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The parallel materialization of REDD + implementation discourses in Brazil

Richard van der Hoff [a,b,*], Raoni Rajão [b], Pieter Leroy [c], Daan Boezeman [c]

[a] Radboud Universiteit, The Netherlands
[b] Universidade Federal de Minas Gerais (UFMG), Avenida Antônio Carlos 6627, Campus Pampulha, 31.270-901 Belo Horizonte, MG, Brazil
[c] Radboud Universiteit (RU), P.O. Box 9108, 6500 HK Nijmegen, The Netherlands

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ABSTRACT

The concept of Reducing Deforestation and Forest Degradation (REDD+) dominates international debates on the role of forests in climate change mitigation, but concrete implementation remains a challenge. In contrast to this general trend, Brazil emerged as a noteworthy exception due to the widespread implementation of major REDD+ initiatives. This research paper aims at understanding the implementation of REDD+ in Brazil from a discursive perspective. The analysis identifies two discourses that are guiding the implementation of REDD+ in different ways. On the one hand, advocates of a sustainable development discourse conceive REDD+ as a centralized mechanism to foster pre-existing deforestation control and sustainable economic activities through centralized mechanisms such as the Amazon Fund. On the other hand, a number of disconnected actors follow a carbon commodification discourse inspired by the idea of neoliberal conservation and create REDD+ projects to provide carbon offset to voluntary markets. The analysis of these discourses reveal that implementation processes do not rely on discursive convergence, but rather culminate in the parallel development and implementation of distinct REDD+ discourses that are at the same time competing, coexisting and collaborating on different levels.

1. Introduction

Since its emergence in the mid-2000s, the concept of Reducing Emissions from Deforestation and Forest Degradation and enhancement of carbon stocks (REDD+) as potentially a low-cost contribution to climate change mitigation has drawn considerable attention at local, national and international levels (Angelsen et al., 2012; FAO, 2011; UN, 2011; World Bank, 2008). At present, the core purpose of REDD+ is to generate the financial resources necessary for reducing as well as avoiding carbon emissions in countries with tropical forests (Agrawal et al., 2011; Angelsen et al., 2012). While political interest in the REDD+ concept abounded since its inception in 2003 (see Moutinho et al., 2011), the practical implementation of REDD+ proved more challenging than anticipated. Some of the main challenges persisting in contemporary debates involve the inclusion of REDD+ in carbon markets, the distribution of benefits (both financial and non-financial), the establishment of a monitoring, reporting and verification (MRV) framework, and the adoption of safeguards concerning social equity and ecological biodiversity (Agrawal et al., 2011; FFPRI, 2012; Vatn and Vedeld, 2013). Many scholars recognize this multiplicity of unresolved challenges in REDD+ implementation as directly resulting from its multi-actor (Brockhaus et al., 2014; Gebara et al., 2014; McDermott et al., 2012) and multi-level (Angelson et al., 2008; Skutsch and Van Laake, 2008) governance characteristics. Within this context, a growing body of scientific literature adheres to a discursive approach to understanding REDD+ implementation, expounding why some elements of REDD+ (e.g. finance) are largely elaborated while other elements (e.g. social safeguards) have remained contentious and only recently attract attention in negotiations (Angelsen et al., 2012; Luttrell et al., 2013; May and Millikan, 2010; Peterson St-Laurent et al., 2013). While many of these discursive studies illuminate the debates, none of these studies articulate how different discourses can result into concrete practices (Leipold, 2014; Skutsch and Van Laake, 2008; Thompson et al., 2011).

Such articulation of the materialization of discourse to practice becomes especially important in understanding the case of REDD+ implementation in Brazil, which has received widespread political attention due to the vast contributions to global deforestation (i.e. an average of 50%, or 2.6 million hectares, in the 2000s) as well as significant achievements in curbing deforestation in the Amazon region (i.e. from 2.8 million hectares in 2004 to 0.7 million hectares in 2010) (Carvalho, 2012; FAO, 2011; Santilli et al., 2005). Brazil currently hosts one of the most elaborate networks of REDD+ stakeholders from a

* Corresponding author at: Universidade Federal de Minas Gerais (UFMG), Avenida Antônio Carlos 6627, Campus Pampulha, 31.270-901 Belo Horizonte, MG, Brazil. Tel.: + 55 31 9454 1340, + 31 6 48630814.
E-mail addresses: richard.vanderhoff@gmail.com (R. van der Hoff), rajao@ufmg.com.br (R. Rajão), p.leroy@fm.ru.nl (P. Leroy), d.boezeman@fm.ru.nl (D. Boezeman).

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diversity of public and private sectors that currently implement over 36 REDD+ projects throughout the country (Angelsen et al., 2012; Gebara et al., 2014). Most of these projects in Brazil obtain financial support from the Amazon Fund, which, since its creation in 2008 until present, has received and distributed more than 800 million USD in donations from Norway and Germany[1] for deforestation reduction initiatives in the Brazilian Amazon. Moreover, Brazil currently works on a national REDD+ strategy, while many state governments in the Amazon region created institutional frameworks to trade avoided deforestation to voluntary markets and are negotiating a carbon offset agreement with the US state of California (GCF, 2012; Nepstad et al., 2013). In addition, the country successfully obtained the certification of over 20 REDD+ projects which together represent several million tons in avoided CO_2 emissions that can be sold as carbon credits in voluntary markets. It is not surprising, therefore, that Brazil is currently the frontrunner in REDD+ implementation. These examples of widespread emergence of REDD+ initiatives involving multiple stakeholders in Brazil pose a rather sharp contrast with the slow pace of the UNFCCC negotiations at the international level. Most importantly, the case of Brazil suggests that REDD+ implementation takes place in spite of the absence of a coherent governance structure at the national and international levels. In light of these reflections, it becomes particularly interesting to articulate the materialization of REDD+ discourses in Brazil in order to understand the implementation of REDD+ practices in the Amazon region.

This research paper responds to this knowledge gap by articulating how discourses construct particular conceptualizations (i.e. visions of what REDD+ is), strategies (i.e. how REDD+ should be implemented) and practices (i.e. the concrete actions realize these visions and strategies). This articulation departs from a constructionist understanding of discourse, which is elaborated in Section 2 and operationalized in Section 3. Based on interviews, observations and documental analysis, Section 4 presents the two main discourses concerning REDD+ in Brazil, paying particular attention to its conceptualizations, and implementation strategies and practices. We then discuss these two parallel discourses in light of the current scholarly literature, and conclude with some key remarks and recommendations for future research.

2. Discourse analysis and REDD+

Given the focus on the materialization of discourses into practices, this research paper defines discourses as "ensembles of ideas, concepts and categories through which meaning is given to social and physical phenomena, and which are produced and reproduced through an identifiable set of practices" (Hajer and Versteeg, 2005: p.175). While other definitions are widely available, this definition particularly emphasizes the omnipresent link between discursive frameworks and concrete practices that sustain discourses. Within this broad conceptualization of discourses, it is possible to identify a critical realist and a constructivist tradition of discourse analysis (Reed, 2000). The critical realist tradition, or critical discourse analysis, draws upon a Marxist theory to see discourses as mediators between practices and ideologies, namely, superstructures imposed by dominant groups in order to hide underlying power relations. In this context, one of the key aims of critical discourse analysis is to promote emancipation by exposing the content of ideological–discursive formations (Fairclough, 1985; van Dijk, 1993). This approach has been adopted by some studies in exposing distinct and often conflicting discourses on the conceptual development of REDD+ at the international level (Hiraldo and Tanner, 2011), concrete implementation efforts at the national level (Peterson St-Laurent et al., 2013; Somorin et al., 2012), and distribution mechanisms (Angelsen et al., 2012).

The constructivist tradition, in contrast, avoids the distinction between an ideological superstructure and an underlying reality. By drawing upon the work of Foucault (2002), Berger and Luckmann (1967), and others, this tradition proposes that discourses are involved in the social construction of reality by "creat[ing] some sense of stability, order and predictability and thereby produc[ing] a sustainable, functioning and livable world […that] acquires its apparent externality, objectivity and structure" (Chia, 2000: 514; Foucault, 2002; Hajer and Versteeg, 2005; Rajão, 2013). Den Besten et al. (2014), for example, argued that international REDD+ debates have developed in two successive waves, thereby moving away from an initial conceptualization based on Payments for Ecosystem Services (PES) towards a broader scope that includes social and environmental 'safeguards'. In a similar tradition, Brockhaus et al. (2014) argue that, despite the presence of conflicting discourses, the general process of REDD+ implementation at the national level is largely determined by the more influential (or dominant) stakeholders.

Despite the differences and quarrels between the critical realist and constructivist traditions of discourse analysis (Fairclough, 2005; Reed, 2000), both approaches agree that discourses shape and are shaped by concrete practices. Therefore discursive formations inspire 'case-specific' discourses with respect to their contents, which subsequently materialize into practices. At the same time, distinct sets of practices are combined in 'case-specific' discourses that may transform these discursive formations over time. This dialectical relation implies that practices are always embedded in (pre-existing) discourses and that discourses always rely on practices for their existence and transformation (Phillips et al., 2004; Van Leeuwen, 2008). As such, discursive approaches tend to emphasize either the discursive struggles through which practices transform discourses, or the materialization of discourses into practices, the latter of which is the focus of this paper. By exposing this materialization, this approach is able to show how different groups mobilize contrasting discourses to shape the conceptualization of environmental problems (Hajer and Versteeg, 2005), and to define the strategies and practices to solve them (Backstrand and Lovbrand, 2006; Den Besten et al., 2014; Rajão, 2013).

Despite emphasizing different elements of discourse materialization, the discursive literature from both traditions generally recognizes the outcome of discursive conflicts as key determinant for the practical manifestation of REDD+ implementation. Some studies suggest that the discursive conflicts in REDD+ debates will culminate in a dominant position for some of the discourse communities, which will determine the characteristics of REDD+ implementation (e.g. Brockhaus et al., 2014). Gebara et al. (2014), for example, indicate that governmental organizations as well as NGOs exert the most influence in REDD+ policy-making in Brazil. As such, REDD+ discourses are directly linked to specific stakeholders of various degrees of dominance as well as the practices in which these stakeholders engage. Other studies either implicitly or explicitly suggest that REDD+ implementation processes can only be successful in case of convergence of discourses and their practices (e.g. Hiraldo and Tanner, 2011). This hypothesis implies that REDD+ requires an alignment of stakeholder interests (either through domination or negotiation) that consolidates all stakeholders into a specific conceptualization of REDD+ to allow for its implementation (see also Skutsch and Van Laake, 2008; Thompson et al., 2011). Still other scholars argue that discursive multiplicity and related conflicts may even be desired at the international level in order to attract a wide diversity of stakeholders. Yet they recognize that this function (REDD+ as a boundary object) may disappear as soon as REDD+ implementation arrives at the national or subnational level (McDermott et al., 2012). As such, REDD+ implementation requires a web of multi-sector and multi-level stakeholders cooperating in a coherent governance structure that supports their interests, which they recognize as one of the greatest challenges in the implementation of REDD+.

While these studies provide some key perspectives for understanding the implementation of REDD+, they leave some crucial details of this process unarticulated. In particular, the literature has so far not been able to account for the translation of REDD+ discourses in concrete and coherent practices, and most importantly, how REDD+ is achieving moderate success (in terms of initiatives implemented) in

[1] http://www.fundoamazonia.gov.br/FundoAmazonia/fam/site_pt/Esquerdo/Doacoes/ accessed on 30/04/2014.

countries like Brazil despite the absence of a coherent discourse at national and international levels. In light of these shortcomings, this research paper questions the validity of the hypothesis advocated by most scholars discussed above that successful REDD+ implementation would necessarily require convergence of discourses and their practices. This research aims to address this question by providing a detailed description of the construction of REDD+ in various discourses that are represented in implementation practices. This description in this research paper addresses three key dimensions: (1) conceptual, how actors understand the issue of deforestation and why it should be reduced through REDD+; (2) strategic, the principles that guide REDD+ implementations; and (3) practical, the concrete actions that make this strategy operational. This study intends to shed light on how the REDD+ concept is received in a particular institutional and political context (see also Aquino and Guay, 2013; Kanowski et al., 2011) and materialized in specific practices in order to contribute to the understanding of the implementation process of REDD+ in Brazil and other tropical countries.

3. Research methodology

This research paper builds primarily on a combination of nine semi-structured interviews, observations and document analysis obtained by the first author of this article. The majority of the interviews were selected based on their influential position in national REDD+ policy-making (yielding similar results as Gebara et al., 2014), which was complemented with standalone REDD+ initiatives from corporate organizations (e.g. CGV and CDI, see below) in order to capture the full range of activities in the Brazilian Amazon. This selection yielded seven interviews with governmental organizations, corporate organizations and non-governmental organizations. Furthermore, two additional interviews with experts in REDD+ implementation and methodology were selected to enhance understanding of REDD+ activities. The interviews were recorded, transcribed and analyzed using simple coding methods that initially focussed on the key elements of REDD+ implementation (i.e. raising financial resources and distribution of benefits). During this preliminary analysis, the codes were regrouped in order to reflect the individual actor positions with respect to REDD+ elements, which yielded a matrix representing the extent to which each actor adheres to particular forms of governance (i.e. market and government) and particular forms of strategy (i.e. commodification and development). This analysis yielded two clusters of REDD+ stakeholders that were recognized as the discourses presented below. This interview analysis forms the primary data source for this research article, from which the two discourses have been identified and all quotes in the empirical section are inspired. In order to obtain an updated perspective of the negotiation process at the UNFCCC, the second author has also participated as an observer of the COP20 in Lima and interviewed delegates from different countries. These data and observations served to confirm and validate the main findings of this analysis with respect to general developments in REDD+ implementation, as well as obtain some insights on the current and future prospects of conceptual development.

The results from this interview analysis were complemented with and supported by a body of secondary data. Firstly, this research paper derives from a collection of governmental report documents and brochures, such as the National REDD+ strategy, the National Plan for Climate Change, as well as publications, brochures and websites from NGOs and corporate organizations, as complementing research data that underscores the research results and enhances understanding of REDD+ implementation in the Brazilian Amazon. Secondly, during two visits to REDD+ initiatives in the north of Mato Grosso, it was possible to collect observations related to the implementation strategies and practices related to REDD+ implementation supported by the Amazon Fund. Finally, this study also benefited from the empirical data obtained by the second author as part of a longitudinal study that has been looking at the formation of deforestation control policies in Brazil since 2006, and that so far has collected more than one hundred interviews with government officials, politicians, members from NGOs and farmers. The empirical findings from these primary and secondary data resources are represented in a narrative description, which captures the central discourse features with respect to problem definition of deforestation in the Brazilian Amazon, the proposed strategy for reducing deforestation and the consequent construction of REDD+.

4. REDD+ discourses in Brazil

The genesis of REDD+ can be traced back to the proposal of a mechanism of 'Compensated Emission Reductions' by a group of Brazilian and North American scientists and activists, which was introduced in 2003 and integrated at the UNFCCC (United Nations Framework Convention on Climate Change) during COP11 in 2005 (Moutinho et al., 2005; Moutinho et al., 2011). The original idea advocated international financial compensation for countries that succeed in reducing tropical deforestation and, as such, contribute to climate change mitigation (Moutinho et al., 2011). While subsequent conceptual developments required the consideration of a number of technical (e.g. monitoring, reporting and verification), social (e.g. equity rights for indigenous peoples) and environmental (e.g. biodiversity protection) issues, this original concept based on international financial support for deforestation reduction efforts still underpins contemporary REDD+ debates (Angelsen, 2013; Angelsen et al., 2012).

In Brazil, REDD+ appeared as a new chapter in the country's attempt to control deforestation in the Amazon. From the military rule in the 1960s until the 1980s, Brazil established a number of large scale colonization and development policies (e.g. *Operação Amazônia*, *PolAmazônia* and *Calha Norte*) in order to increase regional economic activity in the Amazon and ensure the Brazilian sovereignty over an area seen as highly vulnerable to international military intervention. Due to successful efforts to put environmental issues, including deforestation, on the international and national political agenda during the 1980s, the colonization policies towards the Amazon were reconsidered and the federal government launched different programs aimed to tackle deforestation mainly through command and control actions (Hecht and Cockburn, 1990; Rajão and Hayes, 2009; Zhouri, 2004). While monitoring and law enforcement still constitutes the main deforestation control instrument in use in Brazil, a growing number of actors in the 2000s began to recognize the limits of this approach. In this context, the view that deforestation was also an economic (rather than merely legal) problem gained widespread acceptance, which induced the advocacy of economic incentives for the preservation of forests. It was within this broader context that REDD+ was viewed by different actors in Brazil as a way to channel financial resources and provide economic benefits for the conservation of the Amazon (Moutinho et al., 2011). Despite this common ground, REDD+ implementation in Brazil reveals a growing gap between its various conceptualizations and the concrete practices they engender. In the next two subsections we present the two main REDD+ discourses in operation in Brazil, enchasing the way in which these discourses have been turned into implementation strategies and practices.

4.1. REDD+ as carbon commodification

Advocates of the carbon commodification discourse constitute a rather disconnected group of stakeholders that share an interest in direct payments for corresponding emission reductions. In the particular case of Brazil, this small collection of REDD+ stakeholders entails a mixture of corporate organizations, state-level governments and some non-governmental organizations that often do not act as a coherent group but nevertheless engage in similar practices. The remainder of this subsection provides more detailed understanding of this discourse.

4.1.1. Conceptual dimension

In line with international debates on REDD+, a group of private and public actors in Brazil emphasize the role of carbon-offset markets as a key economic instrument to mitigate climate change a global level. This particular discourse presents REDD+ as a way to ensure the reduction of emissions by avoiding deforestation, and in this way, producing carbon credits that can be purchased by other sectors of the economy (e.g. energy) and countries (e.g. Japan) where opportunity cost of mitigation is much higher. Therefore, this rather disconnected group of stakeholders share an interest in market-based approaches to reducing deforestation that is commonly referred to as 'neoliberal conservation' (Arsel and Büscher, 2012; Heynen and Robbins, 2005; Roth and Dressler, 2012).

The most apparent stakeholders of this discourse are corporate organizations, such as carbon traders Celestial Green Venture (CGV) and Carbon Decisions International (CDI), and environmental non-governmental organizations and some indigenous groups that financially, technically or organizationally support local sustainable development projects in exchange for carbon credits or financial compensation. According to the representative of a carbon trading company, reducing deforestation and correspondent carbon emissions in order to mitigate climate change is "why we are talking about REDD+". Understanding deforestation in terms of quantified carbon emissions with a monetary value induces the process of carbon commodification. In similar respect, the carbon commodification discourse argues that REDD+ should 'produce' the commodity of avoided carbon emissions (or carbon stocks) for the purpose of 'consumption' by emitting countries and corporations.

> "*Carbon trading could be like any other commodity if you want. A new commodity is demanded in the world markets and used. In principle, each country should have the right to decide how and if they want to incentivize the production of a certain commodity you see in their territories.*"
>
> [*Carbon Trader A*]

This conceptualization of emission reductions from deforestation as a commodity is promulgated not only by private actors, but by some state-level governments as well. In particular the Amazonian states that propose U-REDD+ allocation, as well as the GCF Task Force to which these states pertain, advocate the offsetting of carbon emissions from industrial activities in Brazil or other countries through the 'competition' for REDD+ carbon credits (Cenamo et al., 2014; GCF, 2012). As a consequence of this particular discourse, REDD+ is conceptualized chiefly as a way to mitigate climate change at global level through the use of market mechanism, leaving other benefits (e.g. poverty alleviation, biodiversity conservation etc.…) as aspects that should be at best safeguarded rather than rewarded.

4.1.2. Strategic dimension

The conceptualization of REDD+ as the commodification of carbon emissions immediately points to the establishment of carbon markets as its most central implementation strategy. A broad understanding of carbon markets emphasizes an exchange between 'consumers' and 'producers' of avoided carbon emissions and/or carbon stocks. CGV, for example, produces carbon credits by certifying projects through standards such as VCS and CCB, which produce carbon yields that are sold to consumers on European carbon markets (CGV, 2011). Alternatively, U-REDD+ allocation would involve the production of avoided carbon emissions and/or carbon stocks by state governments, which are 'sold' to the federal government in order to comply with UNFCCC commitments (Cenamo et al., 2014). Although the consumption of U-REDD+ by the federal government may imply a somewhat unusual formulation (the U-REDD+ proposal involves distribution of financial resources rather than a market), the competition involved in the allocation of financial resources provides an incentive for state governments to achieve (or produce) emission reductions or carbon stocks. In other words, allocation will not occur according to correspondence with the multiple objectives of sustainable development policies (see below), but rather based on quantifiable achievements with respect to reducing carbon emissions and/or maintaining carbon stocks.

The main argument for establishing such markets derives from the conviction that markets can efficiently manage available resources in order to achieve reductions in carbon emissions. This approach towards REDD+ projects consolidates a preference for a market-based rather than government-based approach, which is justified by the market's ability to solve not only economic but also social problems in a much more efficient manner as explained by an influential Brazilian economist (see also Vatn and Vedeld, 2013):

> "*In fact, the market based mechanisms give you room for doing compensatory policies and for doing social policies, so it's just a way of seeing things which is more affirmative rather than say at the end we can do… we can take into account poverty or social issues we start saying this: Green economy is going to take care of the poor. So to do that, we needed to price the rich.*"
>
> [*Economist from governmental research institute*]

While the focus on carbon emission reductions and offset markets dominates the strategic dimension of the carbon commodification discourse, actors involved hold rather ambiguous positions with respect to the non-carbon features of REDD+ (i.e. protecting biodiversity and securing social equity). Carbon traders like CGV, for example, argue that issues like poverty and biodiversity loss distract REDD+ from its core purpose as climate change mitigation policy. Similarly, the different members of the GCF Task Force do not appear to include such issues into their activities in the same way, with the state of Acre showing a greater concern for social justice, while the state of Mato Grosso has a stronger focus on the economic aspect of REDD+ (GCF, 2012). However, the carbon trading companies interviewed suggested that the incorporation of some socioeconomic and biodiversity considerations in their activities is seen as a vital part of their business strategy to commercialize carbon credits, thus maintaining the carbon focus.

4.1.3. Practical dimension

The conceptualization and strategy of the carbon commodification discourse of REDD+ in Brazil has influenced a specific set of practices concerned with the evaluation and implementation of REDD+ projects. These practices emerge within companies that mediate the relation between buyers of carbon credits and landowners of tropical rainforest. Although carbon commodification practices are diverse and unstandardized, the activities of a European carbon trading company provide an excellent illustration of how such mediators construct markets and provide the arena where supply and demand intersect. In this particular case, the 'suppliers' of avoided carbon emissions to this carbon trader are the direct landowners in the Brazilian Amazon, which mostly involve municipalities, local communities and indigenous people. The projects elaborated with these supplies entail intellectual as well as financial support for forest conservation and local development in exchange for the right to sell carbon credits on the voluntary carbon market in Europe.

> "*We do research on the area and on the project. We do our own internal calculations on what the threat level is and [whether] it can be addressed. (…) After we have done that, we do our own calculations again on what we think the carbon credit yield would be. We agree a figure between ourselves and the land owners. We set up a project from beginning to end and we pay fifty [percent] to the land owner for the carbon credit rates for the next thirty years. At no time we own the land.*"
>
> [*Carbon Trader A*]

Even though carbon traders certainly contribute to social co-benefits of REDD+ projects, an analysis of their practice activities suggest that

the main focus remains on generating carbon credits for a voluntary market. Thus, when actively looking for a 'demand side' for their for the carbon credits generated from agreements with Brazilian landowners, these companies look for global voluntary carbon markets and major players (e.g. banks, multinational companies) interested in offsetting their emissions. In this process they "pack" the carbon credits in formats that are in line with perceived investor needs, involving an appropriate scale as well as information on REDD+ benefits. This suggests that the business activities of this carbon trading company are very performance driven and customer oriented. Recognizing the central focus on avoided carbon emissions, the additional social benefits related to development activities in Brazil should be understood as commercial advantage that, according to this carbon trader, "tells the story".

After establishing the financial viability for the creation of a REDD+ projects in a given area, the trader has develop a Project Design Document (PDD) that specifies how carbon yields are calculated. The development of a PDD is a complex process which involves the calculation of the biomass of the area, its forest inventory, a remote sensing assessment of the past and present forest cover, and, finally, the projection of future deforestation in order to constitute a base line enabling a conservation outcome evaluation of the project. The practices to construct a PPD strongly link with the conceptualization of REDD+ as a carbon yielder and its market strategy in two ways. First, while these projects mention social and biodiversity concerns (see above), the focus of the PDD development and validation is placed on the ability of the REDD+ project to create substantial emissions reduction, and, in this way, to "produce" carbon offset credits. Second, and most importantly, through this production of carbon offsets these REDD+ practices realize the market strategy by detaching its tons of carbon from the specific socio-environmental context from where it originates. In this way, the carbon offsets produced by different projects are turned into a global commodity and become a product that can be split, combined, transferred, and exchanged in the same way as any other commodity.

4.2. REDD+ as sustainable development

The sustainable development discourse adheres to a broad set of REDD+ related environmental policies and practices that will be subsumed under a National REDD+ Strategy that is connected to UNFCCC commitments without participation in the UN-REDD+ Programme (GCP, 2008; Gebara et al., 2014; Gebara and Thuault, 2013). As such, many actors advocating this discourse are governmental organizations such as the Ministry of Environment (MMA), and the Ministry of Foreign Affairs (MRE). Some groups inside the Secretariat of Strategic Affairs (SAE/PR) and Ministry of Finance adhere partially to the carbon commodification discourse, but these groups have a more peripheral role in the implementation of REDD+ in Brazil. The Amazon Fund, a distribution mechanism created in 2008 for the management of financial resources of REDD+ related activities in Brazil, constitutes one of the central instruments in the National REDD+ Strategy. This result-based mechanism is financed by donations from the Official Development Assistance (ODA) budget mainly from Norway, but also with substantial contributions from Germany, mostly in the form of technical assistance. The fund has also received a small donation (relative to the fund's size) from PETROBRAS, the Brazilian oil giant that is under the majoritarian control of the Brazilian government. Between 2009 and 2014 the fund has received about 901 million USD that are allocated by the Brazilian Development Bank (BNDES) to support REDD+ initiatives from state and municipal governments, research institutes, and non-governmental organizations. Although the Amazon Fund may not represent the full extent of the National REDD+ Strategy (e.g. the Forest Code also plays a significant role), it does illustrate how stakeholders from national, state and local levels are connected in sustainable development activities in Brazil under the auspices of REDD+. The remainder of this subsection discusses the conceptual, strategic and practical considerations that characterize this sustainable development discourse.

4.2.1. Conceptual dimension

During the 20th century one of the key concerns of the Brazilian central government has been the economic development of the Amazon, which is considered both a strategic asset to be exploited and an unchartered area to be protected from foreign intervention (see above). With the uprising against large-scale deforestation triggered by the government's colonization policies during the 1970s and 1980s, it was necessary to reconsider, at least in discursive terms, the development strategy towards the Amazon. In this context the notion of "sustainable development" has gained widespread support across different sectors and is broadly defined as a form of economic growth "that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987). In the case of the Amazon rainforest, the concept of sustainable development has often been conceived by the Brazilian government as the centralized coordination of economic development through the provision of financial incentives and technological capabilities aimed at nullifying the environmental externalities of economic activities on the long term. In this way the government aims to "ensure that the forest standing is worth more than the forest cut down". The following excerpt from an interview with a senior official from the Secretary of Strategic Affairs (SAE/PR) illustrates this conceptualization:

> "*When you talk about forests in the Amazon, [you talk about] low technology. We are still in the rock era in the Amazon, it is unbelievable! We should improve technology in the Amazon in all ways, so they can have health programs, security programs [and so forth]. What they have in the cities, they should have in the field.*"
>
> [*SAE/PR Representative*]

When REDD+ appeared at the scene in the mid-2000s, it was readily identified by policy-makers from the Ministry of Environment as a way to finally obtain the financial resources necessary for implementing sustainable development actions. Therefore, these actors saw REDD+ not as a means for obtaining carbon yields to mitigate climate change, but rather as an instrument fostering sustainable development that alleviates the social causes of deforestation. This emphasis on the socioeconomic rather than the environmental dimension is a direct legacy of historical views of the Amazon and the persistently developmentalist concerns that has driven the policies towards the region (Rajão and Hayes, 2009).

4.2.2. Strategic dimension

The conceptualization of REDD+ primarily as the solution for a socioeconomic problem with environmental impact particularly manifests in a set of strategies that places the government (and not the market) as the main channel for the distribution of REDD+ benefits. This emphasis becomes particularly clear in the tendency of different senior officials to equate the national REDD+ strategies with governmental actions already in place in the Amazon. A representative from the Ministry of Environment (MMA), for example, stresses the integration of REDD+ in existing sustainable development policies:

> "*Brazil saw that REDD+ as a public policy is very convenient, because we were already seeking REDD+. We were already seeking things that were in the way of Green Economics. Here in the Ministry, REDD+ is treated very nearly to our plan against deforestation: PPCDAM. (…) REDD+ is one element that puts together all those other policies that were already in the field.*"
>
> [*MMA Representative*]

Indeed, the cross references between the National REDD+ Strategy and the Brazilian Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm) confirm the convergence

of REDD+ and existing policies (MMA, 2013). Within this view, REDD+ is a continuation and expansion of governmental actions already in place, with governmental organizations viewing the mechanism mainly as potential additional influx of financial resources for sustainable development policies. With this aim in mind, it becomes clear that, according to this discourse, the distribution of the benefits from REDD+ should be coordinated by the same entity responsible for fostering the development of the region, namely, the federal government.

Another important strategic catalyst for advocating a sustainable development discourse is the adoption of a strategy that aims to isolate the operation of REDD+ at an international level from Brazil's national policies. The Ministry of Foreign Relations (MRE), for example, strongly rejects the notion that REDD+ should provide carbon credits to be sold at an international level. This rejection stems from the view that REDD+ offset alleviates the emission reductions commitments of rich countries while augmenting Brazil's obligations to reduce carbon emissions from deforestation. More specifically, the federal government fears that the legal obligations from carbon offsets will constrain its freedom in pursuing national political interests (e.g. building a hydroelectric dam or opening an iron ore mine) As such, the federal government denounces carbon offsets in an effort to maintain national sovereignty, which is a concern that resonates the impact of the military regime between 1964 and 1985 (see Hecht and Cockburn, 1990).

These sovereignty concerns are reflected in Brazil's non-participation in the UN-REDD+ Programme, the refrainment from acknowledging carbon offsets in the draft of the national REDD+ strategy, and the repeated statements from Brazilian diplomats in the context of the UNFCCC negotiations (Carvalho, 2012; GCP, 2008). In similar respect, the Amazon Fund issues certificates to donor countries that ambiguously states an "equivalent value in CO_2 tons" in reference to the donated value in dollars, the amount of which is transferred to Brazil in recognition of the efforts already undertaken in reducing deforestation rather than obligating future reductions. Moreover, by way of consolidating the governmental control over REDD+ activities, the two advisory committees of BNDES in charge of the Amazon Fund are both dominated by governmental organizations with only a minor participation of members from the Brazilian academia and civil society. These observations suggest that sovereignty concerns of the Brazilian government (most notably MRE) have compelled the consideration of a sustainable development discourse for REDD+ by denying the possibility of a market for carbon offsets.

4.2.3. Practical dimension

The materialization of the conceptual and strategic elements of the sustainable development discourse into concrete REDD+ practices is perhaps best illustrated by tracing the allocation of financial resources of the Amazon Fund. The Guidelines and Criteria for Allocation of Resources of the Amazon Fund, elaborated by the Amazon Fund Guidance Committee (COFA), states that all Amazon Fund projects must "directly or indirectly contribute towards REDD+" (point B7) and "demonstrate a clear coherence with PPCDAm" (point B3), among thirteen other criteria. These criteria indicate that REDD+ practices occur along the lines of wider sustainable development policies as represented in PPCDAm, which involves the three pillars of land regularization, monitoring and control, and promotion of sustainable activities. In addition, it is important to mention that none of the fifteen criteria state a requirement for demonstrating substantial results in terms of emissions reductions. Instead, according to a researcher on REDD+ implementation at the project level, performance in emission reductions has been downplayed in favor of other distribution criteria:

> "*It is not the data of avoided emissions that allowed [projects] to apply for money. It was the technical expertise that went into the readiness that made their financial partners see that 'oh, these guys are really serious. They have publications. They have all this expertise'".*
>
> [*Researcher REDD+ implementation*]

This expertise translates into an ability to provide, for example, transparency into the project activities (point B11), which demands a basic level of organizational performance. These observations indicate not only the kind of projects, but also the kind of organizations that pertains to the sustainable development discourse of REDD+ implementation in Brazil, namely, professional organizations involved in a variety of activities corresponding with national sustainable development and deforestation policies.

Two projects currently supported by the Amazon Fund illustrate the points raised above. The project *Sementes do Portal* of the *Ouro Verde* Institute is dedicated to establishing a local exchange platform for alternative agricultural products. Its activities involve supporting small farmers to compete with large landholders through the introduction of local markets for the sustainable agricultural production of forest products (e.g. cajú, manioc, corn, cupuaçu, nuts, etc.). By providing small farmers with organizational advice and financial resources for buying seeds, the *Ouro Verde* Institute empowers them and augments their competitiveness. Alternatively, according to an anthropologist interviewed for this research, another project in the region of Alta Floresta involves a contribution to the governmental enforcement capacity by supporting local farmers on the condition of compliance to environmental legislation and registration in national register. Especially the latter condition serves to regularize property rights for all economic actors in the Amazon region, which makes a profound contribution to monitoring and control activities by governmental organizations (see BNDES, 2012). While these two projects may contribute to forest restoration and the capture of CO_2, the mitigation of greenhouse emissions by reducing deforestation on a large scale is distant from the core activities of promoted by these projects.

5. Competition, coexistence and collaboration between REDD+ discourses

The observations in the previous section indicate the presence of two distinct discourses that materialize in rather different sets of strategies and practices. On the one hand, we identify a carbon commodification discourse that departs from a neoliberal conservation perspective on the problem of deforestation as the motivation for the commodification of avoided carbon emissions. This commodification underpins the argument that markets, which connect supply and demand of carbon credits or U-REDD+, constitute the most efficient solution for this problem. REDD+ implementation strategies and practices inspired by this discourse actively contribute to the construction such markets. On the other hand, we observe a sustainable development discourse that emphasizes the region's lack of access to technology as well as poverty as the main driver of deforestation. Advocates of this discourse posit REDD+ as financial support for national sustainable development policies that aim for similar objectives. As such, REDD+ becomes a financial mechanism that integrates and coordinates existing environmental and development policies in which the reduction of emissions from deforestation is a side effect rather than the central objective. Table 1 enumerates these findings.

Given the distance between the two discourses and related strategies and practices, it is not surprising that there has been some conflicts for dominance between the groups of actors on the different sides of the debate. Apart from obvious differences between corporate initiatives (i.e. carbon trading) and projects in the Amazon Fund, these conflicts are particularly evident within the ongoing development of the National REDD+ strategy, where the federal government largely excluded the participation of the private sector and the states while inscribing the sustainable development discourse. At the same time, the many side events during the COP20 in Lima organized by the Amazonian states and carbon traders, on the one hand, as well as the agreement of Acre state directly with the German Development Bank, on the other hand, suggest that private and governmental organizations at various levels

independently promote their respective discourse while debunking the other.

In the context of these discursive conflicts, the sustainable development discourse currently appears to hold a quite dominant position not only in the number of stakeholders and the volume of financial resources linked to activities in the Amazon Fund (see Gebara et al., 2014), but mainly through the interest it engenders within the international negotiations. At international level, mostly due to the protagonist of Brazil at the UNFCCC, a framework has been approved at the CO19 in Warsaw that contains close resemblances to the Amazon Fund governance structure. In particular, while the Warsaw Framework leaves the possibility for the future development of a market approach for REDD+ as part of the Ad Hoc Durban Platform (to be concluded at the COP21 in Paris in 2015), UNFCCC's REDD+ will be, at least until 2020, a result-based non-market mechanism that depends mainly on donations to the Green Climate Fund. Most importantly, in accordance to the sustainable development strategy outlined above, paragraph 16 of the decision 9/CP19 notes that "the insertion of results on the information hub does not create any rights or obligations for any party or other entity", thereby emphasizing the non-binding character of REDD+ and empowering the sustainable development discourse in Brazilian REDD+ implementation.

On the other hand, however, the carbon commodification discourse cannot be regarded as a failure just yet. The country successfully obtained the certification of ten Verified Carbon Standard (VCS), two Natural Forest Standards (NFS), and nine Climate, Community & Biodiversity Standards (CCB) REDD+ projects, which together have the potential to avoid tens of millions tons CO_2 (more than any other country) that can be sold as carbon credits in voluntary markets.[2] While not all credits have been sold, private companies in Brazil and abroad have already spent considerable resources in acquiring carbon offsets as part of their social responsibility initiatives and green marketing campaigns. According to Forest Trends, carbon offset transactions in voluntary markets reached 192 million dollars in 2013 with more than 80% of these credits from REDD+ projects mostly based in Latin America. In the same line, the recent acquisition of 40 million USD from the state of Acre in emission reductions by the German Development Bank announced during the COP20 in Lima also brought some hopes for the REDD+ carbon commodification discourse.[3] These announcements offer a hopeful prospect for those actors who, since the mid-2000s, strived to develop a global carbon offset market in order to channel substantial resources into forest protection.

Despite the conflicts, these two discourses largely co-exist independently and even reinforce each other's agenda. In broad terms, both discourses seek to reduce deforestation and corresponding carbon emissions for which they seek the necessary financial resources. On the one hand, the Amazon Fund and the Warsaw Framework for REDD+ rely mostly on the channeling of official development assistance (ODA) from developed countries. In this way, rich countries are able to comply with an agreement signed in 1970 that asks them to donate 0.7% of their gross national income,[4] by which they also seek to satisfy voters at home by contributing to the mitigation of climate change (Hermansen and Kasa, 2014). On the other hand, the carbon commodification REDD+ projects tend to rely mostly on the acquisition of carbon credits from private companies, which select projects based not only on the price of the CO_2, but also has benefits for company image and product branding as a result of buying credits from that specific region (i.e. indigenous community, biodiversity hotspot). With their strong concern for the financial elements of REDD+, these seemingly differing discourses share a common denominator in seeking financial compensation (either through commodification or sustainable development) for practices that have a tangible impact on the social, political and economic reality of deforestation in the Amazon region.

It should be emphasized that this common objective is only partially related to the compromise reached in 2010 during the COP16 in Cancun on avoiding an increase in global temperature above 1.5 or 2.0 °C (Art. 4, Decision 1/CP.16). In the Copenhagen Accords, signed in the aftermath of the troublesome COP15, Brazil made the commitment to reduce its greenhouse emissions by 36.1 to 38.9% in relation to its projected emissions by 2020. In order to achieve this, the Brazilian government has included the reduction of deforestation in both the Amazon and the Cerrado biomes as its most important nationally appropriated mitigation action (NAMA), which would avoid the emission of 668 million tons of CO_2 equivalent. However, Brazilian negotiators have repeatedly highlighted that, in accordance with the principle of common but differentiated responsibilities, developed countries should achieve the largest emission reductions, giving a secondary role to REDD+ and other initiatives from developing countries. For this reason, the Brazilian government generally refrains from acknowledging REDD+ as (one of) the leading instrument for international climate change mitigation efforts. As governmental organizations dominate the more widely advocated sustainable development discourse, Brazil leaves largely out of sight the overall contribution of these reductions resulting from REDD+ to the mitigation of climate change at the global level, and instead focuses more explicitly on acquiring financial compensation for reducing deforestation.

6. Conclusions

The observations in this paper strongly indicate that REDD+ implementation is a heterogeneous process that is corresponding to the observations by Brockhaus et al. (2014) and Kanowski et al. (2011) and depends strongly on the historical context and the pre-existing discourses to which stakeholders adhere. These pre-existing discourses, in the case of Brazil, entail the predominant governmental concerns of regional development and sovereignty protection that presuppose the sustainable development discourse, as well as notions of neoliberal conservation that sustain the carbon commodification discourse. It is clear from the previous section that both discourses contain a wide elaboration of its conceptual, strategic and practical REDD+ elements that are most likely to perpetuate discursive conflicts for the foreseeable future. As such, the need for an alignment or convergence of stakeholder interests as a prerequisite of REDD+ implementation, indicated by Skutsch and Van Laake (2008) and Thompson et al. (2011) among others, may not be always valid. Therefore, corresponding to McDermott et al. (2012), instead of waiting to resolve the conceptual issues of REDD+ at the international level, the case of Brazil shows that, at a national and subnational level, discourses already materialize in partially conflicting strategies and practices that nonetheless coexist alongside each other.

While it is difficult to judge whether this parallel REDD+ implementation is plausible in the long run, we warn for a possible collapse of the REDD+ identity. This collapse, firstly, will lead to conceptual and organizational polarization of REDD+ stakeholders, which we already observed in the case of Brazil. In this context, the identity of REDD+ will not be represented by its features since these features vary considerably among implementation practices. REDD+ could instead only be characterized by the central objective that inspired the acronym: climate change mitigation by reducing emissions from deforestation and forest degradation. However, attaining this objective may complicate implementation processes as a consequence of a collapsing identity. As REDD+ constitutes a variety of conceptualizations, it will remain unclear who will be responsible for deforestation efforts, who should finance these efforts and who should reap the benefits. Although it has been argued that alignment of stakeholder interests is hardly viable nor completely necessary, the organization of implementation practices

[2] http://www.vcsprojectdatabase.org, http://www.climate-standards.org and http://www.naturalforeststandard.com/projects/project-index-2/ accessed on 30/05/2014.

[3] http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=10654 accessed on 30/05/2014.

[4] http://www.un-documents.net/a25r2626.htm accessed on 30/05/2014.

Table 1
Central features of parallel REDD+ implementation discourses (see Section 4).

	Carbon commodification discourse	Sustainable development discourse
Conceptual dimension	• REDD+ as the production of carbon credits • Emphasis on climate change	• REDD+ as inducer of sustainable development • Emphasis on socioeconomic drivers of deforestation
Strategic dimension	• Carbon market as the most efficient option for achieving emissions reductions • Non-carbon elements generally downplayed	• Government as the best option for inducing development • Strong concern for national sovereignty protection • Consolidation of existing policies
Practical dimension	• Mediation between supply and demand on carbon market • Projects constituted through Project Design Documents • Commodification of emissions reduction as well as carbon sinks	• Selection of projects based on aligned with policy objectives • Regularization of property right system • Monitoring and control • Promotion of sustainable production activities

in a nested approach would certainly benefit both REDD+ in particular, as well as deforestation reduction efforts in general. In this respect, the coherent advocates of the sustainable development discourse would reflect this requirement better than the disconnected advocates of the carbon commodification discourse. While this approach is plausible for the internal development of discourses, however, the substantial differences and the polarization between both discourses so far have prevented the emergence of coordinated efforts.

This article barely touched upon the ramifications of parallel REDD+ discourses and, more importantly, their implementation practices, and is therefore only a preliminary inquiry into Brazilian REDD+ implementation. At the same time, however, it indicates a need for a renewed research focus in order to improve efforts to reduce deforestation and coherent carbon emissions. The heterogeneous character of REDD+ demands an abandonment of a focus on the discursive competition for dominance, and a focus instead on the coexistence of distinct discourses and practices, the dialectical interactions between them, and the problems that may arise in the process. More specifically, research efforts should focus on the potential integration of implementation practices deriving from distinct discourses, rather than on convergence of stakeholder interests. Such an approach could direct attention away from the fruitless attempts to establish a single REDD+ identity towards a more promising coexistence of REDD+ implementation practices at the international, national and subnational levels.

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