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## The legitimacy of certification standards in climate change governance

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### Abstract

This article explores the role of two private steering mechanisms, the Forest Stewardship Council (FSC) and the Climate, Community and Biodiversity Alliance (CCBA) in REDD+, the climate change mitigation policy that aims to avoid deforestation and forest degradation in developing countries. It does so by analyzing input and output legitimacy of the two certification standards at the global level, and at national and local levels in Peru. The findings show an increasing interest among REDD+ actors in using these standards, and a relatively large number of Peruvian REDD+ projects that are certified by the FSC or CCBA. The findings also suggest intrinsic linkages between input and output legitimacy of the FSC and CCBA within single governance levels and across different scales. The article also demonstrates the added value of studying the legitimacy of policy instruments, such as the FSC and CCBA, in a specific context like REDD+.

**Keywords:** CCBA, certification, FSC, governance, legitimacy, partnerships, Peru, REDD+

### 1. Introduction

Many policies and actions at different governance levels have attempted to mitigate climate change. However, the problem is far from being solved, and climate change mitigation and adaptation are still widely discussed in global and national political agendas (Adder *et al.*, 2001; Somorin *et al.*, 2011). The role that forests play in climate change has increasingly become a key issue in these discussions as well as a recurrent subject for scientific research (i.e. Cramer *et al.*, 2004; Kirschbaum, 2003; van de Werf *et al.*, 2009). Forest ecosystems offer various services, including provisioning (i.e. timber and non-timber products), supporting (i.e. soil formation), cultural (i.e. recreational activities), and regulating services (i.e. carbon sequestration) (Meynard *et al.*, 2007; MA, 2005). The fixation of CO<sub>2</sub> constitutes the most relevant type of service for mitigating climate change. Forests act as carbon stocks, and release of CO<sub>2</sub> to the atmosphere occurs when deforestation or forest degradation take place (Palmer and Engel, 2009; van der Werf *et al.*, 2009). In fact, deforestation represents the second largest anthropogenic CO<sub>2</sub> emission source (van der Werf *et al.*, 2009).

REDD+ is a mechanism that emerged in the international political arena as an attempt to avoid deforestation and forest degradation in developing countries, and thereby contribute to the mitigation of climate change (Phelps *et al.*, 2010). Since the issue of avoided deforestation was placed on the agenda of the United Nations Framework Convention on Climate Change (UNFCCC) in 2005 (Pistorius, 2012), the scope of this relatively young mechanism has been expanded in more than one occasion. During the 15<sup>th</sup> Conference of the Parties (COP15) held in Copenhagen, it was acknowledged that REDD+ refers to “reducing emissions from deforestation and forest degradation; and the role of conservation,

sustainable management of forests and enhancement of forest carbon stocks in developing countries” (UNFCCC, 2009:11). REDD+ is meant to create economic incentives for developing countries to preserve and maintain trees standing rather than allow deforestation and forest degradation (Lederer, 2011).

While REDD+ is being negotiated under the UNFCCC, several initiatives are underway to support developing countries in “getting ready” for REDD+, including the Forest Carbon Partnership Facility (FCPF) and the Forest Investment Programme (FIP) of the World Bank (WB), and UN-REDD (Visseren-Hamakers and Verkooijen, 2013). As part of these programmes over 40 countries are designing national REDD+ strategies (UN-REDD, 2012a) and carrying out pilot projects (Phelps *et al.*, 2010). Despite all this activity, much uncertainty remains about how to ensure REDD+ effectiveness, and many contentious issues still have to be resolved (Hajek *et al.*, 2011; Visseren-Hamakers *et al.*, 2012a). One of the major difficult discussions revolves around the possible generation of non-carbon benefits (NCBs) (Visseren-Hamakers *et al.*, 2012c). It has been commonly presumed that REDD+ would generate NCBs such as enhancement of biodiversity conservation and improving local livelihoods (Pistorius *et al.*, 2010). While this can be true for some cases (Busch *et al.*, 2011), it has been pointed out that REDD+ can also be a risk for the environment and local communities (Corbera and Schroeder, 2011; Pistorius *et al.*, 2010). Therefore safeguards have been developed to avoid undesirable consequences caused by REDD+ activities (Pistorius *et al.*, 2010). However, it is still uncertain to what extent REDD+ will indeed enhance or at least sustain NCBs.

The success of REDD+ can be influenced by other, already existing environmental tools and policies. Voluntary certification schemes constitute one type of such tools since they intend to promote the conservation of forests and the improvement of forest management practices, which reduce CO<sub>2</sub> emissions from deforestation and forest degradation (Nasi *et al.*, 2011). In this article, we focus on the role that two voluntary certification schemes, the Forest Stewardship Council (FSC) and the Climate, Community and Biodiversity Alliance (CCBA), can potentially play under REDD+.

The FSC is a non-governmental, not for profit organization (FSC, 2012), in which civil society and market actors collaborate. The FSC first published its Principles and Criteria for sustainable forest management in 1994. Its main goal is the improvement of forest management practices worldwide, paying attention to ecological, social and economic aspects. The FSC certification scheme thus constitutes a private market-based regulation that, through the use of a label, lets consumers know that the wood products they buy originate from well-managed forests (FSC, 2012). The CCBA is an association of non-governmental organizations (NGOs), research institutions and corporations (CCBA, 2012b), which launched its first CCB Standard in 2005 (CCBA, 2005). The CCB Standard identifies and evaluates land-based carbon projects which contribute to the mitigation of climate change and generate other environmental and social benefits (CCBA, 2012a; McDermott, 2013; Melo *et al.*, 2014; Visseren-Hamakers *et al.*, 2011). The goals of the two certification schemes are thus similar to those set by REDD+, since the FSC and REDD+ both aim for sustainable management of forests, and the CCBA and REDD+ both aim to

mitigate climate change. All three policy instruments seek to address social and biodiversity issues. Knowing how the FSC and CCBA voluntary certification schemes might reinforce and complement REDD+ can thus contribute to the success of the latter mechanism, and ultimately to sustainable development.

Here, we argue that REDD+, with its intergovernmental negotiations, readiness initiatives, involvement of different types of actors at all scales, and potential interaction with voluntary certification schemes such as the FSC and CCBA, is an example of global environmental governance. This concept refers to new forms of regulation, different from the traditional state steering, in which new actors are involved that exercise self-regulation to some degree, but where public authority still plays a role (Biermann and Pattberg, 2008). The participation and political power wielded by non-state actors have considerably increased in the last few decades (Pattberg, 2005), and have led to a new political arena where the role of the state is weaker. Although this changing role of the state does not apply to all fields, it has been observed in environmental politics (Arts, 2006; Cashore, 2002), where actors often work together in partnerships – collaborations between state, market and/or civil society actors (Ite, 2007; Morse and McNamara 2009; Visseren-Hamakers *et al.*, 2012b), and increasingly use market instruments to achieve sustainability goals (Shaw and Black 2010; Vermeulen and Seuring 2009; Yadav and Misra 2012). This expanding influence and participation of non-state actors in environmental politics has important consequences, for instance that traditional systems to control power and accountability are becoming less effective or even obsolete (Van Kersbergen and Van Waarden, 2004). Therefore, the question of legitimacy of contemporary forms of governance has become increasingly important.

In this article we explore the role that the FSC and CCBA can play under REDD+ in terms of legitimacy at the global, national and local levels. We focus on Peru, a country whose forests are under serious threat, but which is very active in REDD+. At the global level, we focus on UNFCCC meetings, where the official negotiations on REDD+ take place. In Peru, we focus on the national Mesa REDD and the Mesa REDD in the southern Madre de Dios region, since these are important forums in Peru where REDD+ is discussed and developed (see section 3). The article thus provides insights into a prominent current case of contemporary governance in which an intergovernmental policy intertwines with private initiatives, and with this, contributes to important debates in governance literature on issues of legitimacy. The research was performed in the period December 2011 to June 2012, and included desk research and 18 in-depth phone interviews. Below, we first introduce our analytical framework for studying the concept of legitimacy, after which we briefly provide some background information on REDD+ in Peru in section 3. In section 4 we present the results, and we reflect on and conclude our findings in section 5.

## **2. Analytical framework**

The concept of legitimacy is a central theme in political science and it has been argued that it is essential for the functioning and success of different political mechanisms (i.e. Bodansky, 1999; Cashore, 2002). While there are various conceptualizations of legitimacy

(see e.g. Bernstein, 2011; Bernstein and Cashore, 2007; Koppell, 2008), we will build on the widely recognized and broad definition by Suchman (1995:574), who defines legitimacy as ‘a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions’. This definition takes a position in the middle in the debate between strategic and institutional approaches towards legitimacy, thereby recognizing that legitimacy can be regarded both as an asset that an organization can use, and something that is constructed in an organization’s environment. Suchman (1995) also differentiates between pragmatic, moral and cognitive legitimacy, with pragmatic legitimacy being determined by the target audience’s self-interest, in other words, March and Olsen’s (1998) ‘logic of consequences’ (see Bernstein and Cashore, 2007). Moral legitimacy is about whether the organization does ‘the right thing’, both in terms of process and output (Suchman, 1995:579), and can be compared to March and Olsen’s (1998) ‘logic of appropriateness’. Cognitive legitimacy incorporates both comprehensibility and meaningfulness – whether the organization makes sense to the target audience, and taken-for-granted-ness, in which alternatives to the organization become unthinkable (Suchman, 1995).

There is a vast body of literature focusing specifically on the legitimacy of, often international, private and market-based governance (Auld and Gulbrandsen, 2010; Bernstein and Cashore, 2007; Biermann and Gupta, 2011; Marx, 2013; Partzsch, 2011; Schepers, 2010; Schouten and Glasbergen, 2011), with some authors arguing that legitimacy of private organizations differs significantly from that of governmental ones (Bernstein, 2011; Marx, 2013; Partzsch, 2011). This literature builds on earlier debates on legitimacy in global governance, in which the ‘democratic deficit’ of international organizations, caused, among others, by the lack of elections at the international level, is discussed (Koppell, 2008).

Here, we make use of a two-dimensional definition of legitimacy introduced by Scharpf (1997), differentiating between *output* and *input* legitimacy, an approach that was originally designed to analyze European decision-making processes (Biermann and Gupta, 2011), but has regularly been applied to study the legitimacy of private governance (Partzsch, 2011). On the one hand, *output legitimacy* can be defined as a dimension that ‘revolves around effectiveness or problem solving capacity of the governance system’ (Bäckstrand, 2006a:292). On the other hand, *input legitimacy* has been described as a dimension that focuses on ‘whether the process conforms to procedural demands, such as representation of relevant stakeholders, transparency and accountability’ (Bäckstrand, 2006a:291-292). Both of these dimensions can be considered part of moral legitimacy, as this includes evaluations both in terms of outputs and process (see Suchman, 1995).

Drawing on these definitions, we aim to analyze the legitimacy of the FSC and CCBA in a novel manner. We concentrate on their legitimacy in a specific context, namely in the context of another policy instrument, REDD+. In choosing this approach, we recognize that the legitimacy of a policy instrument may vary in different contexts and among different groups (Bernstein, 2011). We thus aim to explore the role that the FSC and CCBA can potentially play under REDD+ in terms of output and input legitimacy.

For output legitimacy, we focus on effectiveness, and for input legitimacy we concentrate on participation. While interpreting output legitimacy in terms of (perceived) effectiveness, performance or problem-solving capacity is rather common (Bernstein, 2011; Biermann and Gupta, 2011; Suchman, 1995; Partzsch, 2011), the focus on participation for input legitimacy, putting aside other aspects such as accountability and transparency, may require further explanation. We do so because of our contextual interpretation of the legitimacy and the relative youth of the relationships between the FSC and CCBA and REDD+. The relationships between the three policy initiatives are not yet institutionalized, so accountability or transparency rules are not expected. In this early phase, we are especially interested in the extent to which the FSC and CCBA representatives are participating in the REDD+ community. The operationalization of output and input legitimacy, as elaborated below, allows us to differentiate between the extent to which the FSC and CCBA rules (output legitimacy), and representatives (input legitimacy) are playing a role under REDD+.

### 2.1 Output legitimacy

As stated above, we operationalize output legitimacy through the concept of effectiveness. Effectiveness can be understood as ‘institutional performance’ regarding the results, while output legitimacy ‘is concerned with the perception of the results among a broader range of stakeholders’ (Rosendal and Andresen, 2011:1909). Effectiveness has also been operationalized by many authors in terms of output, outcome and impact effectiveness (Underdal, 2002). For instance, Szulecki *et al.* (2011:716-717), define output effectiveness as the ‘actual activities such as issuing regulations, producing reports, conducting research or organization of meetings’; outcome effectiveness as ‘changes in behavior of targeted communities’, and impact effectiveness as ‘the actual improvement in the problem areas in the form of tangible changes in economic, social or environmental parameters’. We follow these definitions, leaving aside impact effectiveness, since in order to measure tangible changes, methods are needed that go beyond the social sciences, and measuring actual effects of REDD+ on the ground is difficult due to its relative youth.

Following these definitions, *output effectiveness* is, in the context of this research, defined as the production of documents (reports, papers, workshops, presentations, etc.), when they are related to REDD+ topics and/or produced by organizations working on REDD+ issues, and where (elements of) the FSC and/or CCBA can be found. Output will refer to the relevance of the content of the documents. In order to assess the relevance, the categories as listed in Table 1 have been defined:

[Place Table 1 here]

In addition, we have operationalized *outcome effectiveness* as potential changes in the behavior of actors related to REDD+ and induced by the FSC and CCBA. The categories as listed in Table 2 have been established:

[Place Table 2 here]

## 2.2 Input legitimacy

As stated above, input legitimacy is operationalized through the concept of participation. Participation is relevant in the context of global environmental governance due to the perceived lack of democracy and legitimacy in governance processes (Nanz and Steffek, 2004), and the argument that enhancing the participation of non-state actors could potentially close this gap (Beisheim and Dingwerth, 2008; Lövbrand *et al.*, 2009; Newig and Fritsch, 2009b). We distinguish between six categories to assess the type and extent of participation of official and unofficial FSC and CCBA actors during REDD+ processes and activities (including debates, decision-making processes and development and implementation of REDD+ pilot projects). Official actors are defined as those who are employed by these organizations, while unofficial actors are those who act on their behalf, i.e. partners of the FSC and CCBA. The categories are listed in Table 3 (based on Schroeder, 2010 and IAP2, 2007):

[Place Table 3 here]

## 3. REDD+ in Peru

As of 2011, Peru had approximately 67 million hectares of forests, making it the country with the second largest forest area in Latin America (Organizacion para Estudios Tropicales, 2011), and an estimation of 8831 million tons of carbon stocked in the living forest biomass (FAO, 2011). Peru constitutes a suitable ground for REDD+ due to the existing deforestation and forest degradation threats, caused by high rates of migration from the Andes to the Amazon and the consequent increase of pressure on the land, a low capacity to control illegal activities, development of infrastructure such as new highways, agricultural expansion and demographic growth (Organizacion para Estudios Tropicales, 2011; White and Minang, 2011).

Peru is active in the FCPF and FIP and is a partner country under UN-REDD (FCPF, 2012; The REED Desk, 2012; UN-REDD, 2012b). In 2008, various national and regional organizations signed an action plan to implement REDD in Peru, named the Tarapoto Declaration (Grupo REDD Peru, 2008; Hajek *et al.*, 2011). Regarding the negotiations surrounding REDD+ at the national level, the so-called ‘Mesa REDD Peru’ is one key forum for discussing REDD+, where mainly NGOs, but also research institutes and governmental actors work together to develop REDD+ at the national level (Grupo REDD Peru, 2012a; Hajek *et al.*, 2011).

During the research period, regional Mesas REDD had been established in six out of the 25 departments in which Peru is geo-politically divided, and there were 35 REDD+ projects, of which 16 were certified by the FSC or CCBA (Piu and Garcia, 2011). We focus our analysis on the department of Madre de Dios, which has the largest number of REDD+

pilot projects of all the departments of Peru (Piu and Garcia, 2011). In the period of our research, Madre de Dios held 10 REDD+ projects within its boundaries and shared four more projects with neighboring regions. Three of the 10 projects located within Madre de Dios department were certified by the CCBA and two both by the FSC and CCBA (Piu and Garcia, 2011); one out of the four shared projects with neighboring regions was certified by the CCBA. The regional Mesa REDD in Madre de Dios was created by the regional government in December 2009, and includes governmental actors and NGOs (Grupo REDD Peru, 2012b).

The manner in which REDD+ is developed and implemented in Peru is subject to strong criticism. Especially organizations of tropical forest based indigenous groups have questioned the moral legitimacy of the global REDD+ program and its implementation in Peru (AIDSESP, 2011). Their main argument is that developed countries caused environmental decline and are imposing solutions for the problems they caused on forest dwellers societies (Gasché and Mendoza, 2011), and that REDD+ measures can undermine indigenous rights over customary held forest territories. This has resulted in a so called Indigenous REDD+ discourse, an important element of which is explicit claims for legally recognized tenure over forest areas subjected to REDD+ programs. A notorious case of ‘carbon cowboys’ operating in Peru has contributed to this critical stance of indigenous groups (de Jong *et al.*, 2013; Visseren-Hamakers *et al.*, 2013).

#### **4. The legitimacy of FSC and CCBA under REDD+**

##### *4.1 Output legitimacy*

At the *global level*, there was general recognition of the potential role of the FSC and CCBA schemes under REDD+ among the interviewed experts and practitioners, and hence, the output effectiveness is medium. The FSC and CCBA are, in general, seen as tools that can generate some environmental and social benefits and contribute to the attainment of some REDD+ objectives (Angelsen *et al.*, 2009; Estrada, 2011; Griscom *et al.*, 2009; Rainforest Alliance, 2012). Regarding outcome effectiveness, there is an absence of behavioral changes in actors related to REDD+ induced by the FSC or CCBA. The interviewees expected changes in REDD+ process and activities induced by the FSC or CCBA to take mainly place at the national and local levels. See table 4 for an overview of the main findings.

For the *national level* the output effectiveness is low, and the outcome effectiveness absent for both the FSC and CCBA. The certification schemes are only mentioned in a few REDD+ related documents (Vela *et al.*, 2011; Llanos and Feather, 2011; Piu and Garcia, 2011), and no behavioral change has been found. As for the global level, the interviews show that experts and practitioners have developed overall positive views towards the potential contribution of these schemes to REDD+, which could provide a basis for enhanced output and outcome effectiveness in the future. However, in spite of these positive opinions, all interviewees agreed that the role of the FSC and CCBA was not being discussed within the Mesa REDD at the national level, since there were more urgent methodological matters that needed to be discussed.



There has been a great proliferation of pilot projects, as listed in different documents and on websites (MINAM, 2012; Piu and Garcia, 2011) that are coined as REDD+ projects. This large number of projects can on the one hand be explained by the continuing expansion of the REDD+ scope to include objectives such as sustainable management of forests. This has allowed the inclusion of projects which are not necessarily focused on reducing carbon emissions. If one would consider the positive opinions collected during the interviews, once Peru's national REDD+ programme is further developed, the current levels of output legitimacy of the FSC and CCBA could be enhanced. For instance, once Peru develops criteria or indicators to identify which projects can actually be classified as REDD+ projects, the FSC and CCBA could be taken into account to identify 'good' REDD+ projects. In fact, the benefits of using these standards to identify 'good' REDD+ projects in the future was mentioned by several interviewees.

For the *local level* the results show that in the documents (iCCBA, 2009; Greenox, 2012; Sheil *et al.*, 2010) there is recognition of the importance of the FSC and CCBA for some REDD+ processes and activities and thus, the output effectiveness is medium. Regarding behavioral changes, we differentiate the results for REDD+ events within the regional Mesa REDD, and the development of pilot projects, because of the different nature and characteristics of these processes. Although experts and practitioners have developed positive opinions towards the potential role of the FSC and CCBA under REDD+, as the information provided by many interviewees shows, there is an absence of behavioral changes among actors participating in the regional Mesa REDD. On the contrary, for REDD+ pilot projects, a shift in the behavior of some actors has taken place. Many REDD+ pilot project developers have recognized the benefits of using FSC and CCBA certification within REDD+ projects. This is reflected not only in the documents (Greenox, 2012) but also in the views of many of the interviewed experts and practitioners. In fact, as some of the interviewees stated, more project developers are showing interest in becoming FSC and CCBA certified, and many REDD+ projects in different stages of development are under assessment by the certification organizations. FSC and CCBA certification schemes are regarded by project executors as tools to speed up the development of REDD+ projects, because matters such as forest inventories and safeguards are already covered. Therefore, the significance of the behavioral changes is high among actors involved in the development of REDD+ projects.

The behavioral changes and general positive attitudes could have a counterpoint, however. Some authors have pointed out that forest certification schemes are often used in areas where forests are not under severe pressure (Pattberg, 2005). If sustainable management practices were already taking place in areas where FSC and CCBA certification is used to faster develop REDD+ projects, a real and significant reduction of carbon emissions might not be attained. This could reduce the potential contribution of REDD+ to the reduction of carbon emissions. With a considerable high number of FSC and CCBA REDD+ projects and the increasing interest of project developers in these certification schemes, Peru constitutes a suitable ground in which these potential risks could materialize.

#### 4.2 Input legitimacy

The results at the *global level* show that during the UNFCCC meetings, the participation of the FSC and CCBA has been indirect and weak. This was found in, among others, the analyzed reports from the UNFCCC negotiations, documents from the side-events, and attendance lists, and was confirmed by some of the interviewed experts and practitioners who attended the meetings. Participation has mainly taken place through presentations, where information about the benefits of using these schemes in the REDD+ context was shared (FSC, 2009a; FSC, 2009b; FSC, 2011).

For the *national and local levels* the results on participation are the same. While there is an absence of participation of the FSC at both levels, the participation of the CCBA is indirect and weak. As for the global level, this was confirmed by both the analyzed documents, and the majority of the experts and practitioners interviewed for these levels, who were involved in the Mesa REDD and other REDD+ related processes. The participation of the CCBA has mainly taken place through one of its official representatives in some of the national and regional Mesa REDD workshops and meetings (CCBA, 2009; Grupo REDD Peru, 2009; MINAM, 2011), where CCBA introduced its standard and offered its expertise for the development of three REDD+ pilot projects.

The differences in the participation of the FSC and CCBA at the national and local levels are remarkable. An underlying reason for this difference could be that the CCBA seems to be more suitable for REDD+ projects, since the CCBA is more focused on climate change mitigation while the FSC primarily promotes sustainable forest management. However, the different official positions of these organizations towards an involvement in activities aimed at the mitigation of climate change probably provide a stronger explanation. In fact, in 2008 the FSC General Assembly decided that it was necessary to explore the positive and negative potential consequences of the engagement of the FSC in climate change related activities. For this matter, the FSC Forest Carbon Working Group (FCWG) was created, which submitted a report to the FSC Board of Directors and the Secretariat. From this report, various new policies referring to carbon were formulated and approved in 2011, some of which highlighted the risks related to rewards for the provision of ecosystem services, including storage and carbon sequestration, and other recognizing the importance of carbon as an environmental value. A strategic framework was also developed with areas in which the FSC could engage, and how it could participate in the specific context of REDD+. Reputational risks related to the association of the FSC to false carbon claims and carbon markets were identified as well (FSC, 2011). The FSC reluctance until 2011 to become involved in climate change and REDD+ related activities has thus probably played an important role regarding the differences in the participation between the FSC and the CCBA. The changed official FSC position towards an engagement in climate change activities, as adopted at the global level, will most likely percolate to the national and local levels, and higher participation levels in REDD+ activities can be expected in the future.

[Place Table 4 here]

## 5. Conclusions and discussion

This article has aimed to explore the (potential) role of the FSC and CCBA certification schemes under REDD+ at three levels of REDD+ governance, applying an output and input legitimacy approach. The main outcomes of the research vary for the different levels of analysis, but overall, the role that the FSC and CCBA can play under REDD+ is a topic that is increasingly being discussed by different REDD+ actors and organizations. These voluntary certification schemes are regarded as being able to contribute to attain REDD+ objectives, acting as tools that can also be useful to avoid REDD+ related problems, including in terms of social and of environmental safeguards, and reinforce some of its positive effects, including non-carbon benefits. These relatively new views have been found in most of the analyzed documents and are supported by the majority of the experts and practitioners within the three levels of analysis. However, it seems that there is still a lack of certainty about the roles of the standards, and a large part of the discussion still takes place in terms of their ‘potential’ role. This is caused by the relative youth of REDD+ policies rather than doubts about the benefits of using the FSC and CCBA. Moreover, there are already a few REDD+ pilot projects in Peru, for example the Madre de Dios Amazon REDD project, which have reported positive experiences on the use of the FSC and CCBA (Greenox, 2012). These early experiences have reinforced the development of positive opinions towards the role of the FSC and CCBA under REDD+. In addition, the fact that the FSC and CCBA are participating, to a different extent, in some REDD+ activities and discussions implies that these organizations are aware of their (potential) contribution to REDD+. Thus while overall, the current input and output legitimacy of both standards in the context of REDD+ is still relatively low (table 4), we expect this legitimacy to significantly increase over time.

Our research contributes to the ongoing debates on legitimacy in several ways. First, the results support the idea that there is a relationship between output and input legitimacy (Bäckstrand, 2006b; Bernstein and Dingwerth, 2008; Lövbrand *et al.*, 2009). The number of REDD+ pilot projects that are certified by the CCBA or FSC can be seen as an indicator of their effectiveness reaching REDD+ related actors. During our research period, there were 14 REDD+ projects certified by the CCBA out of the 16 projects which have any kind of certification, while just five were FSC certified (Piu and Garcia, 2011). The fact that the CCB Standard is used more often than the FSC can be a consequence of the higher level of participation of the CCBA in REDD+ processes and activities. By sharing information and through the learning processes that take place through participation (Bulkeley and Mol, 2003), the CCBA perhaps has been able to raise awareness among a broader range of REDD+ related actors as compared to the FSC. Therefore, our comparison of the FSC and CCBA in terms of their effectiveness and participation within one level of analysis (in this case the local level) supports the idea of a relationship between output and input legitimacy.

Newig and Fristch (2009a) have argued that a relationship between participation, governance effectiveness and multi-level governance most likely exists. We argue that in a multi-level governance context like REDD+, such a relationship can exist, but that the relevance of participation and effectiveness in this relationship can change depending on

the approach adopted. Using a top-down approach, participation seems to play a more important role than effectiveness, and with a bottom-up approach, the role of effectiveness seems to become more relevant. REDD+ is a political mechanism which ‘permeates through multiples spheres of decisions-making and organization’ (Corbera and Schroeder, 2011:90) and therefore, different activities related to REDD+ and carried out by partnerships such as the FSC and CCBA are likely to take place and have consequences for more than one level of governance. This is also related to the fact that many actors do not ‘belong’ to just one level of governance. In fact, many of the interviewees have reported REDD+ experiences on more than one level.

Adopting a top-down approach, the UNFCCC side events in which the FSC and CCBA have participated can be seen as a platform where REDD+ related actors can pick up some ‘take-home messages’ about the benefits of using these standards to, for instance, develop ‘good’ REDD+ projects. In other words, the participation of the FSC and CCBA in the side events has a learning component and the dissemination of information and knowledge can permeate to lower levels of governance. The attendance of Peruvian REDD+ related actors of these events at the global level could thus further enhance the effectiveness and participation of the FSC and CCBA under REDD+ at the national and local levels. In fact, the involvement of the FSC and CCBA in UNFCCC side events also suggests that the members of these organizations are well aware of the importance of participating in these types of platforms to reach other actors and increase their effectiveness at lower governance levels. Following the same line of reasoning, the participation of the CCBA and FSC in national REDD+ processes and activities can help to get the attention of REDD+ related actors which are working at the local level, influencing effectiveness and participation there. Participation also seems to play a more important role in a top-down approach due to the high number and diversity of actors involved in REDD+ processes at higher levels of governance. For instance, at the UNFCCC COP17 in 2011, around 220 side events were organized covering many different topics, including REDD+ (UNFCCC, 2012). Therefore, it can be argued that for the FSC and CCBA it is more likely to reach more REDD+ actors through the participation in events taking place at higher levels of governance, thereby enhancing their effectiveness and participation at lower levels.

On the other hand, adopting a bottom-up perspective, the effectiveness of the FSC and CCBA under REDD+ processes and activities at lower levels of governance can have (positive or negative) consequences for their output and input legitimacy at higher levels. For instance, some REDD+ pilot projects in Peru have reported the benefits of using the FSC or CCBA (Greenox, 2012), and some of these positive experiences have reached the national and global levels. The case of Madre de Dios Amazon REDD Project is a good example, and the experiences and achievements of this project have been documented by various organizations and integrated in reports presented during COP15 (Cenamo *et al.*, 2009; Sheil *et al.*, 2010). In most of these documents the FSC and CCBA are mentioned as positive elements which have contributed to the success achieved by the project so far. This example thus shows how positive experiences regarding the role of the FSC and CCBA in REDD+ projects have ‘permeated’ from the local to the global level and might have consequences for their effectiveness and participation at higher governance levels.

Second, our novel conceptualization of legitimacy, namely the legitimacy of a certain policy instrument in the context of another policy arena, has proven to be very fruitful. While the general legitimacy of the FSC is widely recognized, although forest certification is of course also critiqued (see e.g. Pattberg, 2005), our analysis shows that its legitimacy in the context of REDD+ is less established. Our research thereby supports the recognition by others (Bernstein, 2011) that the legitimacy of a policy instrument may vary in different contexts, and shows the value of studying the legitimacy of policy instruments in different communities and contexts.

Third, the research can also inform the debate on strategic versus institutional legitimacy. As discussed in the above, the FSC has been relatively hesitant in promoting its standard in climate change mitigation related policies such as REDD+. From a strategic legitimacy perspective, the FSC has thus made little effort to enhance its legitimacy in the context of REDD+. Interestingly, this has not inhibited the REDD+ community to more or less embrace the FSC as potentially contributing to REDD+ in a positive manner. Moreover, the output legitimacy of the FSC is comparable to that of the CCBA, which has actively promoted itself as being able to contribute to REDD+ performance. With this, our analysis thus supports the institutional legitimacy perspective, which argues that a field or sector, in our case the REDD+ community, collectively constructs legitimacy, and that legitimacy is less produced through the efforts of the organization itself.

Fourth, our results can be further reflected upon by distinguishing between pragmatic, moral and cognitive legitimacy. While the analysis, by conceptualizing legitimacy in terms of input and output legitimacy, has focused on moral legitimacy, we have also recognized elements of pragmatic and cognitive legitimacy during our research. In terms of pragmatic legitimacy, REDD+ actors see the FSC and CCBA as opportunities to make REDD+ less complex. In other words, they are interested in these certification schemes for their own pragmatic interests. If the standards don't deliver on this promise, their legitimacy in REDD+ governance may be under threat. In terms of cognitive legitimacy, it seems that REDD+ actors find the contributions of the FSC and CCBA natural and logical, especially in addressing NCBs such as improving local livelihoods and biodiversity conservation, although alternatives to addressing these issues through certification are also considered. More research would be needed to better understand the relationships between pragmatic, moral and cognitive legitimacy of the certification standards under REDD+.

Finally, the relevance of our topic is considerably increasing and further research should be carried out in order to assess with more certainty the positive and negatives consequences of the application of FSC and CCBA certification schemes in REDD+ projects and policies. This continued research is vital to more broadly assess the consequences of contemporary governance for sustainable development, in which public policies such as REDD+ increasingly intertwine with private initiatives such as the FSC and CCBA to together impact sustainability.

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Table 1. Output categories

Absence of output	(elements of) FSC and/or CCBA are not found
Low relevance	references to (elements of) FSC and/or CCBA can be identified
Medium relevance	recognition (explicitly or inexplicitly expressed) of the importance of (elements of) the FSC and/or CCBA for REDD+ processes and activities can be found
High relevance	changes in REDD+ processes and activities induced by (elements of) FSC and/or CCBA are (explicitly or inexplicitly) expressed

Table 2. Outcome categories

Absence of behavioral changes	actors do not show behavioral change
Low significance	REDD+ actors express interest to include FSC and/or CCBA actors during debates, and/or use these schemes in REDD+ projects
Medium significance	recognition of potential changes in REDD+ processes and activities induced by FSC and/or CCBA actors and/or their certification schemes are (explicitly or inexplicitly) expressed
High significance	REDD+ actors take action to involve the FSC and/or CCBA actors in REDD+ processes and activities and/or to make use of these schemes in REDD+ projects

Table 3. Participation categories

Absence of participation	actors are not present in any of the processes or activities related to REDD+
Passive participation	actors are informed about certain problems, facts or opportunities related to REDD+
Indirect and weak participation	actors are invited or asked to provide input or feedback about REDD+ issues
Indirect and strong participation	actors are involved in REDD+ processes and activities and their views and concerns are considered
Direct and weak participation	actors act like partners during REDD+ processes and activities
Direct and strong participation	authority is conferred to the considered actors during REDD+ processes and activities

Table 4. Overview output and input legitimacy of the FSC & CCBA under REDD+

Legitimacy	Level of analysis	FSC	CCBA	
Output legitimacy (Effectiveness)	Global	Medium	Medium	
	Output			
	National	Low	Low	
	Local	Medium	Medium	
	Outcome	Global	Absence	Absence
		National	Absence	Absence
Local		Absence <sup>1</sup> /High significance <sup>2</sup>	Absence <sup>1</sup> /High significance <sup>2</sup>	
Input legitimacy (Participation)	Global	Indirect and weak	Indirect and weak	
	National	Absence of participation	Indirect and weak	
	Local	Absence of participation	Indirect and weak	

<sup>1</sup>The regional Madre de Dios Mesa REDD

<sup>2</sup> REDD+ pilot projects in the Madre de Dios region

