

**Decentralization and community forestry:  
Main approaches and their implications in the Lowlands of Bolivia**

By Pablo Pacheco and Diego Pacheco<sup>(\*)</sup>

**SUMMARY**

This paper reviews different contemporary paradigms of forest governance ranging from those arguing to maintain central command and others favoring the emergence of local autonomies. In between of these extremes fall some positions such as the one prone to building a more democratic decentralization, and the other favoring a polycentric system of governance. This paper argues that the different positions may claim that their assumptions are being supported by the Bolivian experience, country in which the most significant experience of decentralization is underway. Consequently, this paper proposes an intermediate solution by which public system of government, and other forms of local government should be articulated, and functions distributed according to population choices. This may lead to move forward the process of decentralization, though favoring more flexible and adaptive institutional solutions across different levels of government.

**1. Introduction**

This paper fits within the decentralization, governance, and institutional reform debate that has captured large attention in the last time. It seeks to contribute to the discussion about the influence that institutional reforms, as a result of decentralization, forestry regulations change, and recognition of property rights to local forest users have had on shaping the distribution of powers, which influence in the management of forest resources, and its outcomes on local people's livelihoods. This effort goes beyond the current understanding of decentralization as only a set of forestry regulations regarding forestry management (Andersson 2002a), or a merely distribution of responsibilities regarding forest resources among different levels of public government (Larson 2003). It instead understands decentralization in forestry as a broader process of powers

---

\* Pablo Pacheco is a Ph.D. candidate (ABD) in the School of Geography at Clark University, Worcester, MA (p.pacheco@cgiar.org). Diego Pacheco is a Ph.D. candidate in the Joint Program of Public Policy at Indiana University, Bloomington, IN (dipachec@indiana.edu).

negotiation with implications on rights, regulations, and services around forest resources use.

No explicit linkages have been made between in the literature of decentralization in forest management and property rights. The literature in decentralization is primarily devoted to understanding the performance of municipal governments in forest management and forest resources governance, and to capture the factors that lead to diverse results of local governments intervention in the forestry sector (Ferroukhi 2003b, Larson 2003). This perspective is exclusively concerned with the functioning of public systems in forest resources management, and ignores the literature about property rights and institutions looking at the implications of collective property rights enforcement. Hence, common property institutions are often ignored when evaluating forestry governance even though it is recognized that forest user groups play a central role in crafting and enforcing forest management rules (Becker and Leon 1999, Gibson et al. 2000).

Literature on the property rights regarding forest resources is concerned with identifying the types of tenure security leading to better forest conditions, finding that tenure type is not as important as tenure security (Gibson et al. 1998, Tucker 1999). This is in tune with the statement that well-defined boundaries make easier the management of common pool resource and are able to sustain collective action (Ascher 1995, Baland and Platteau 1996, Dietz et al. 2003, Gibson et al. 2003, Ostrom 1999b). However, others argue that type of tenure is related to a better forest management since common property regimes are more suitable for sustainable forest use because reduce risk and externalities (Arnold 1998, McKean 2000, Ostrom 2000, Ostrom 1995).

When integrating the concepts of forest governance and property rights it is assumed that the recognition of a common-property regime is by itself a form of decentralization of natural resource management (Agrawal and Ostrom 2001), occurring within a broader scope of decentralization of forest management. Understanding decentralization as the transference of authority at lower levels is important to capture

such a greater scope (Ribot 2002). The powers decentralized are usually political; this is at the core of the political or democratic decentralization, which is the capacity of local actors to elect their local authorities by themselves, but also the authority to decide over natural resources and to collect taxes. In addition, the transference of some resources into the lower levels of a political-administrative hierarchy is an objective of decentralization, such as financial and physical.

Recognition of property rights is not *strictu sensu* part of a political-administrative decentralization but granting land tenure rights to local communities may constitute one of the key features of natural resources decentralization. Decentralization, in a broader sense, led to a process in which competing powers and resources are transferred to different actors at the lower levels of public government, and involving other non-public forms of government -traditional or customary forms of government of local groups-.

It has been suggested that decentralization, to be successful in achieving sustainable forest management, should pay more attention to the recognition of specific forest rights, particularly greater rights and autonomy for rules design, management and enforcement. Empirical research suggests that better forest conservation can be found in places where property rights has been transferred to local populations, at least as proprietors, encompassing a bundle of rights for access, withdrawal, management, and exclusion (Agrawal 2001, Ostrom 2003). From a somewhat technical perspective, it is also suggested that some enabling conditions need to be in place to stimulate local communities to undertake initiatives of forest management, and more flexible forest regulations are required to overcome legal barriers. This perspective claims for more room for local forest users to participate in the definition of norms of forest management, as well as in control and monitoring. Therefore, forestry regulations, political decentralization, and property rights play each a role in this process.

In Bolivia there is an ongoing process of decentralization, which started in the provision of social services, and involved gradually forest resources management, being

considered as one of the most aggressive efforts in the region to decentralize forest management (Ferroukhi 2003b). Different steps were taken towards building a democratic decentralization of public administration, and specifically forest management, namely: transferring some decisions about forest resources use to municipalities, improving mechanisms for enlarging social accountability of mayors, and democratizing the access to public forest resources by recognizing local forest users forestry rights. In essence this has been a top-down decentralization model in which most of the decisions were taken at the central level and implemented downward, and the municipalities' reaction to the new scenario has varied considerably across places (Pacheco 2004a).

In the opposite direction, different social processes underwent in the Bolivian society in the last two decades were aimed at expanding the voice of discriminated sectors in local politics, as a way to enhance their livelihoods. Particularly active have been some groups of forest dependent people such as indigenous people, and small-scale timber producers, leading movements seeking to enhance their rights to forested land, and hence forest resources. These groups were to some extent limiting the implementation of land policies and forest management regulations looking for the normalization of nature-society interactions with strong neo-liberal orientation (Assies 1999). On the political side, some of the rural movements' demands are grounded heavily on claims for autonomy on decision-making around diverse issues of local resources management (Bruce 1999).

The evidences about the implications of decentralization in forest management, and local forest users are quite contradictory because similar policy shifts may produce ambiguous results. This has contributed to the design of several perspectives about the way in which decentralization should be pursued, and how the power should be distributed across the different levels of government and within society. Furthermore, the contradictory outcomes of decentralization stimulate enlarging the differences of understanding that exist regarding its likely implications on forest dwellers and other rural people's livelihoods, and forest conservation. The ambiguity of outcomes attributed to decentralization has to do to the fact that it is not implemented in a vacuum, and there

are some other several factors that affect the way it operates in practice, such as the local political economies, and local power relationships, as well as issues of political representation and democracy. Some comparative assessments have been undertaken to understand whether some common trends exist across regions, and within countries, for instance Ribot (2001) for Africa, and Ferroukhi (2003b) for Latin America.

This paper explores some of the most relevant perspectives about decentralization in forestry, and discusses their shortcomings and strengths based on the Bolivian case. It seeks to move forward the debate about institutional reform from the dichotomy between centralized versus decentralized systems of government. Indeed, to build effective solutions for poverty alleviation and forest conservation, it is needed to develop a more complex administrative systems that define institutional arrangements, and produce incentive structures appropriate to deal effectively with such tasks (Wunch 1999). This paper will suggest that for the success of interventions supporting community forestry an array of actions at varied scales have to be promoted, from those supporting distributive policies (i.e., facilitating access to land or forestry rights, or financial assets) to the provision and production of services in the local arena (i.e., improving road infrastructure, disseminating techniques for sustainable timber and non-timber products harvesting, monitoring market trends, and building smart informational networks), as well as enhancing local social learning along with capabilities for autonomous decision making.

This paper defines forest decentralization broadly. It assumes that deepening administrative decentralization of public services provision regarding forest management, strengthening new modalities of participation at the local level, and recognizing formal forestry rights for local forest users may benefit community forestry. Hence, it does not look exclusively at the implications of the role of municipalities on forest management but to the interplay between decentralization, social participation, and property rights on rural people's capabilities to support their livelihoods from forest resources use.

This paper draws in several case studies undertaken in 10 municipalities of the lowlands Bolivia in which the dynamics of decentralization in forestry have been assessed during several visits by the principal author carried out in 1997, 2000, and 2001. Additional understanding has been obtained from diverse conversations with mayors, functionaries of public agencies, national experts, and other people working in Bolivian forestry projects, and NGOs. The authors also have benefited from the debate on decentralization in forest management undertake in the Bellagio workshop sponsored by WRI, February 2002, and from a workshop on decentralization in forestry sponsored by the Swiss and Indonesian governments in Interlaken, April 2004.

## **2. Neither the top nor the bottom: is there a dividing line?**

The debate about the implications of decentralization for forest and people drawing resources from such forests has stimulated an increasing debate. There is a pragmatic sense that decentralization even not a panacea constitute an inevitable way to follow, as result of somewhat irreversible collateral processes underwent globally towards shrinking state institutional infrastructures, and bringing policy-making closer to people. Decentralization, in this sense, can meet differential political criteria such as those pushing liberalizing reforms and those claiming for self-governing at the local levels. In this light, issues that have captured larger attention in the decentralization debate are what powers should be transferred, and whom these powers should be granted to. Hence, the main focus is the engineering of decentralization rather than the dynamics of powers negotiation among actors. This section looks at some of the positions arising from the debate, their assumptions and implications for community forestry.

These perspectives are mainly four: 1) The mainstream regarding forest governance lies in the leviathan presumption –using a Hobbes’s term- proposing that only an external force can avoid the tragedy of the commons, and central governments should spend their efforts to control and monitor forest resources management; 2) a more recent perspective favors democratic decentralization as the proper alternative for managing natural resources system, a view that relies in the notion that legitimate representation is

possible to be built in democratic systems, as well as proper accountable mechanisms; 3) other view increasingly support local autonomies as the most favorable alternative to govern forests, very much drawing in the concept of self-governance and self-determination; and 4) a last one which somewhat embraces the last three favoring polycentric institutional systems.

### *Shrinking central control while keeping the command*

This position argues in favor of maintaining key decisions at the central level of the government. The state in this perspective (Ostrom 1986) should, even in a context of transference of responsibilities and authority to lower levels, to keep the command over critical issues which contribute to define the economic and political “order” in the tropical frontiers. Many forestry services still maintain this notion. The instruments ordering the frontier dynamics are related to factors such as property rights allocation, taxation issues, regulations on good practices, and mechanisms to ensure stakeholders’ compliance with such regulations. A key element in this position is that all the instruments mentioned before should remain under the command of the central state, otherwise it would entail to hindering its ability to influence on forest resources use.

This position’s main assumptions are the following:

- Full property rights to forest users should not be granted because that may jeopardize forest resources conservation in the long run.
- The tragedy of the commons apply in most cases, and there is no way to avoid it rather than with strong compliance of regulations devised at the upper level.
- Forestry management to be sustainable has to follow some rigid regulations whose compliance to be effective has to be enforced through command and control.
- Little power should be granted to lower levels of government –such as municipal governments-, because they lack of technical capacities and expertise.
- Local governments often suffer from political interference on technical decisions, which tend to contribute to expanding corruption and favoring political patronage.

The implications of this position are several. Although it assumes the lack of technical capacities at the lower levels, it contributes to maintain such capacities weak. While central command might tend to contribute to a more effective enforcement, it often becomes too much costly and it is often undermined by corruption because its lack of transparency, and frequently leads to little effectiveness of command and control tools. Furthermore, this approach does not promote involvement of stakeholders in monitoring and enforcement, and there is little incentive for them to become active players in the process of decision making around macro level policies for forest resources management. Finally, the most problematic issue is that it assumes that homogeneous policy solutions may work for a diversity of actors, and for disparate local situations.

#### *Democratic decentralization with local governance*

This approach favors strengthening local municipalities as key players of natural resources management, and involving local users groups in key decisions affecting their ability to make use of such resources, and to benefit from them. Nevertheless, in order for this approach to achieve successful outcomes it considers that significant and meaningful decisions have to be transferred to local governments. Yet, local governments granted with powers over forest resources management should constitute elected bodies in order to guarantee that exist both accountability and responsiveness of such governments to their local constituents (Ribot 2001). While democracy and social participation resides at the core of this perspective, this view emphasizes largely the role of municipal governments as protagonist of local forest management, and little effort has been made to look at lower levels beyond municipalities (Ferroukhi 2003a, Larson 2002).

This approach's holds the following assumptions:

- The tragedy of the commons could apply but it can be avoided with the involvement of local governments in ordering and regulating the social use of resources.
- Municipalities can significantly contribute to the enforcement of forestry regulations because they are closer to people and understand better the local social needs.



- There are technical capabilities at the local level, which need to be supported in order to enhance the technical knowledge within the local governments.
- The political interference influence on local governments decision making it is likely to be avoided by building better accountability and local democracy.

This approach favors building democracy and accountability at the local level, contributing both to improve social participation, which as has been documented has positive implications on enhancing forest users' livelihoods. No definitive evidences exist, therefore, about the influence of social participation in forest conservation. Nevertheless, more power in local governments hands can have contradictory effects. Larger local democracy may led to pro-poor interventions at the local level, which might in some cases be harmful for forest resources use, but in others can enhance sustainable practices. In contrast, in a local context in which local elites dominate, granting powers to local government may result in enlarging the benefits of such elites from forest resources uses in no sustainable ways. This approach assumes that central state, and foreign actors are key players in supporting a process of local capacities building (Kaimowitz *et al.* 2000). Its main weaknesses, however, is that there are no devised ways for building counterbalancing powers to that which are hold by central, and local governments.

#### *Local political autonomies and radical self-governance*

This is the position favoring that most power should go to the bottom, beyond municipalities, empowering directly forest user groups. This view is cited in public policy texts as only self-governance (Bickers and Williams 2001). This perspective is more clearly visible in the context of the emergence of indigenous rights movements, and to a large extent is being developed by looking at grass-roots demands of political autonomy. Therefore, it arises mostly in the political arena derived in part from the stream that favors radical democracies. Agrawal and Gibson (1999) analyses the recent greater interest in the use of the term community for conservation of natural resources, mentioning that the claims of the stewardship role of native populations in relation to

nature are highlighted as an alternative institutional arrangement to the state and private management of resources.

The main assumptions of this approach are as follows:

- The tragedy of the commons does not apply in all circumstances because compliance of local rules and regulations contributes to manage natural resources.
- It appeals to local knowledge in which local communities practices are rooted which helps to establish no detrimental local practices of forest resources use.
- The interference of central decisions may contribute to distort local decisions, and to favor interests that are not negotiated locally.
- Assumes that there are in place capabilities of self-governance, which contribute to an effective monitoring of forest resources use, and sanctions enforcement.

This approach academically does not have a clear exponent but clearly is different from the perspectives highlighted before. Self-governance favors little room for linking governance across scales since its focus on the smaller organizational structures where there is no room for other actors. The role for devising the rules for governing natural resources should be crafted entirely by forest user groups. In this order, there is little space for external institutions to influence on the grassroots organizations. According Bickers and Williams (2001) one of the main constraints of self-government units is that their ability for coercion is limited relying simply in moral sanctions, and that beyond a relative small scale perspective self-governance might tend to collapse. In this view there is little change for learning scaling up social and changing upper level institutions. When applied altogether with other forms of decentralization it is likely that favors competition and collusion between units of local government. Yet, this perspective demands further exploration.

*Polycentric institutional systems: building from complexity*

A system is polycentric when there are many centers of authority and overlapping responsibilities. Polycentricity enables the development of multiple institutional arrangements favoring independent rule-making and rule-enforcement authority distributed among different jurisdictions (Ostrom et al. 1993). Polycentrism, to some extent, contains elements of each of the forms of governance mentioned above, where individual citizenship is also distributed among different governments simultaneously.

The conceptualization of a polycentric system is based on the consideration that patterns of organization are driven for the establishment of separated units of provision and production of public goods and services, where every government is a provision unit matching with different private, public, and mixed units for the production of the services they need (Ostrom and Ostrom 1999). In a polycentric system, the nature of the authority varies substantially. There can be multi-purpose or special-purpose organizations, and governments with independent authority, as well as hierarchical governments within jurisdictions (Ostrom et al. 1993). A polycentric system designs an overlapping, nested, and multiple inter-organizational arrangement that may well adapt to the management of complex natural system such as forests (Ostrom 1998), which are composite of resources providing a variety of goods and services for actors at different levels (Varughese 1999).

This approach is based on the following premises:

- Tragedy of the commons is overcome by the self-governing capabilities of local forest groups and their ability to work out problems, but mostly if there is a supportive network of external authorities favoring self-organization (Ostrom 1999a).
- Polycentrism to be successful must rely on a legal environment supportive of the communities' development of multiple units of government within a broad range of alternatives, and allowing for mutually provision-production of goods and services among different entities (Oakerson 1999).

- The emergence of a provision unit rely on individual incentives to “get what they pay for and pay for what they get” (Oakerson 1999); thus polycentricity lies on an active involvement of the citizens in governance solving their problems by themselves.

Since the structure of the government is sized to the scale of the public problem, this approach suggest that polycentrism may allows for the achievement of greater economies of scale, as well as it will tend to increases fiscal efficiency, reduce costs of opportunism, and reveal individual preferences for a better investment of resources (Ostrom et al. 1993). In general, polycentrism is assessed as a more efficient system since different public goods can be most efficiently produced at different scales of organization (McGinnis 1999). In practice, this implies the establishment of a variety of governmental alternatives such as the private sector market provision, contemporary local governmental units -municipal governments-, indigenously or traditionally based social-political units, hierarchical bureaucracies, and a mixture of all of these (Oakerson 1999, Ostrom et al. 1993, Wunsch 1999).

### **3. Decentralization and property rights in Bolivia**

In 1994 was approved the Popular Participation Law that introduced formally the political-administrative decentralization in Bolivia. Two years latter, were reformed the Agrarian Reform and the Forestry Law, both conceived within the new institutional decentralized public system launched before. The agrarian regulations were focused primarily on moving forward a process of title regularization and titling, while the forest legislation defined a set of regulations for forest use, somewhat differentiated according to forest user, under the premise that sustainable forest management is feasible under the right practices. The main changes prompted by such regulations are addressed in this section.

### *Rules and regulations for forest resources use*

The forest regulations established a new system for monitoring forest management, enforcement and sanctions to illegal logging, as well as introduced some market-oriented regulations and taxes to discourage unsustainable forestry operations. The forest policy's explicit goal is that sustainability of forest management can be achieved through progressive incorporation of less valuable timber species and the application of extraction techniques allowing the natural regeneration of the forest. Furthermore, it seeks to define clear rights over forest resources in part to increase investments in forest management, to eliminate forest crime and illegal logging, and to define rules for forest management according to some technical criteria.

The public institutional system of the forest sector was substantially altered in 1996. The Ministry of Sustainable Development and Planning (MDSP) was constituted as the ruling entity. The Forestry Superintendence (SF) is the regulatory entity, and the National Forestry Development Fund (FONABOSQUE) is the financial entity. The SF is a central piece of this new system because it is in charge of the following tasks: granting forest concessions; authorizing logging permits; approving management plans and raw material supply and processing programs; monitoring forest products transportation; confiscating illegal timber; and supervising the activities of forest management.

The key new forestry provisions are: 1) new rules for the state to allocate public forest areas as concessions; 2) a new forest tax system; and 3) new criteria regulating sustainable forest management. Regarding the first point, the SF can grant public forest to private companies through a system of long-term forest concessions for a period of 40 years, renewable every five years. In relation to the second issue, forest users all have to pay a forest tax (US\$1 ha/yr), which applies to annual logged area, though in the past it was applied to the whole forest concession area. The law states that delays in a forest concession's tax payments should result in turning the concession back to the government (BOLFOR 1997). However, the SF has been extremely flexible when some

concessionaires did not comply with their payments during the last two years. Since March 2003, this system has been amended to reduce the forest tax rate per unit area.

Regarding the third point, according to the legal framework, non-commercial forest uses do not require authorization, and a forest management plan is an essential requirement for all types of commercial forest activities. Hence, forest concessionaires as well as private landholders are obligated to design management plans as an instrument to regulate commercial logging activities, including forest inventories and mapping. Forest management plans have to comply with many technical requirements. Forest management, when based on selective management, must respect a minimum cycle of 20 years between logging operations on the same area, and a minimum cut diameter must be respected. Furthermore, annual operations plans are required. The regime to be applied to non-timber forest products (NTFP) is quite similar to that defined for timber products, with the exception that harvesters have to pay a lower fee (BOLFOR 1997).

#### *The formalization of property rights*

In late 1995, begun a process to establish a land registry agency in Bolivia, and to regularize the land tenure situation wherever possible. In 1996, was issued a new Land Law –known as Law INRA-, to provide the legal basis to carry out the process of title regularization and titling in the overall country, but prioritising where conflict exist such as in the lowlands because of the large land concentration. The INRA law introduced important provision that led to legitimise property rights of private land ownership, though in parallel tend to democratise the access of local communities to land, and to secure the access rights of indigenous people. In this regard, two legal provisions are important: 1) the recognition of indigenous territories, named as native communal lands (*Tierras Comunitarias de Origen*, TCOs), and 2) the acceptance of small farmers and communal groups' preferential access to publicly owned land. Furthermore, some provisions to avoid land speculation and unproductive land accumulation were also considered.

The new Forestry Law included two mechanisms to stimulate a larger democratisation of access to forest resources. The first refers to the exclusive right of indigenous peoples to use the forest resources within their indigenous territories, recognized legally since the new Agrarian Reform Law was passed. According to this law, indigenous claims over land are considered to be titled after completion of a process of land regularization. The second states that local forest user groups can benefit from forest concessions within areas to be declared as municipal forest reserves, which represent up to 20 percent of public forest within each municipal jurisdiction.

Most of the indigenous groups located in the lowlands Bolivia have the right to claim the lands that they consider are needed to guarantee their subsistence, though it has to be assessed by the National Institute of Agrarian Reform (INRA). In contrast, in order for small-scale loggers to be granted a forest concession in the municipal reserves, they have to be recognized as a local user association (*Asociación Social del Lugar*, ASL). While indigenous territories emerged as result of direct social pressures over the central government, the municipal reserves were conceived as the easiest way to formalize the access to forest areas of local forest users or small-scale loggers who were previously conducting forestry operations informally within forest concessions or protected areas, because they had no legal right to access forest resources (Kraljevic 1996).

The National Institute of Agrarian Reform (INRA) is the entity in charge of implementing the land policy. Furthermore, it is responsible for monitoring the implementation of the rural cadastre, the delimitation of public lands, and the expropriation of private lands, among its most important functions. Furthermore, the INRA Law created the Agrarian Superintendence (*Superintendencia Agraria*, SA), in charge of the process of land classification according to its potential use, and also of granting public lands to conservation of the biodiversity, research and eco-tourism uses; determining the value of the land; and developing all the actions needed to guarantee land uses according to its classified potential use. Municipalities have little to say regarding land tenure issues, except to suggest the creation of municipal forest reserves.

Small-scale farmers and indigenous territories are exempted from paying the land tax, while medium and large farmers have to pay it. Land tax is estimated through a self-valuation system in which each landholder estimates both the value of the land and the improvements made on it. Self-valuation is expected to simplify the system of tax collection, although it promotes under-valuation of properties, dropping the estimated fees to be collected. The INRA law also stipulates that landowners, from small to large ones, must justify how their land fulfils a socio-economic and ecological function in order to hold their property rights over it, and avoid their reversion by the state. However, in the case of the medium and large property, tax payment is a mechanism that allows landholders to justify no land abandonment.

### *Popular participation and decentralization*

The Popular Participation Law expanded the municipal government's jurisdiction beyond the urban centres to the entire territory covered and made municipalities responsible for local schools, health facilities, roads, and water systems sections. To finance these new responsibilities, the central government allocate 20 percent of its budget in favour of the municipal governments, to be distributed among municipalities in proportion to each one's population. Rural and urban property taxes have been earmarked for the municipal governments, who now administer their collection.

The law has sought to introduce community control over municipal governments by recognizing local social organizations as territorially based grassroots organizations (*Organizaciones Territoriales de Base*, OTBs); permitting them to influence municipal investment decisions and to elect oversight committees to monitor municipal finances. Furthermore, the Popular Participation Law has strengthened municipal governments and made them more democratic. The Administrative Decentralisation law, issued in 1995, complemented the Popular Participation law, although its effects have been less dramatic.

The municipal governments, over time, have made significant progress in establishing boundary districts within their jurisdictions, which allows them to deal with



planning processes at a district level by both formulating and implementing District Development Plans. Majors have the function to appoint to sub-mayors in each district; although it is up to them to transfer part of the municipal revenues to be administered by the sub-mayors, in order to implement the annual plans. Local authorities can be nominated directly as sub-mayors only in the case of the Indigenous Districts.

The new Forestry Law has granted a number of responsibilities to prefectures –the departmental governments- and municipalities regarding forest management. Main prefectures’ responsibilities include implementing programs and projects of public investments related to the forestry sector at the departmental level, and developing programs for strengthening municipalities’ institutional capacities. In turn, municipal government have received functions including monitoring of logging activities, and inspecting raw material supply and processing programs. They are also in charge of delimiting municipal forest reserves, allocate them to ASLs, and to provide them assistance for forest management. Municipalities are expected to create Forestry Municipal Units (*Unidades Forestales Municipales*, UFM), and to maintain them by assigning their annual share of forest taxes -25% of forest extraction and conversion-.

#### **4. The outcomes of forest decentralization in Bolivia**

Decentralization made explicit the differences between public forms of government that operates in the public political systems, with other non-public forms of government. Hence, responsibilities have been transferred to municipal governments, but not enough power has been granted in favor of customary forms of government, which are local in kind. The fact of that most powers regarding forest resources have been transferred to municipal governments resides in the assumptions that they constitute the most representative smallest unit of government in which public decisions are made. This entails that culturally rooted decision-making structures embedded within indigenous groups do not fit easily with this process of decision-making and political party dynamics, considering that the municipal governance is shaped by a vote system of representation. This issue is relevant since indigenous populations in the lowlands

encompasses almost 30 groups, that have demanded 20 Millions of hectares, nearly the third part of the lowland region.

The fact of granting property rights to indigenous populations, and to expand jurisdictions of municipalities has led to spatial overlapping between indigenous territories and municipal governments' jurisdictions. Though it may lead to build complementary forms of governance at the local level, and may also stimulate competition around decision-making regulating forest resources use. The proposed way to resolve such contradiction has been the creation of "indigenous districts", though it only constitutes an administrative solution to a deeper socio-political problem. Indeed, communities, and communities associations have received little formal authorities to intervene in regulating forest resources uses, and to enforce such rules, but the rights to administrate the renewable natural resources of their jurisdictions. This could make sense in cases in which has been documented that the tragedy of the commons apply in practice, such as the experience in the *Mojeño* multiethnic territory (Roper 2000), but in others it has undermined the traditional forms of governance, such as in the *Guarani* territory (Beneria 2003).

Municipal governments have little to say in the process of (semi) privatization of property rights to forestry users such as delimiting boundaries for collective private property in indigenous territories, granting long-term rights to forest concessionaries, which are renewable if some regulations are complied, and titling land to individual private properties. This constitute formally a process of securing private rights to diverse social actors in which municipalities do not formally intervene but in delimiting municipal forest reserves. Hence, decentralization is restricted to monitoring functions of forest management, and to provide technical services to the local groups, which are granted with concessions within the municipal reserves. Whereby, most land administration decisions are still made at the central level, and there is not a uniform figure regarding taxes collection from natural resources use. While land taxation is responsibility of the municipal governments, forest taxation is responsibility of the SF, and only when they are collected a portion is handed over to the municipalities.

The municipalities have responded differently to the functions they have received regarding forestry. Some studies have analyzed the ways in which municipalities responded to forest crime, forest conservation, land privatization, and provision of technical assistance to local forest user groups. The answers about diversity of outcomes of decentralization in forestry, specifically municipal governments' interventions, have been linked to two different sets of factors operating at diverse level. The first, is related to the factors constraining municipal decision-making (i.e., local political economy, local power relationships, and influence of social groups (Kaimowitz *et al.* 1999, Pacheco 2004b, Pacheco and Kaimowitz 1998). The second has to do with the attributes of the municipal governments such as accountability, institutional capacity, and financial resources available, among the most relevant (Andersson 2002b, Pacheco 2004a).

Although the SF carried out most of the monitoring activities by itself after decentralization, gradually it looked for some help from the UFM's. Its main interest was taking advantage of the resources transferred to municipalities to develop monitoring activities, as well as the need to justify their actions to the local population. Nevertheless, the answer of municipalities to forest crime monitoring was ambiguous. One group did not want to get involved in controlling illegal forest activities because that would affect some politically influential people within the municipal governments, and another group had no actual capacity or resources to spend on activities with little financial return and high political cost. That institutional behavior has created ambiguous signals about the role that municipalities play in forest crime monitoring.

Municipal governments are more motivated by controlling the operations of large-scale forest concessions. In a few cases, municipalities have taken over machinery of timber companies, and intervened when forest concessions were logged in areas outside their boundaries. Additionally, local authorities have strong criticism against the system of auctioning confiscated illegal timber because they do not benefit from it. Furthermore, the role of municipal governments, as was suggested earlier, is more active in controlling illegal clear cutting because of the direct benefits they obtain from it. They have been

active players in temporarily resolving uncertainty over property rights, primarily of small landholders, by issuing land 'possession certificates', though with no legal value.

The municipal government response to protected areas is contradictory. Some municipalities have resisted the creation of municipal reserves in the cases in which they undermine the livelihoods of local populations who to diverse extent make their living of resources withdraw from the forest (such as colonists, and small-scale loggers). In other cases, municipalities have created local alliances to defend protected areas, mostly in the cases in which they were jeopardize by external interests such as foreign timber concessions which were not represented in the local politics. Municipalities have favored protected areas in the situations in which they can derive some resources from them such as the cooperation of environmental organizations, or local initiatives such as ecotourism.

Municipalities have in some cases intervened in granting local recognition of territorial rights of communities living within their jurisdictions, though them have only had formal effect on the approval of forest use permits form the SF. In few cases, they have prompted settlements within forest concessions, and questioned the rights of timber concessions within their jurisdictions. Yet, the intervention of municipalities on property rights related issues have been suppressed from the central level due to they are illegal according to the current agrarian and forestry regulations. Even more, even though municipalities participate in the identification of municipal forest reserves, and potential beneficiaries, the recognition of such reserves, and the allocation of rights to social concessionaries within such reserves need the approval of the MDSP.

The reinforcement of some property rights that came along with decentralization - such as indigenous territories and municipal forest reserves- have had significant implications for local forest users, though the pace of such changes has been extremely slow. Titling of indigenous territories has become a bureaucratic and slow process, and indigenous people cannot benefit fully from their forest resources because they do not fulfill the conditions to formulate and implement forest management plans according to the current forestry regulations. In parallel, the recognition of municipal reserves has

been an extremely slow process of identification of public forest, which was a precondition for establishing such reserves as was described elsewhere (Pacheco 2000). Much of the claimed areas have not been made available for municipalities, and about 26 demands of ASLs were not even processed (Cronkleton and Albornoz 2004).

The municipal governments have little influence in the dynamics of forestry rights allocation, but they have involved an active participation of local forest users such as indigenous people, and small-scale loggers. The groups with larger social cohesion have been able to place their territorial claims, to access to forest resources, and to get them legally recognized by the State. While indigenous have been more successful to make effective their territorial claims, small-scale loggers have faced with more difficulties and bureaucracy since for them getting access to forest was mediated by the process of municipal reserves creation as was mentioned earlier. Furthermore, there is a large way since getting access to forest to develop forest management in such areas.

It is expected that local groups with larger managerial skills, organizational tradition, knowledge of markets, will succeed in make use of their forest in a sustainable way. The lack of such capabilities undermines the aims of such groups to manage their resources, and to benefit from them. It has been argued that groups able to build rules and regulations about resources use may be able to achieve such aims. The Bolivian case shows that different situations persist in practice. While some groups have crafted better rules for forest management, and distribution of benefits, other still need a long way to go. Anyhow, the evidences about the conditions explaining that is still slim.

## **5. The Bolivian decentralization in light of the different views**

The Bolivian case to some extent can satisfy the claims from the proponents of all the decentralization perspectives. The Bolivian experience shows that in practice all the perspectives are correlated. This is not a conscious aim of the decentralized forest governance, rather a practical outcome. What it is important is that those policy makers and practitioners bearing one or the other perspective are enough satisfied with the

overall outcome, as a point of departure. All of them can find that what it is in place is close enough to what do they would expect for forest management, and do can use to move forward to achieve what do they really claim.

The problem is that some correlations should be stronger and others more irrelevant in order to foster the achievement of the objectives of improving the livelihoods of forest-dependent people. The central control is still visible in the partial decentralization of the rights for levying taxes at the local levels, and forest crimes sanction. It is the SF who has the responsibility for gathering the local taxes for spending in the administrative costs of the entity, and redistributing a portion to prefectures and municipalities for them to invest in the UFM. In turn, the UFM have the role to monitor the compliance with the forestry regulations, but they cannot develop by themselves local forestry regulations, neither have the authority to levy taxes. The environmental standards and regulations regarding the forestry sector are developed at the central level. Consequently, the forestry regulations are fairly the less decentralized of the sectors in the country.

However, the latter is correlated with the fact that the municipalities have been transferred with impressive political powers resulting in the greater democratization of the country. In light of the democratic decentralization perspective, accountable authorities and other mechanism for local politicians' oversight has been developed and implemented. Additionally, municipalities were granted with a 20% area of the total territory of its territory as municipal forest areas for the delivery to the forest user groups. Though, this fixed portion leads to rigid solutions for improving local people access to forest, it has led to an active participation of some municipalities in forest management.

The Bolivian experience is not in between but still perpetuates the tension between the central control and democratic decentralization perspective. It should be discussed how much of the local accountability is lost by limiting the taxation rights of the municipalities in forest areas, and also the limitations in the role of the governments for developing forestry regulations. However, the large political transference of powers to

the municipalities overshadows to some extent its limited role in the forestry sector. Additionally, the devolution of higher rights to local indigenous communities put in doubt what the real implications of a new central command but a more local level.

The legalization of common property regimes for indigenous communities recognizing their property rights over the renewable natural resources within the territories, and customary rights for the exploitation of these resources, bring about the conditions for the development of the radical self-governance premises. However, indigenous communities still must fulfill with the requirements imposed by the national level if they want to commercially exploit their forests. Others have been declared as protected areas having to fulfill special legislative bans in forestry exploitation. In the eyes of indigenous institutions this has been an intermediate step in their search for self-governance in the management of natural resources, either renewable or non-renewable, and in their struggles for reaching political autonomy.

Finally, the Bolivian policy opened up some room for polycentric governance. As mentioned earlier decentralization policies have recognized powers and jurisdictions for municipalities, and rights to exploit natural resources for indigenous populations in the indigenous territories. To date, these policies hardly negotiated with different sectors broaden the narrowly municipal decentralized Bolivian perspective. Therefore, the overlapping of jurisdictions and to some extent of distinctive forms of governance creates the conditions for polycentricity. Public units such as municipalities can interact with private collective consumption units, indigenous institutions. However in the Bolivian political context this is seen as a problem rather than as an opportunity.

Common property institutions clearly present positive aspects leading to polycentrism since they frame service provision units closely matched to local individuals' preferences, what a municipal government can difficultly reach. Even more, indigenous institutions can be considered nested systems of governance since common property institutions encompass small, medium, and large units of government. Indigenous multiple-level units of governance are able to deal with different problems at

different levels such as, for example, the distribution of natural resources to their members, conflict resolution, bargaining in the process of rural development, and enforcement of management rules.

The Bolivian legislation, however, has not gone far recognizing indigenous institutions as formal units of government at the local level. For the Bolivian municipal policy the way to deal with the indigenous diversity has been to embed the indigenous institutions within the municipal government as municipal indigenous districts, as mentioned earlier. The problem is that, since those units are largely overlapping indigenous organizations must split up proportionally as the number of municipalities as do they overlap, which means highly organizational costs.

Some indigenous populations are experimenting this approach of hierarchical public governance by recognizing sub majors, elected either by them or selected by the major. However, most of the indigenous organizations are claiming for the recognition of the indigenous territories as “indigenous municipalities” or “territorial indigenous entities”, which refers to recognize indigenous territories with a similar hierarchy of municipalities, by transferring territorial areas from municipalities to the indigenous entities. This would imply a process of an impressive shrinking of the current municipal jurisdictions, which is highly opposed by the non-indigenous populations. In this position, however, there will be little room for polycentrism. The solutions to “the problem” of presenting distinctive forms of governance are stressed in the way of monopolizing local government either in hands of municipalities or in hands of the indigenous institutions. In this regards, indigenous view is closer to the radical self-governance approach, while the municipal perspective is still largely rooted in the traditional democratic governance approach.

A smart solution could be that of the polycentric approach, keeping both forms of government simultaneously while distributing functions according populations’ choices. The point is that both units of provision should be formally recognized as alternative institutional arrangements to provide services and organize production at the local level.



This should improve differential institutional arrangements instead of entitling homogeneous entities, either municipalities or indigenous institutions, to govern similar issues. In addition, polycentrism will be reinforced by the emergence of associative units within indigenous institutions to deal with forest management through forest associations, as it is occurring at present.

## **6. Conclusions**

This paper has shown that different paradigms of decentralization in forestry are struggling to gain predominance in the political process of decentralization in forestry. While some still claims for the state as the key actor of moving decentralization forward, other considers this as an opportunity for local actors to enlarge their local autonomies. Other perspective defends a more formal decentralization of powers but within more democratic frameworks and political practices. Finally, the last perspective, frames their understanding of institutional reform looking them as part of polycentric arrangements involving local institutions and local actors. This paper argue that it is needed to look at all such approaches, assessing them from a critical perspective, to move towards a more complex public system which could be able to adapt to varied situations.

The Bolivian case, which represents the most significant process of decentralization in the region, shows that the outcomes of decentralization have been diverse. While some of such outcomes provide arguments to reinforce central command, other support that local communities autonomies should be reinforced. Nevertheless, it seems that looking for more democratic governments could achieve better results by improving accountability, and social representation. However, it also appears as relevant that other forms of government should be considered as part of the architecture of decentralization if better systems of check and balances have to be put in place. In this regard, polycentric solutions for improving production of goods, and provision of services in forestry seems to offer innovative solutions towards a more flexible systems of decentralization in forestry adapted to context specific solutions.

This paper offer some preliminary insights in that direction seeking not just to understand better the implications that decentralization has in local forest users' livelihoods, and forest, but also seeking to influence on the current debate underway in the country to move forward the process of decentralization that involves larger autonomies for regions, based on more innovative institutional arrangements.

## References

- Agrawal, A. 2001. Common Property Institutions and Sustainable Governance of Resources. *World Development* 29: 1649-1672.
- Agrawal, A., and C. Gibson. 1999. Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation. *World Development* 27: 629-49.
- Agrawal, A., and E. Ostrom. 2001. Collective Action, Property Rights, and Decentralization in Resource Use in India and Nepal. *Politics and Society* 29: 485-514.
- Andersson, K. 2002a. Can decentralization save Bolivia's forests? An institutional analysis of municipal forest governance. Pages 304. *School of Public and Environmental Affairs and Department of Political Science*. Indiana University, Bloomington.
- . 2002b. Explaining the Mixed Success of Municipal Governance of Forest Resources in Bolivia: Overcoming Local Information Barriers. Pages January 28, 2002. *Natural Management Resources - World Bank*, Washington, D.C.
- Arnold, B. J. E. M. 1998. Managing forests as common property. FAO.
- Ascher, W. 1995. *Communities and Sustainable Forestry in Developing Countries*. ICS Press., San Francisco, California.
- Assies, W. 1999. Land Territories and Indigenous Peoples's Rights. Colegio de Michoacán - Centro de Estudios Rurales, Mexico (unpublished draft).
- Baland, J.-M., and J.-P. Platteau. 1996. *Halting Degradation of Natural Resources: Is There a Role for Rural Communities?* Clarendon Press., Oxford.
- Becker, D., and R. Leon. 1999. Indigenous Forest Management in the Bolivian Amazon: Lessons from the Yuracare People in C. Gibson, C. McKean, Margaret A., and Ostrom, Elinor, ed. *People and Forests: Communities, Institutions and Governance*. The MIT Press, London, England Cambridge, Massachusetts.
- Beneria, J. 2003. Decentralization Questioned: The Structuring and Articulation of Guarani Participation in Conservation and Development in Izozog, Bolivia. University of California, Los Angeles.
- Bickers, K., and J. Williams. 2001. *Public Policy Analysis*. Houghton Mifflin Company, Boston, New York.
- BOLFOR. 1997. *Ley y reglamento de la Ley Forestal, Ley INRA*. Proyecto BOLFOR, Santa Cruz, Bolivia.
- Bruce, J. 1999. Legal Bases for the Management of Forest Resources as Common Property. FAO.
- Cronkleton, P., and M. A. Albornoz. 2004. The Diversity of Community Forestry in Bolivia. Pages 21. Center for International Forestry Research (CIFOR), Santa Cruz.
- Dietz, T., P. C. Stern, and E. Ostrom. 2003. Struggling the commons. *Science* 302: 1907-1012.
- Ferroukhi, L. 2003a. *La Gestion Forestal Municipal en America Latina*. CIFOR, Bogor, Indonesia.

- . 2003b. *La gestión forestal municipal en América Latina*. Center for International Forestry Research, International Development Research Center., Bogor, Indonesia.
- Gibson, C., F. E. Lehoucq, and J. Williams. 1998. Does Tenure Matter to Resource Management? Property Rights and Forests in Guatemala. Pages 26. *Fifth Biennial Conference of the International Society for Ecological Economics*, Santiago, Chile.
- Gibson, C., J. Williams, and E. Ostrom. 2003. The Importance of Rule Enforcement for Local-Level Forest Management.
- Gibson, C. C., E. Ostrom, and M. A. MacKean. 2000. Forests, People, and Governance: Some Initial Theoretical Lessons. Pages 227-242 in C. C. Gibson, E. Ostrom, and M. A. MacKean, eds. *People and Forests: Communities, Institutions and Governance*. The MIT Press, Cambridge, Massachusetts London, England.
- Kaimowitz, D., G. Flores, J. Johnson, P. Pacheco, I. Pavez, J. Roper, C. Vallejos, and R. Velez. 2000. Local government and biodiversity conservation: A case from the Bolivian Lowlands. A case study for Shifting the Power: Decentralization and Biodiversity. Conservation. Biodiversity Support Program, Washington, D.C.
- Kaimowitz, D., P. Pacheco, J. Johnson, I. Pavez, C. Vallejos, and R. Vélez. 1999. Local Governments and Forests in the Bolivian Lowlands. Rural Development Forestry Papers (RDFN) No. 24b. Overseas Development Institute, London.
- Kraljevic, I. 1996. Estudio exploratorio del sector maderero local de la provincia Velasco en el departamento de Santa Cruz. Documento Técnico 48/1996. Proyecto de Manejo Forestal Sostenible BOLFOR, Santa Cruz, Bolivia.
- Larson, A. 2003. Decentralization and Forest Management in Latin America: Toward a Working Model. *Public Administration and Development* 23: 211-226.
- Larson, A. M. 2002. Natural resources and decentralization in Nicaragua: are local governments up to the job? *World Development* 30: 17-31.
- McGinnis, M. 1999. Introduction. Pages 1-30 in M. Michael, ed. *Polycentric Governance and Local Public Economies: Readings from the Workshop in Political Theory and Policy Analysis*. The University of Michigan Press, Ann Arbor.
- McKean, M. 2000. Common Property: What Is It, What Is It Good for, and What Makes It Work? in C. C. Gibson, M. A. MacKean, and E. Ostrom, eds. *People and Forests: Communities, Institutions and Governance*. The MIT Press, Cambridge, Massachusetts, London, England.
- Oakerson, R. J. 1999. *Governing Local Public Economies*. ICS Press, Oakland, California.
- Ostrom, E. 1998. Scales, Polycentricity, and Incentives: Designing Complexity to Govern Complexity. Pages 149-167 in G. a. J. A. M. eds., ed. *Protection of Global Biodiversity: Converging Strategies*. Duke University Press, Durham, NC.
- . 1999a. Self governance and forest resources. CIFOR, Indonesia.
- . 1999b. Self-Governance and Forest Resources. Pages 19. CIFOR, Center for International Forestry Reserach, Bogor, Indonesia.
- . 2000. Private and common property rights. Workshop in Political Theory and Policy Analysis, and Center for the Study of Institutions, Population, and Environmental Change, Indiana University, Indiana.

- . 2003. How Types of Goods and Forestry Rights Jointly Affect Collective Action. *Journal of Theoretical Politics* 15: 239-270.
- Ostrom, E., James Walker, and Roy Gardner. 1986. Covenants with and without an sword: self-governance is possible. *American Political Science Review* 86: 404-17.
- Ostrom, E., and V. Ostrom. 1999. Public Goods and Public Choices in M. Michael, ed. *Polycentricity and Local Public Economies*. The University of Michigan Press, Ann Arbor.
- Ostrom, E., L. Schroeder, and S. Wynne. 1993. *Institutional Incentives and Sustainable Development*. Westview Press, Boulder, San Francisco, Oxford.
- Ostrom, M. M. a. E. 1995. Common property regimes in the forest: just a relic from the past? FAO.
- Pacheco, P. 2000. Avances y desafíos en la descentralización de la gestión de los recursos forestales en Bolivia. CIFOR/BOLFOR, Santa Cruz, Bolivia.
- . 2004a. Decentralization of forest management in Bolivia: who benefits and why? *Workshop on Decentralization in forestry*. CIFOR, Intercooperation, United Nations Forum on Forests, Interlaken, Switzerland.
- . 2004b. What Lies behind Decentralization? Forest, Powers and Actors in Lowlands Bolivia. *European Journal of Development Research* 16: 90-109.
- Pacheco, P., and D. Kaimowitz. 1998. *Municipios y gestión forestal en el trópico boliviano*. Center for International Forestry Research, Centro de Estudios para el Desarrollo Laboral y Agrario, Fundación TIERRA, Proyecto BOLFOR, La Paz.
- Ribot, J. 2001. Local Actors, Powers and Accountability in African Decentralizations: A Review of Issues. International Development Research Centre of Canada, Washington, D.C.
- Ribot, J. C. 2002. Democratic Decentralization of Natural Resources: Institutionalizing Popular Participation. Pages 30. World Resources Institute, Washington, D.C.
- Roper, J. M. 2000. Whose territory is it? Resource contestation and organisational chaos in Bolivia's Multiethnic Indigenous Territory. *2000 Meeting of the Latin American Studies Association*, Miami, March 1-18.
- Tucker, C. 1999. Private versus Common Property Forests: Forest Conditions and Tenure in a Honduran Community. *Human Ecology* 27: 201-229.
- Varughese, G. 1999. Villagers, Bureaucrats, and Forests in Nepal: Designing Governance for a Complex Resource. Pages 228. *SPEA-Political Science*. Indiana University, Bloomington.
- Wunch, J. S. 1999. Institutional Analysis and Decentralization: Developing an Analytical Framework for Effective Third World Administrative Reform. Pages 243-268 in M. D. McGinnis, ed. *Polycentric Governance and Development*. The University of Michigan Press, Ann Arbor.
- Wunsch, J. 1999. Institutional Analysis and Decentralization: Developing an Analytical Framework for Effective Third World Administrative Reform. Pages 243-269 in M. McGinnis, ed. *Polycentric Governance and Development*. The University of Michigan Press, Ann Arbor.