ and stimulating its implementation in Central Africa. Our analytical approach is similar to that of Moezzi *et al.* (2017), which demonstrated that storytelling is very useful to evaluate a new environmental paradigm. Although the storylines used by carbon standards are essentially technical, it is plausible to consider that the advent of REDD+ in Central Africa involved storytelling, according to our survey and giving storytelling characteristics we find in the documents developed and disseminated by these standards. People involved in the implementation of REDD+

in Central Africa have played an important role by trying to demonstrate that REDD+ projects can be realised at national and local levels.

Our findings are consistent with the idea of Salmon (2009), who estimated that organisations can build their success through storytelling. After having identified and presented deforestation as an important cause of greenhouse gas emissions contributing to climate change, certification standards underline the necessity to act by implementing REDD+ to lessen climate change and achieve sustainable development. Most of them sensitise their audience to the need to involve experts and local populations in the implementation and monitoring of REDD+.

As demonstrated by our findings, the concept of storytelling is very useful to dissect the discourses designed to spur

action and to benefit from this action. But the concept does not really highlight marketing and business dimensions. That is why the concept of business storytelling has been developed recently (Benites-Lazaro *et al.* 2017). It provided insights into the manner in which corporations use storytelling for business. Stories about climate change are often frightening or even apocalyptic. They appear to be a strategic resource in the business community and an opportunity for companies to conceive strategies that will demonstrate their credibility.

The conceptual framework of storytelling appears to be quite close to approaches that have developed in recent years in political science, such as policy narrative (Jones *et al.* 2014, Sanford *et al.* 2014, Vijge *et al.* 2016) and discursive institutional analysis (Den Besten *et al.* 2014). But these approaches are mainly applied to the analysis of policies, including environmental ones, as they emerge, diffuse themselves and become institutionalised. The roles and influences of the actors are particularly emphasised, while narrative communication is not studied enough.

Our analyses reveal that, as an analytical framework, storytelling does not usually take into consideration the disappointment that can be felt by a target population who had given their support to what was promised. The conceptualisation of storytelling should therefore be reconsidered within the context of research on environmental policies, taking into account this disappointment (Figure 4). Thus, the study of the storytelling that usually accompanies the conception and dissemination of environmental policies should examine more than just the four main classic features of storytelling. It should also seek to reveal and analyse any disappointment or decline in enthusiasm or disappointment that may occur after the target audience has adopted and implemented an environmental policy.

CONCLUSIONS

Our results show that the narrative discourse constructed to promote REDD+ and to aid its implementation is structured on two main storylines: monitoring, reporting and verification (MRV), as well as financial payments and rewards. The documents developed and disseminated by the standards present a very simplified and optimistic vision of REDD+ that avoids complex questions not only on MRV, but also on financial payments and rewards. The two storylines on which REDD+ narrative is constructed emphasise its beneficial outcomes in terms of sustainable development, particularly for local populations. Most of the certifications sensitise their audience to the need to involve local populations in the implementation and monitoring of REDD+.

The promises of financial payment and rewards were crucial, as shown by our survey and as documented in several publications (Aquino and Guay 2013, Rakatama *et al.* 2017). Apart from experts from the government, the experts we interviewed considered the advent of REDD+ in Central Africa to have involved storytelling and included the prospect of receiving financial payments and rewards equivalent to quantities of reduced or avoided deforestation. Yet, the

projects that were implemented did not lead to financial payments or rewards, causing a decline in enthusiasm from the stakeholders and disappointment in local populations (Awono *et al.* 2014, Sills *et al.* 2014, Sunderlin *et al.* 2014). More than 10 years after the advent of REDD+, the initial enthusiasm has been replaced by a combination of hope and disappointment. The pilot projects and initiatives created in Central Africa seem to have lost momentum, as the stakeholders no longer trust the financial promises (Mabele and Scheba 2016).

Through the analysis of interviews, we show that Central African actors have believed that countries will be inundated with REDD+ finance. In view of these results, the REDD+ process has been negatively affected, in the sense that the future of payments to pilot projects is uncertain. Further research on REDD+ projects should focus largely on the consequences of not fulfilling financial promises, and the consequences of scarce remuneration from carbon markets. Based on our reconsideration of the concept of storytelling (Figure 4), the gap between promises and reality should be assessed and clarified at a time when environmental policies are increasing in number to address the urgency and acuteness of ecological problems.

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