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Institutional bricolage in forest governance - local responses to governance institutions

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Abstract

Forest management by small farmers in the Amazon has been facing various institutional changes as a result of a shift from government to forest governance. Although new legislation has been designed to create opportunities for local communities and for forest preservation, the outcome of environmental governance at the local level remains arbitrary or lacking in effectiveness. By means of case studies in communities in the Amazon region of both Bolivia and Ecuador, this study reveals the dynamics of policy implementation at the local level as a result of forest governance. These dynamics illustrate that forest policy, as only one of the many institutional influences on forest management in local communities, often being in conflict with local needs, norms and traditions.

Keywords

Institutional bricolage; forest governance; forest management; Amazon

Introduction

Forest governance in the Amazon regions is not an opaque and well defined concept. It is multileveled and it includes various types of organizations and agents. Furthermore, it exists of mix of different types of institutions: regulations, standards, conventions, norms, and traditions. However, it is regarded as a popular mechanism to enhance the sustainable use of forest resources, increase local development, and improve biodiversity (Leach, Mearns et al. 1999).

Although much research has been done, we still know little about how local people respond to the externally introduced institutions and about the effectiveness of governance institutions (Kaimowitz, Thiele et al. 1996; Kaimowitz, Pacheco et al. 1998; Lemos and Agrawal 2006). What we do know is that local forest users already have a framework of socially embedded institutions. These already existing institutions can be rather opaque or informal and are strong structural influences on forest practices that are not easily replaced by formal government regulations or global norms. As a result, the introduction of governance legislation appears to be subject to local dynamic processes with unpredictable outcomes.

This paper attempts to open the black box of governance influence at the local level by looking at how people respond to externally introduced institutions. It departs from the post-institutional perspective of institutional bricolage as an alternative approach to how institutions that allows us to look beyond the formal aspect of environmental governance.

Forest and forest governance in the Amazon

Since the 1990s, countries in the Amazon region have increasingly adopted their legislation in response to environmental change. In many occasions, these adoptions have also resulted in new environmental governance regimes combining global standards on biodiversity conservation and development with local needs. As already explained

earlier, forest governance has been proposed as a solution to resource degradation as it creates an interdependent world with different responsible stakeholders involved. Furthermore, governance would diminish the environmental conflicts, promote collective ownership, and lead to social justice (Paavola 2007). This has resulted in forest governance regimes in Latin American countries like Bolivia and Ecuador. In these regimes it is believed that, under the right circumstances and by enhancing local participation, feelings of local responsibility towards a sustainable management of forest resources will grow (Kaimowitz, Pacheco et al. 1998; Leach, Mearns et al. 1999; Sampford 2002; Larson and Ribot 2004; Perz, Aramburu et al. 2005; Tacconi 2007).

According to Lemos and Agrawal (2006, p. 298), environmental, on in this case, forest governance can be defined as "interventions aiming at changes in environment related incentives, knowledge, institutions, decision-making, and behaviour". More specifically, political actors use governance to influence environmental actions and outcomes by using a set of intervening regulatory processes, mechanisms, and organizations. These interventions do not solely concern the government but are also linked to markets and civil society (Lemos and Agrawal 2006; Gueneau and Tozzi 2008).

Forest governance can be seen as a multilayered structure connecting the national level with the global and the local. It also implies an increase in actors and organizations as it allows for a greater role for civil society and market. This has certain implications for the institutions part of forest governance. First, the various levels of governance have resulted in a diversity of external institutions coming from different actors, bodies, and organizations. In addition to the regulations, mechanisms, and organizations of the national government, environmental governance is also defined by supranational normative institutions constructed at the global level by decision-making bodies such as the UN, IMF. These norms emerge in national forest policy by setting a standard for the

'right way' of achieving sustainable use of natural resources, fighting resource degradation, or increasing biodiversity conservation (Paavola 2007).

Second, these global norms do not solely materialize in policy. They are also very much present in the ideas and agendas of local NGOs (Benneker 2008). The influence of these local NGOs at the community level is rather important. Often, they are the only organization in communities promoting forest governance or biodiversity conservation. As they are able to be present in remote locations like the Amazon, this can make them even more influential than the government who lacks the resources the do so (Jong 2004).

This diversity in institutions, levels, and organizations has, however, resulted in a fuzzy institutional framework for local forest users (Wiersum 2009). Global, national, and other externally introduced institutions have been intervening in their forest practices because of a shift to forest governance. These fuzzy external institutions can lead to unclarities, loopholes, and room for manoeuvre. This in turn, has resulted in unforeseen and unintended outcomes at the local level of forest governance and a questioning of the continuing faith in these formal institutional frameworks, like environmental governance, as solution to resource degradation (Leach, Mearns et al. 1999; Mehta, Leach et al. 1999; Cleaver 2001).

Although much research has been done, we still know little about how and why local people respond to the externally introduced institutions (Leach, Mearns et al. 1999; Andersson 2003). What we do know is that local forest users already have a framework of socially embedded institutions. These already existing institutions can be rather opaque or informal and are strong structural influences on forest practices and are not easily replaced by formal government regulations or global norms. As a result, the introduction of governance legislation appears to be subject to local dynamic processes with unpredictable outcomes. This paper attempts to open the black box of governance

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The Amazon region of Bolivia and Ecuador

The Amazon regions of both Bolivia and Ecuador are still relatively untouched but are increasingly changed by infrastructural developments and extensive cattle farming (Southgate, Sierra et al. 1991; Rudel and Horowitz 1993; Stoian 2000; Pacheco 2001, 2006). In these regions, the forest still has an important role in the daily lives of the local inhabitants. Forest products such as timber, Brazil nuts (*Bertholletia excelsa*), agroforestry systems, palm fibres, and smalls-scaled agricultural production offer local inhabitants the necessary sources of income. In general, however, these sources of income are not very substantial and the region can therefore be characterised as poor, which further increases the dependency of local communities on forest resources. The forest, however, also has an important socio-cultural role. Forest is not only an economical resource but is also an important factor in the cultures of many local communities in the Amazon, especially those of indigenous communities.

The Northern Bolivian Amazon comprises of the Beni and Pando provinces and is characterised by large areas of forested land, divided into segments by rivers. The agricultural production systems, and especially those of the large landowners with extensive cattle management systems, have created a diverse landscape with forest and large pastures (Stoian 2000; Pacheco 2001, 2006). The Northern Bolivian Amazon is an area with a specific history characterised by the former extraction of rubber and current collection of Brazil nuts. These two products intensified the migration to the north and opened up completely unexplored territory (Fifer 1970; Stoian 2000; Assies 2002). After

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the collapse of the rubber market in 1970, Brazil nut collection became the main forest product. Brazil nut is now the most important export product of the Bolivian Amazon followed by timber (CFB 2000; Stoian 2000). More recently, local NGOs in the Northern Bolivian Amazon are initiating agroforestry projects with fruit trees, cacao, or other products.

The South-Eastern Ecuadorian Amazon is characterised by great variety in geographical conditions starting at around 1,200 metres above sea level and ending in the lowland Amazon basin. The history of the South-Eastern Ecuadorian Amazon is highly influenced by processes of colonisation initiated by the Ecuadorian government. Before the colonisation, indigenous tribes inhabited the Amazon. However, in the period from 1960 to 1970, the Ecuadorian government strenuously stimulated the migration of poor highland cattle farmers to the Amazon region (Rudel and Horowitz 1993; Bilsborrow, Barbieri et al. 2004; Mena, Bilsborrow et al. 2006). The colonisation period had two important consequences. First, it led to conflicts between the migrant farmers and the Shuar. These conflicts marked the beginning of a troubled relationship between the two groups that still exists today (Rudel 1989; Rudel, Bates et al. 2002; Kautz 2004). Second, the colonisation has had a direct effect on the landscape as it increased deforestation rates in Ecuador as a direct effect of land registration and cattle farming (Pichón 1992; Cleuren 2001; Perz, Aramburu et al. 2005; Ibarra, Romero et al. 2008).

The forest regimes in the Bolivian and Ecuadorian Amazon changed to forest governance in respectively 1996 and 2004 (Ibarra, Romero et al. 2008; Martínez 2008). Bolivia embraced a more collective approach towards forest management by designing a regulative framework focussing on community forest management (Martínez 2008). Bolivia later also included the possibility for collective Brazil nut management. Ecuador implemented regulations that aimed at simple and more individual forest management

plans. They both, however, promote the sustainable management of forest resources by creating market oriented regulations.

Forest governance in Bolivia and Ecuador did not only lead to new regulations. The changes in the forest regimes also resulted in a change in the role of NGOs. In the new governance system and in particular in remote areas, the role of NGOs grew in importance. At the local level, NGOs frequently took over the role of state in regards with the promotion and implementation of the new forest regulations. This did not only result in NGOs becoming more important for local communities that the government, but it also resulted in the recombination of national regulations with the agenda of NGOs (Benneker 2008). The agenda of NGOs is in general very idealistic and often based on the global principles on sustainability, participation, human rights, and democracy mentioned above. As a result, the implementation of forest regulations at the local level frequently also implied the implementation of NGO ideals, standards, or norms.

In general, forest governance in the Bolivian and Ecuadorian Amazon led to the introduction of local communities to a multitude of new institutions and actors at different levels. Global standards and ideals influenced national government and local organizations. National government allowed more space for market mechanisms and NGOs to move into the 'arena' of forest legislation. Local NGOs were capable of recombining national regulations, global norms and own agendas and applied this 'institutional mix' in the field. Overall, the forest governance led to a fuzzy, dynamic formal institutional framework for forest management.

Institutional bricolage

In order to analyze the responses of local actors to forest governance and explore the dynamic actor-institution interface, this paper draws on the theory of institutional

bricolage as introduced in studies on natural resource management as first introduced by Cleaver (Cleaver 2001). Institutional bricolage is a process in which actors consciously and unconsciously reshape disparate institutional elements. In this process, both newly introduced and already existing institutional components from different origins are continuously re-used, reworked, or refashioned to perform new functions (Galvan 1997; Lanzara 1999; Cleaver 2001; Sehring 2009). As time evolves, institutions change in response to the external environment and internal views (Shepsle and Bonchek 1997; Cleaver 2001).

Institutional bricolage reacts against other institutional theories in natural resource management focussing on designing institutions for sustainable management of natural resources. This view of institutional crafting is much too static and rational and does not represent the local reality (Cleaver 2000, 2001). Institutional bricolage departs from a post institutional perspectives that acknowledges the rather messy interaction in which rules can be bended, meaning 'leaks' as it flows through different contexts (Douglas 1987) and actors have room for manoeuvre for institutional reshaping (Arce and Long 2000; Cleaver 2001; Cleaver and Franks 2005).

As is clear from the above, the role of local actors – or bricoleurs - in processes of institutional bricolage is important. They can be seen as institutional engineers that make do with what is at hand. However, the term engineers would suggest a rational and conscious bricoleur who is always aware of his actions. This is not true as bricolage is as much an intentional as inevitable process (Freeman 2007). Actors are not always aware of their institutional reshaping and processes of institutional bricolage can thus be both rational and unconscious.

Institutional bricolage, although a continuous process, is mostly visible when different bureaucratic institutions are introduced to local communities. Bureaucratic institutions are formal and often externally introduced institutions and 'enter' an arena of already

existing socially embedded institutions. This introduction of institutions ignites a response among local smallholders resulting in processes of institutional bricolage. In general, three different types of responses, or processes of institutional bricolage, can be distinguished: aggregation, alteration, and articulation.

Methods

The theory of institutional bricolage assumes that these externally introduced institutional frameworks described above are reshaped at the local level. People respond to them by borrowing and constructing certain elements of these institutional frameworks and their traditional, socially embedded ones. This next section describes these local processes of institutional bricolage by looking at three different communities in the Bolivian Amazon and three in the Ecuadorian Amazon[1].

The selection of the cases was based on selection criteria drawn up by the ForLive project. Three themes were addressed: local perceptions on bureaucratic and socially embedded interviews, forest practices of smallholders and their relation to the different institutions, and local responses to different kind of institutions. Data assembled in the six cases were collected by means of open ended, semi structured interviews, participant observation, questionnaires and group exercises and discussions.

The selected cases in the Bolivian Amazon all consist of peasant smallholders. These smallholders originate from different areas in the lowlands of Bolivia and came to the Amazon as a result of the rubber boom. They have lived for generations in the Amazon and are dependent on forest resource extraction mostly consisting of Brazil nut, timber and agroforestry.

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[1] The selection of cases has been part of a wider project called ForLive, Forest management by smallholders in the Amazon, an opportunity to enhance forest ecosystem stability and rural livelihoods, www.waldbau.uni-freiburg.de/forlive/

The selected cases in the Ecuadorian Amazon include indigenous and migrant smallholders. The indigenous smallholders are the original inhabitants of this area while the migrant farmers only relatively recently arrived in the Amazon due to government stimulation in the 1980s. Indigenous communities are very forest dependent, economically as well as socially and culturally. The forest is part of their identity. The migrant farmers are more oriented towards cattle farming and see the forest more as an economical resource.

Aggregation: recombining institutions

The process of aggregation implies a certain level of adopting or embedding newly introduced institutions. It is the recombination of local institutions, expectancies, needs, and wants with external governance institutions. These governance institutions can be many things such as the government regulations on forest use or global norms on aspects such as sustainability and biodiversity, or local NGO standards on farmers' rights, and collective action. Aggregation processes are ignited by different motivations. It can be economically driven, very strategic, or to strengthen identity.

Aggregation as a result of economical or surviving strategies is a more gradual process of piecing together different institutional elements. In most of the researched cases, communities were very willing to accept for example NGO norms on collective action as it would raise expectations of income generation. Often, NGOs would promote a certain production system such as agroforestry which is combined with their norms and ideals about the appropriate way to manage it. Collective action was for example in Bolivia an important way to manage and organize timber extraction, Brazil nut collection, or agroforestry. By 'selling' this collective action aspect as the right way to an increased income, farmers were often rather willing to recombine them with their own ideals and goals about a preferable life.

Aggregation processes can also serve a strategic goal of the community. In this way, the community uses the externally introduced institutions to achieve a personal goal. In one of the cases in Bolivia, aggregation was related to claims on land. This community was following the regulations by established a formal forest management plan. They had founded a local association to organize the collective management of a forested area and met almost all the requirements but one: formal land titles. The community lacked formal land titles and the intention of the association and the forest management plan was to make a firmer claim on the land they regarded theirs.

Processes of aggregation linked to identity strengthening were observed as well. In one of the Ecuadorian cases, the relationship between migrant farmers and indigenous communities was characterised by a history of conflict and distrust. From the colonization era in Ecuador and onwards, farmers from the highland have been entering the Amazon and the traditional territories of the indigenous communities. This has generally led to a problematic relationship between the two groups. In this case, the relationship was rather poor as well and characterised by many accusations. The migrant farmer took every good opportunity to distinguish themselves from the surrounding indigenous communities. Consequently, the foundation of a producer's organization for the collection of palm fibre in one of the migrant cases was regarded as not only an economical opportunity. Rather it was a chance to distinguish themselves from and consider themselves better than their indigenous neighbours.

Alteration: reshaping institutions

The process of alteration implies the adaptation of institutional elements. One feature of processes of alteration of government regulations is the bending of rules: the selective changing of regulations in order to make them better fit individual purposes. Examples

of rule bending can vary from 'little tweaking' to completely reinterpreting the existence of certain rules.

Observed tweaking or rule bending of governance institutions appeared to be an almost automatic response. For example, forest management plans require formal land titles. However, in one of the Bolivian cases the forest management plan served as a tool to get the formal land titles. This community went about it in the other way: by drafting a forest management plan they were able to make a much firmer claim on the land. The alteration of institutions could also lead to the negation of it. For example, cattle farmers in the Ecuadorian communities did not regard their timber extraction without a forest management plan as illegal. They perceived their timber extraction as an agricultural practice: to create pastures for cattle. Furthermore, they were convinced that a forest management plan was not applicable to their, in their eyes, small amount of extraction.

Alteration of institutions does not only occur with externally introduced institutions mentioned above. Embedded local institutions may just as well be part of processes of alteration. In some instances, it was possible to see that, in spite of non-compliance with forest regulations; some governance institutions did have an effect on forest practices. Local NGOs seem to play an important role in this. For example, various researched farmers appeared to be more aware of global issues such as sustainability and biodiversity because of interaction with NGOs. This even led to changes in their community norms and forest practices, especially when these farmers collaborated intensely with local NGOs. In these instances, global norms on forest governance did affect local practices.

However, the alteration of socially embedded institutions was also initiated by other factors. In these instances, forest governance institutions appeared to be less influential. Nearby cities, markets, or relationships with external actors also proved to be a drive behind the alteration of local institutions. These processes led to communities

becoming more obsessed with having a city lifestyle and less focussed on sustainable forest management.

Articulation: rejecting institutions

The final observed processes of institutional bricolage mentioned here are articulation processes. These imply - mostly discursive - claims made by local actors on what is considered their traditional beliefs, culture, and identity. Articulation leads to the rejection of externally introduced governance institutions. Articulation is not as much visible in the actual practices as it is in discursive practices. Furthermore, the strength of the claims made on identity varies: it can be rather 'mild' or 'strong'.

One of the examples of mild articulation comes from a Bolivian case in which a Brazil nut management plan was promoted by a local NGO. Brazil nut management plans are implemented by the government in Bolivia for several years. However, they have not yet led to many Brazil nut management plans in the Northern Bolivian Amazon (Pacheco, Barry et al. 2008). There are multiple reasons for his such as lack of resources of state for monitoring, control, and facilitation, problems with determining land titles for these huge forest areas, the history of the area with Brazil nut, and more. However; according to the local farmers, an important reason for not implementing management plans for Brazil nut has to do with the traditional identity of the peasants. Their history is intertwined with resource extraction in general and Brazil nut collection in particular. Throughout time, they have had access to this important source of income. Peasants regard access to it as unquestionable and nonnegotiable. Therefore, the Brazil nut plans, which were only lightly promoted anyway because of the logistical problems described above, were not seriously considered by local farmers. The articulation by the farmers was thus made on their traditional identity as Brazil nut collectors. It was only mild articulation as the management plans were not very widely promoted and monitored.

Stronger articulation, in the researched cases, happened when cases where the issue of forest regulations was much more forced. For example, articulation happened in one indigenous community because they experienced avid promotion of the forest law by government officials and NGOs. The result of it was that this community felt its identity was 'threatened' by the forest regulations. Throughout time, this indigenous community regarded itself as independent, proud forest users who had always rejected to government interference. Now they felt like they were trapped and they needed to rebel against the government. Consequently, they collectively rejected the forest regulations. Their socio-cultural identity and their traditions were too much in conflict with the introduced governance institutions. This clash between local identity and global governance was observed in other cases as well.

Institutions reshaped

The above processes of institutional bricolage paint a picture of dynamics, reshaping, renegotiating of relative newly introduced bureaucratic institutions that is a result of a shift from government to governance. Not only were new forest regulations designed for local forest users, the shift from government to governance also brought along the introduction of standards and norms such as conservation, biodiversity, sustainability to local communities. In the researched cases, this introduction was mostly done by local NGOs. Moreover, the introduction of the government regulations was, in the researched cases, also often done by NGOs. Therefore, it appears that NGOs in these rather isolated areas are very important organizations in forest governance. They not only operate as "promoters" of national forest laws but also bring with them more global concerns on the Amazon.

The observed processes of institutional bricolage, however, reveal that responses to forest governance are diverse and lead to perhaps unexpected outcomes. Institutional

bricolage is a continuous process, however, is mostly visible when new bureaucratic institutions are introduced to an already existing socially embedded institutions framework. The process itself can be described as throwing a rock in a pond. As it enters the water, it creates a ripple on the surface that widens out and becomes smaller. The rock, in this case, is the bureaucratic institution that has been 'thrown in a pool' of socially embedded institutions. However, the difference between the normal consequence of throwing a rock in a pond and this situation is that, in processes of institutional bricolage, neither the rock nor the water shares the characteristics of normal rocks and water. For example, the rock does not necessarily sink in the water and is not always as solid as it would appear. Depending on the outcome of the process, the rock may remain solid and unchangeable, it may spread out over the surface as if it was made of oil, or it may dissolve in the water as if it was a lump of sugar.

There are at least three possible outcomes of this rock-like item being thrown in the water that have been identified in this research. It could bounce off the water, as if thrown on ice. In this case, the rock does not enter the water and is forced to go in another direction. If the ice is soft, the rock leaves a mark or a dent on the ice and remains on the ice while transforming into a film like oil. The final process is the process in which the rock enters the water normally and then dissolves in the water like sugar. In other words, there are at least three consequences or outcomes of the different processes of bricolage. Each of these outcomes relates to one of the three processes: aggregation, alteration, and articulation.

Bricolage is said to be an intentional but also an inevitable process (Cleaver 2001; Freeman 2007). This is reflected in the more conscious and sometimes even strategic processes of bricolage found in the cases and the more gradual and unconscious processes. There are many reasons for bricolage; they vary from expedience and avoiding negative consequences, to appropriate behaviour and certain expected ways to act, to

identity and traditional practices. Whatever the reason, it is always ignited by responses to newly introduced institutions.

Conclusions

Forest governance in Bolivia and Ecuador has been the result of a global concern on how to increase biodiversity and make the use of natural resources more sustainable. For this purpose institutions were designed at the national level, such as the forest law, entailing rules, regulations, standards, and norms on how to best manage the forest. As such, the optimum mechanisms were designed to ensure a more sustainable use of forest resources by local communities.

This research questions the effectiveness of these forest governance institutions. It argues that the shift from forest government to forest governance did not lead to a more transparent and clear way of managing the natural resources. Moreover, the institutional framework of forest governance can be regarded as fuzzy, stretching over a multiplicity of levels, and existing of a multiplicity of institutions and organizations. Furthermore, forest governance institutions are not the only structurizing influence on local forest practices. Forest practices are structured by local institutions as well. Instead of assuming that these locally embedded institutions are replaced by the bureaucratic governance institutions, this research reveals that a much greater dynamic is taking place of local institutional bricolage.

This study focuses on the local processes of institutional bricolage as responses of local farmers to forest governance institutions. It specifically looked at institutional bricolage related to institutions of the government and local NGOs in six communities in the Bolivian and Ecuadorian Amazon. These processes of institutional bricolage resulted in a variety of outcomes and consequences for governance of forest resources. The reconstruction of forest governance institutions at the local level appears to be very

unpredictable. The role of the state in these processes seems to be rather limited while local NGOs appear to have a much greater influence on local forest practices. As a result, it is possible to conclude that the local communities in the researched cases appeared to be more receptive towards 'softer' norms appealing to morality and commitment than 'strict' regulations based on sanctions. Furthermore, environmental governance is but one of many influences on forest practices. Other non-forest or non-environmental institutions have had great impact on the identified processes of institutional bricolage and whether a local farmer complies with forest regulation or not.

The theory of institutional bricolage criticizes the concepts of institutional crafting that has long dominated schools of thought in natural resource management. Institutional bricolage portrays a different image, it is an image of what has been called the 'science of the concrete' (Freeman 2007). Instead of governance processes and concepts, the bricoleur prefer to be led by materials, tools available, and signs. A bricoleur does not question the universe but his tools. And finally, events are not created through structure but structure is created through events. This post-institutionalist perspective sheds a new light on institutional influences, the effectiveness of formal institutions, and the faith placed in robust transparent designed institutions. It makes a plea for a different approach uses insights from anthropology and sociology and that focuses on the reshaping and reconstruction of governance at the local level.

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