



Indigenous land reconfiguration and fragmented institutions: A historical political ecology of Tsimane' lands (Bolivian Amazon)

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ABSTRACT

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Lands inhabited by indigenous peoples often have low population density but abundant natural resources. For those reasons, many actors have historically attempted to occupy those lands or use the resources in them. Increasing pressures over lands occupied by indigenous peoples have resulted in the awakening of indigenous peoples over their rights to land and resources generating many debates over indigenous peoples' rights to land and self-governance. In this article, we provide a historical and geographical overview of territorial and governance issues among the Tsimane', an indigenous group native to the Bolivian Amazon. We examine how the Bolivian state economic policies implemented during the 20th century affected the Tsimane' ancestral lands, and how – over the late-20th century – the Bolivian state accommodated Tsimane' claims to lands in between multiple interests. We show how national policies led to the reconfiguration of Tsimane' territoriality and to a fragmented institutional representation. Current indigenous territories and indigenous political representation are an expression of conflictive policies that have involved multiple actors and their specific interests on indigenous lands and its resources.

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1. Introduction

Lands inhabited by indigenous peoples usually have low population density (Stocks, 2005) but abundant natural resources (Finer et al., 2008; Sunderlin et al., 2005). For those reasons, many actors have historically attempted to occupy those lands or use the resources in them. For example, between the 1960s and 1980s, several Latin American governments implemented policies to promote the economic integration of the Amazon region into national economies by creating incentives for the expansion of the private sector (Schmink and Wood, 1992; Urioste and Pacheco, 1999). Those policies led to the commodity frontier expansion, to an increase in the pressure over forested areas inhabited by indigenous peoples (Medina et al., 2009), and to the consequent

increase of conflicts (Orta and Finer, 2010). Biodiversity conservation policies promoted by neoliberal governments in Latin America during the 1980s and 1990s added additional pressures over lands occupied by indigenous peoples (West et al., 2006; Zimmerer, 2011).

Increasing pressures resulted in the awakening of indigenous peoples over their rights to land and resources (Kay, 2002). When lands inhabited by indigenous peoples were marginal for the global economy, indigenous peoples, without any land title, held the *de facto* control over the land. However, as those lands became the frontiers of many commodities and as powerful elites started to draw maps to convert large tracts of forests into real estate (Chapin et al., 2005; Finer et al., 2008), indigenous peoples rushed into land titling processes. Since the 1970s, indigenous peoples around the world have progressively claimed rights to “indigenous land,” defined as the area that a particular indigenous community has ‘traditionally owned, occupied or otherwise used or acquired’ (Chapin et al., 2005; Offen, 2009). Those rights to land were internationally recognized in the 1989 International Labour Organization (ILO) Convention 169 on the Rights of Tribal and

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Indigenous Peoples in Independent States (Stavenhagen, 2005). Throughout the 1990s many Latin American countries ratified the ILO convention and several engaged in constitutional reforms that granted territorial rights to indigenous peoples in unprecedented ways (Stocks, 2005). Nevertheless, as it became clear that land-titles were not synonymous with secure property rights, the claim for indigenous people's rights moved a step forward to also demand the recognition of indigenous governance (Colchester et al., 2004; Chumacero, 2011; Martínez-Alier, 2007; Surrallés and García-Hierro, 2005).

Political ecology analysts have pointed out that the state recognition of indigenous peoples' rights to land and self-governance has taken place within unavoidable compromises with multiple stakeholders, during complex socio-political processes (Peet and Watts, 2004; Zimmerer and Bassett, 2003). Indeed, territorial reforms in Amazonian countries to grant land rights to indigenous peoples have been implemented while parallel contradicting environmental and productive policies were promoted by both private and public agents (Escobar, 1998).

This article follows a historical political ecology framework (see Offen, 2004; Rubenstein, 2004) to examine how over the 20th century, and especially during its second half, the Bolivian state accommodated lowland indigenous peoples' claims to land and natural resources in between multiple interests (e.g., colonists, logging companies, conservationists). We analyze how the negotiation of those interests affected both the configuration of indigenous lands and indigenous institutional representation. We use indigenous territory to refer to the formal land titling process granted by the state, and indigenous territoriality as a broader acceptance that includes the specific relation between indigenous society, politics, and space.

The Bolivian Amazon provides an interesting case for understanding the process through which national-states have recognized indigenous peoples' rights to land and for elaborating on the consequences of those policies for indigenous territories and political institutions. Since the early 1990's, the Bolivian government launched important reforms aiming at recognizing lowland indigenous peoples' territorial claims. Pressed by grassroots mobilizations and fostered by a new international framework in favor of indigenous self-governance, Bolivia ratified the ILO Convention 169 in 1991 and reformed its Constitution in 1994 to recognize indigenous peoples' rights to land. More recently, the 2009 constitutional reform flaunted of giving political autonomy to indigenous political and territorial entities. How did Bolivian lowland indigenous peoples gain land rights? How did the Bolivian government respond to the different political pressures in its attempt to grant indigenous peoples' rights to land? And how land rights gained by indigenous peoples subsequently affect their claims for self-governance? This article aims at answering such questions.

2. Methods

2.1. The Tsimane' case study

There is not internationally agreed upon legal definition of 'indigenous' peoples, although there is some agreement that the concept implies "priority with respect to the occupation and use of a specific territory; the voluntary perpetuation of cultural distinctiveness; self-identification, as well as recognition by others as a distinct collectivity; and an experience of subjugation, marginalization, dispossession, exclusion, or discrimination" (Stavenhagen, 2005, p. 17). In Latin America, the concept has been used by political forces to classify groups to make them fit with bureaucratic categories (Langer and Muñoz, 2003).

In the latest census (Censo, 2001), 62% of the population in Bolivia identified themselves as "indigenous people." The 2009 constitution recognizes 36 indigenous groups, the Quechua and the Aymara in the highlands being the two largest ones (2.5 and 2.1 million). The Bolivian Amazon hosts a larger number of indigenous groups, but all of them have small populations (the largest being the Guaraní with 300,000 people). Among these Amazonian indigenous peoples, we study the Tsimane', a group of about 10,000 people, mostly living in the department of Beni.

The Tsimane' are a native Amazonian society of hunter-horticulturalists. Although their origins are unclear, historical accounts have typically localized them in what is now the Beni Department. Currently, the Tsimane' live in about 125 rather permanent communities (Fig. 1). Traditionally, Tsimane' communities were settled next to rivers, although nowadays many are also settled next to road axes. Currently, there are 50 Tsimane' communities in the shores of the Maniquí, 16 in the Quikibey, and 3 in the Sécore River. There are also 25 communities along the Yucumo-Rurrenabaque road or nearby, and 27 along logging concession roads (or close to them) that mostly run parallel to the Maniquí River. Some Tsimane' communities have recently moved to new areas, such as the area around the city of Ixiamas, department of La Paz.

Ethnographic work describes the traditional Tsimane' lifestyle as highly mobile, emphasizing the cultural importance of *sóbaqui* (traveling or visiting), and the semi-nomadic settlement pattern (Ellis, 1996). As a result of this mobility, the traditional Tsimane' land use pattern was characterized by dispersed land occupancy, low intensity of natural resources use, and spatial overlap of resources usage among households and communities. Due to shared resource use and governance, land and natural resources probably fell under the broad category of common-property tenure, *sensu* Ostrom, 1990. Within a community, households owned specific agricultural fields in the sense that they could exclude other community members from using them (for example, once established an agricultural plot remained permanent unless the owner decided to move out); but households could not sell the land they cultivated or used (Huanca, 2008). Land uses (i.e., fishing, hunting, gathering) and resource users overlapped. Even nowadays, although villages have informal internal boundaries, villagers routinely trespass them in daily activities. Dispersed land occupancy, low intensity of natural resources use, and spatial overlap of resources usage continues to be the norm in communities far from roads and market towns.

2.2. Methods of data collection

This article draws on three main sources of information. First, we reviewed the existing literature on land tenure issues in the Bolivian Amazon since the 19th century, focusing on the impacts of different actors (i.e., loggers, colonist farmers, conservationists) over land and resources. We have also reviewed classical ethnographies of the Tsimane' to identify their historical settlement patterns and typical land use types.

Second, information on current Tsimane' settlement patterns comes from a participatory mapping project conducted during 2008–2010 (Reyes-García et al. 2012) and from a revision of the geographical database of the National Institute for Agrarian Reform. During the mapping project, we obtained GPS readings of the position of all Tsimane' communities, which we cross-checked with official data on land tenure status to map the current distribution of Tsimane' villages.

Third, part of the information presented here comes from our own ethnographic work in the area. For over more than one decade we have conducted several prolonged field studies among the

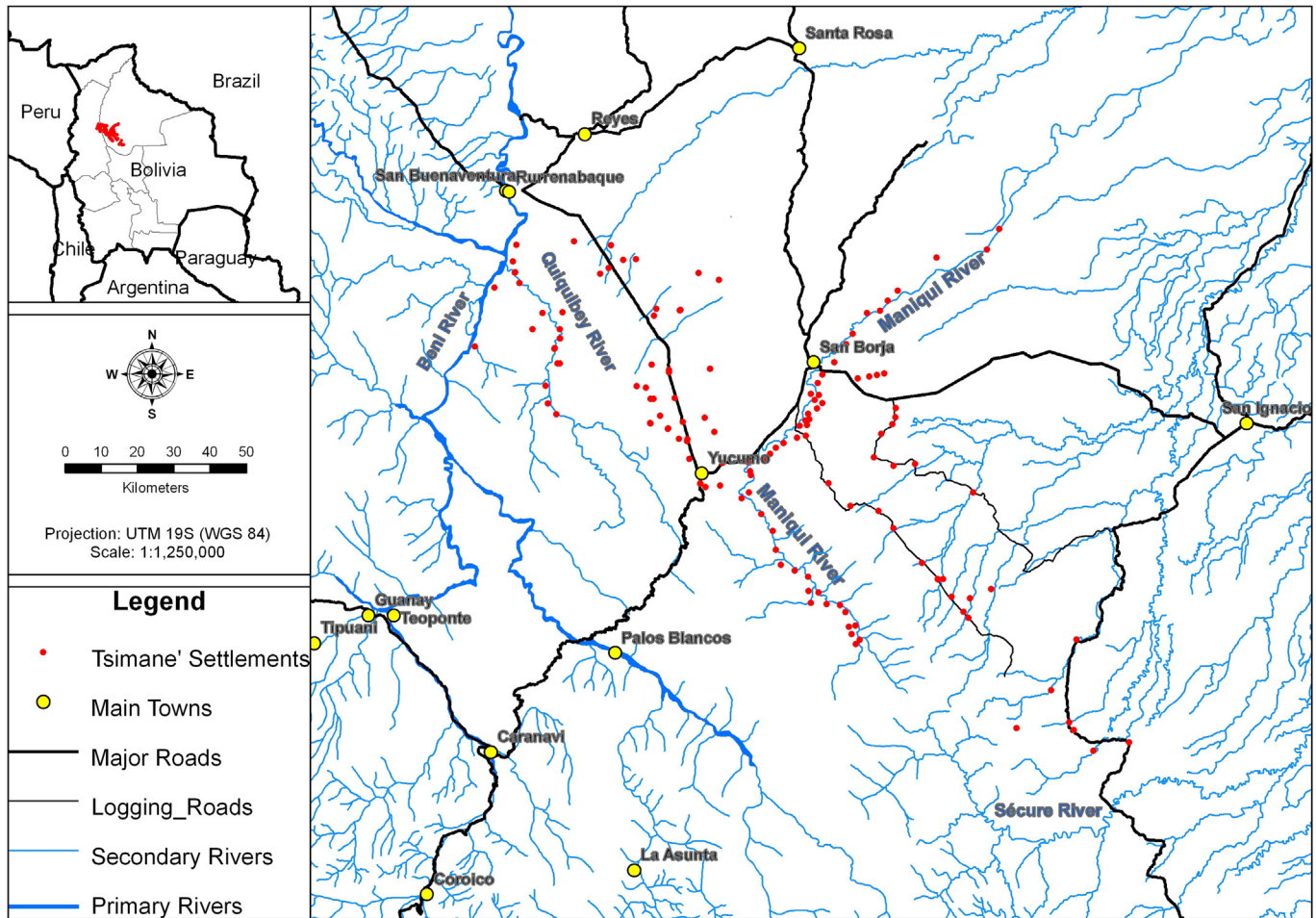


Fig. 1. Spatial distribution of Tsimane' settlements.

Tsimane' in which we have analyzed local and regional socio-economic and political issues, as well as the dynamics of land use and conservation management in several land tenure regimes where Tsimane' communities are found (Paneque-Gálvez et al., 2013). During those field studies we have had extensive interactions using participant observation and formal and informal interviews with several actors: land users, park-guards, community-guards, and national and international NGO working in the area. We build on this information throughout the article.

3. Indigenous territories as marginal lands: The Tsimane' until the 1952 Revolution

The Bolivian Amazon remained on the fringe of economic development during most of the colonial period (Assies, 2006). Only the advent of the Jesuit Order by the end of the 17th century brought partial changes to the lowlands. Those changes directly affected the Moxos and Chiquito areas, where Jesuits introduced ranching and congregated indigenous populations in missions, but had a more indirect effect on the Tsimane', who seem to have resisted settlement efforts.

In 1621, the Franciscan priest Gregorio de Bolívar provided the first known reference to the Tsimane'. He was also the first missionary to try –and fail– to settle them in missions (Chicchon, 1992; Daillant, 2003). After him, other missionaries settled in the area, in a mission named San Francisco de Borja known by its poor management and violent exploitation of indigenous peoples (Metrax,

1948). Tsimane' oral history describes the period as troubled, characterized by epidemics, missionary abuse, and Tsimane' resistance to settlement, exemplified by the killing of a missionary (1862), the destruction of missions, and confrontations with converted indigenous groups (Daillant, 2003; Huanca, 2008). Ethnographers have argued that the relative economic autarky, dispersed settlement pattern, and lack of political representation displayed by the Tsimane' until recently are the result of their resistance to settle in missions (Chicchon, 1992; Perez-Diez, 1989; Riester, 1993).

The late-19th century brought the expansion of commercial interests into the Bolivian Amazon, first through the extraction of rubber (*Hevea brasiliensis*) and quinine (*Cinchona* spp.) and then through ranching and agriculture (Gamarrá, 2007). Those activities seem to have resulted in important changes in the area inhabited by the Tsimane'. Around 1910, San Borja received new migrants attracted by the rubber economy. Soon after, with the collapse of rubber markets, those migrants converted to cattle ranching. Big cattle farms were installed in areas previously used by indigenous peoples and used indigenous peoples as workers (Jones, 1980). The development of air transportation in the 1940s gave a push to the local economy, easing the commercialization of beef and forest products (i.e., animal pelts, copaiba – *Copaifera reticulata* – oil).

Historical records from this period continue to describe the Tsimane' as a relatively isolated population: seemingly they did not participate in rubber camps or cattle ranching (Chicchon, 1992), although apparently they engaged in trading forest products, mainly with middlemen who visited their villages (Riester, 1993).

Although the Tsimane' might have resisted to enter in the new economic system, their territoriality was affected by new land uses that resulted either in Tsimane' progressive participation in the new economy (often through the establishment of new labor relations based on debt peonage) or – for the one who resisted – in their displacement towards more remote areas.

4. The productivist period: from the 1952 Revolution to the 1994 constitutional reforms

4.1. Forest frontiers expansion (1952–1980s)

Productivist policies born from the 1952 Revolution aiming to expand crop production and to modernize the large-scale agricultural sector directly targeted the Bolivian lowlands. Those policies stimulated agricultural production through capital investment, credit, technological assistance, and the expansion of the road network (Arrieta et al., 1990; Zeballos, 1975). The state also encouraged migration from the densely populated highlands and valleys to the lowlands. The expansion of agriculture and road development preceded timber extraction, an activity that remained unregulated until 1974. Thus, policies resulting from the 1952 agrarian reform had the effect of pushing the forest frontiers into previously inaccessible territories encroaching most of the lands traditionally occupied by lowland indigenous groups (Pacheco et al., 2010).

From the policies born from the 1952 Revolution, the first processes that deeply affected Tsimane' lands were the opening of roads and the consequent arrival of colonists. The first road in the region was opened between San Borja and Trinidad in 1975. Soon after, between 1975 and 1986, and especially once the road from Yucumo to Rurrenabaque was finished in 1979, the Rurrenabaque-Sécure colonization project brought a mass of highland settlers to the area (Bottazzi, 2008). The colonization program created nuclei of 40 households, giving 25 ha of land to each family as private property (Pacheco, 2002). After 1987, with the improvement of the road between San Borja-Yucumo-Rurrenabaque, permanent migration increased rapidly (VSF, 1995).

Colonization affected the Tsimane' in three different ways. First, Tsimane' living in areas where hunting grounds were destroyed moved to other parts (mainly the Maniqui and the Quiquibey rivers) (Bottazzi, 2008). Second, some Tsimane' moved their settlements closer to the road, soon becoming wage laborers in colonists' properties (Bottazzi, 2008). Third, some Tsimane' received land as private property. The National Institute of Colonization reserved six blocks for the Tsimane' in an attempt to create a "Tsimane' Nucleus." In the late 1990s, a few Tsimane' families were integrated as formal landowners receiving land titles on small parcels in the colonization area (Bottazzi and Dao, 2013). Land conflicts soon arose between Tsimane' and colonists who lived in the area bordering the Tsimane' nuclei (Huanca, 2008).

The construction of the San Borja-Yucumo-Rurrenabaque road also intensified the arrival of loggers to the area (Chumacero, 2011). The forestry department had identified the *Chimane Forest* as a timber-rich area of approximately 1.2 million hectares in the southwest of the Beni department. During the 1970s, the Chimane Forest was considered the largest mahogany (*Swetenia macrophylla*) reserve in South America (Jones, 1980). The area was also rich in other commercial species such as cedar (*Cedrela odorata*) and oak (*Amburana cearensis*). Logging companies operated without regulation in the area until 1978, when the government declared the Chimane Forest an Embargoed Forest Reserve, barring logging until studies were carried out to determine whether the area should be classified as a Permanent Production Forest or as a Protected Forest (Lehm, 1994a). Despite the embargo, logging

companies continued to harvest timber in the southern end of the area and lobbied to have the embargo lifted. In 1986 the Bolivian government surrendered to those pressures and converted 579,000 ha in the southern sector into a Permanent Production Forest (Lehm, 1994a).

As the arrival of colonists, logging had different effects on Tsimane' use of the land and natural resources. On the one side, logging companies damaged traditional Tsimane' hunting and fishing grounds, as well as some important Tsimane' cultural remains (Daillant, 1997) forcing many families to migrate (Huanca, 1999). On the other side, lured by the possibility to obtain cash from wage labor, some families decided to settle around the roads opened by logging companies, where Tsimane' men would help locate wood and traded bush meat for market products with loggers (Gullison et al., 1996).

The rich biological diversity of the area also attracted the attention of national and international conservation organizations. From 1939 until the end of the 1990s, the Bolivian government had recognized by decree 26 protected areas covering 15% of the national territory (Zimmerer, 2011). Most of those areas overlapped with lands inhabited by indigenous peoples. For example, in 1965, the government created the Isiboro-Sécure National Park (1.2 million ha) in an area inhabited by Tsimane', Yuracaré, and Moxeños (Vandebroek et al., 2004). In 1977, the Man and Biosphere program (UNESCO) declared a Biosphere Reserve in the Pilón-Lajas area (400,000 ha), along the Quiquibey river in the second-largest territory inhabited by the Tsimane'. Studies conducted in the Chimane Forest led the National Academy of Sciences of Bolivia to create, in 1982, the Estación Biológica del Beni (135,000 ha) a protected area in the lower section of the Maniqui River, where some Tsimane' settlements were found. However, at an early stage, the establishment of protected areas did not seem to affect indigenous peoples, mainly because of poor enforcement of protection.

4.2. Structural adjustments and indigenous people's political awakening (1985–1994)

By 1985, Bolivian military dictatorships had given way to elected democracies which embarked on a structural adjustment program strongly relying on a market-oriented approach, thus increasing support to export-oriented agricultural and logging activities (Pacheco, 2006; Zimmerer, 2011). Policies from those programs increased encroachment upon indigenous lands by logging companies, agribusiness activities, and colonist farmers. As in other Latin American countries, those pressures eventually resulted in a collective reaction of lowland indigenous groups in defense of their lands.

Since the 1952 agrarian reform, highland and lowland communities were organized in farmers unions (*sindicatos campesinos*) with some political representation, but without territorial aspirations (Colchester et al., 2001). In 1982, leaders of lowland regional groups, with the support of foreign NGOs, formed a national confederation to claim indigenous rights, i.e., the recognition of indigenous authorities, the pursuit of multi-cultural and multi-lingual education, but especially the recognition of indigenous lands. As a way to demand government recognition of their territorial rights, in 1990, lowland indigenous groups organized a peaceful march to the capital city of La Paz. This march has been considered of extreme political importance, as it resulted in the first granting of land titles to indigenous groups (Jones, 1993; Lehm, 1994a) pushing the government to ratify the 169 ILO Convention. But, as the Tsimane' case study suggests, the land titling process that has been linked to this march reflects indigenous political pressures as much as it reflects pressures by other sectors.

The Tsimane' historical resistance to settlement in missions resulted in a late and tampered incorporation into the political

arena. This is especially true when compared to other lowland indigenous groups, such as the Moxeños or the Trinitarios, characterized by a strong organizational capacity. The Tsimane' only started to participate in national politics in 1987, at a time when the governments of Bolivia and the USA reached an agreement through which USA would cancel a small portion (US\$650,000) of Bolivia's foreign debt in exchange for the declaration of the Beni Biological Station as a Biosphere Reserve. The agreement was reached without consulting indigenous peoples, something that was highly contested and raised outsiders attention on the need to strengthen Tsimane', and lowland indigenous peoples in general, political organization (Stocks, 2005; Thapa, 1998).

The first Tsimane' political organization, the Gran Consejo Tsimane' (Tsimane' Grand Council, GCT), dates of 1989. The GCT was coached by Protestant missionaries and – according to some analysts – supported by logging companies to channel Tsimane' land-demands against Moxeños territorial ambition in the *Chimane Forest*, since at that time Tsimane' were considered easier to manipulate than the Moxeños (Lehm, 1994b). The GCT put forward a territorial claim requesting control over an area that includes the Maniqui river, the Eva Eva mountain range, and part of the pampas (Bottazzi, 2009). Two ministerial decrees, one of them passed before the 1990 march, initially recognized Tsimane' rights to land. The first decree (DS No. 23611) assigned to the Tsimane' people an area of 392,220 ha on along the Maniqui River named Territorio Indígena Chimane (TICH, Tsimane' Indigenous Territory). The TICH partly overlapped with the Beni Biological Station and did not include areas previously granted to logging concessions. The same decree recognized the Multiethnic Indigenous Territory (TIM), an area of about 400,000 ha shared by Moxeños, Tsimane', Yuracaré, and Movima (Chumacero, 2011). A second decree (DS No. 22610) converted part of the Isiboro-Secur National Park into an indigenous territory (Tierra Indígena Parque Nacional Isiboro-Secur, TIPNIS) shared by Moxeños, Yuracarés, and Tsimane'.

The initial recognition of Tsimane' land-rights was based on a very restricted view of Tsimane' territoriality, mostly limited to the Maniqui river, without considering that a large share of Tsimane' settlements were spread in the Pilón-Lajas Biosphere Reserve and along the road between Yucumo and Rurrenabaque. As the first presidential decree securing land to the Tsimane' could not be extended, the Tsimane' and other indigenous groups of the Pilón Lajas had to replicate territorial claims. In 1991, a second Tsimane' political organization – the Consejo Regional Tsimane'-Mosetene (CRTM, Regional Council Tsimane'-Mosetene) – was founded to convey the territorial claims of the inhabitants of Pilón-Lajas to the central government. The CRTM was founded with the support of an agro-ecological Bolivian NGO, the GCT, and the protestant missionaries. Following their claims, in 1992, another decree proclaimed the Indigenous Territory Tsimane'-Mosetene in an area that largely overlapped with the Pilón-Lajas Biosphere Reserve. As the TIPNIS, the new area, called the Biosphere Reserve and Indigenous Territory of Pilón-Lajas, had dual status as a protected area and as an indigenous territory.

The decrees approved during this period do recognize Tsimane' rights to land, but they also reflect pressures by the logging and the conservationists sectors. As a consequence, Tsimane' territory was split into two main territorial entities: the TICH and the Pilón Lajas. The first was mainly supported by a logging lobby, who considered that – given the lack of Tsimane' strong political organization – securing Tsimane' rights to this forest was the best way to keep forest concessions operating (Lehm, 1994a). The second was mainly supported by the conservationist sector, which considered indigenous people as conservation allies and had started to push the Bolivian government for the co-administration of protected areas (Bottazzi, 2008). An additional part of the lands inhabited by the

Tsimane' fell into territorial entities (TIM and TIPNIS) dominated by other lowland indigenous groups and with very marginal Tsimane' representation.

5. Neoliberal multicultural reforms (1994–2006)

As in several other Latin American countries, local indigenous self-governance movements were received with neoliberal 'multicultural' reforms seeking to 'shape and neutralize' political opposition with the partial recognition and the bestowal of limited rights to land (Hale, 2005, p. 10). This was the tendency adopted in 1994 by the neoliberal government of President Sánchez de Lozada by means of a broad constitutional reform in Bolivia. At a formal level, changes derived from those reforms acknowledged Bolivia's multiethnic and pluricultural nature and recognized the social, cultural, and economic rights of indigenous peoples. At a practical level, the government passed several laws, including land (1996) and forestry (1996) laws that deepened pressures in the areas inhabited by lowland indigenous peoples. Some changes recognized 'use' rights to indigenous people to satisfy their basic demands to land, but other changes laid the ground for the private appropriation of most agricultural land and the timber resources located inside areas inhabited by indigenous groups.

The 1996 agrarian reform law (No. 1715) was an ambitious attempt to secure private and common property rights to land based on the demonstration of land's social and economic function (de Jong et al., 2006; Hernáiz and Pacheco, 2000). The law also introduced the figure of Tierras Comunitarias de Origen (TCOs, Communal Original Lands) allowing groups of communities to jointly claim a territory through their representative organizations. Areas previously assigned by presidential decrees to indigenous peoples, such as the TICH or the TIM, were officially recognized as TCOs. According to this law, indigenous peoples had the right to hunt, clear land, and extract timber and non-timber forest products for consumption from their TCOs, but these territories were inalienable through sale or rental (Chumacero et al., 2009; INRA, 2010). Commercial timber extraction from TCOs needed approved management plans. The law also foresaw a land registration process (referred to as *saneamiento*) to clarify the rights of third parties before the legal recognition of TCOs. Critically, in this process all claimants had priority over indigenous peoples (Assies and Salman, 2000).

Another important reform affecting land tenure was the 1996 forestry law. This law sought to attract private investments into forestry while promoting equitable access to forests and sustainable forestry (Pacheco et al., 2010). The law defined two major types of production forests: long-term forest concessions and private lands, both requiring forest management plans (Pacheco et al., 2010). However, to regularize logging contracts assigned under the 1974 law, typically either in private properties, protected areas, or indigenous lands (Hunnisett, 1996), the forestry law reconverted those contracts to long-term forest concessions. The law also stipulated that, in case of overlap with TCOs, concessions would have priority, as forestry contracts preceded the agrarian law (Pacheco, 2007).

Conservation measures seemed to move towards the recognition of indigenous peoples rights. As mentioned, the establishment of protected areas initially did not disturb lowland indigenous peoples. Rather, environmental protection helped them to control the advancement of logging and colonization. During the late 1990's, the Bolivian government deployed the themes of sustainable development and the co-administration of protected areas (including indigenous peoples' participation) as major discursive tools of its decentralization processes and its conservationist agenda (Bottazzi, 2008). For example, since 1998 the Pilón-Lajas is

co-managed by the national service of protected areas, SERNAP, and the CRTM. The Tsimane' have also been included in the management of the Beni Biological Station, mainly as park rangers.

At a first glance, the changes brought by the 1990s constitutional reforms seem a big step forward in the recognition of indigenous peoples' rights to land and natural resources. However, their real implications of indigenous peoples' rights to land are more complex.

The new agrarian law gave land rights to indigenous peoples, but it also clarified and secured property rights for large-scale agribusinesses and logging companies (Kohl, 2003). The actual process of land demarcation (*saneamiento*) has been slow in most of the territories and has privileged non-indigenous peoples (Assies, 2006). Even the inclusion of indigenous peoples in protected areas management can be seen as a decrease of indigenous peoples' rights to lands, as before such legislations indigenous peoples had the *de facto* total management of those resources, which became partially controlled by the National Service of Protected Areas and foreign NGOs after establishment of protected areas. Conflicting interests between TCOs and logging concessions, agribusinesses, infrastructure development, and private landowners, guided the process of land titling to a halt by 1999 (Martínez, 2000).

An important constraint of the 1990s reforms was that land rights were not accompanied by political rights. It should be noted that the 1996 agrarian reform law was strictly about property. The term "Communal Original Lands" (TCOs) purposely avoided any reference to "territory," which would imply the acceptance of political authorities and jurisdiction (Assies, 2006; Van Cott, 2000). The 1994 popular participation law, which aimed at administrative decentralization, involved the recognition of indigenous authorities and allowed for the creation of indigenous municipal districts under an indigenous vice-major (*subalcalde*). The law also foresaw sharing federal revenues with these municipalities and organized an indigenous sub-municipality (*subalcaldía*), which theoretically benefited from a municipal budget. Despite those provisions, the Tsimane' had very little capacity to influence formal administrations, even at the municipal level where power was held by traditional parties controlled by cattle rancher lobbies (Chumacero, 2011). In fact, the Tsimane' did not have municipal representation until 2004 and they exercised political participation through informal mechanisms like the GCT or the CRTM.

Another constraint in the application of the 1990s reforms was that any benefits from those reforms were unequally distributed among the Tsimane' themselves. From its creation, the GCT monopolized the forest revenues obtained from logging companies. Since its creation, logging companies paid a percentage of their benefits to the GCT. With the expulsion of logging companies from protected areas, after the 1996 forestry law, logging companies had to find new extraction areas, which often took them to extract wood from indigenous territories, such as the TIM and the TICH (Gullison et al., 1996). Over the years, the GCT has signed a number of agreements granting permits to extract wood within the TICH, although in 2012 the TICH was the only TCO in Bolivia without a forestry management plan (Chumacero, 2011). Since those agreements only benefited the Tsimane' elite, and as in other parts of Bolivia (Pacheco et al., 2010), a growing number of Tsimane' have started to negotiate timber extraction in their communal lands with illegal loggers, or to engage in illegal logging themselves.

In sum, the apparently pro-indigenous policies enacted in Bolivia after 1994 contrast with other policies designed to stimulate national economic growth through infrastructure expansion, commodity exports, and also with conservation policies. Overall, rather than securing indigenous peoples' land rights, such policies resulted in the concession of large extensions of land to logging companies and industrial agro-corporations, in the massive

migrations of highland indigenous and peasant settlers to the lowlands (Hecht, 2005; Killeen et al., 2008; Pacheco, 2006) and in restrictions on the use of land and natural resources from conservation policies (Zimmerer, 2011).

Social disagreement with the result of the neoliberal reforms led Bolivia, during 2000–2005, to what some authors have named as a left-indigenous insurrectionary period (Webber, 2008). This period was characterized by a crisis of governmental institutions and ample urban and rural mobilizations. For example, unresolved land problems prompted lowland indigenous peoples to undertake another march for "Lands, Territories, and Natural Resources" in 2000. The march initially resulted in an agreement of the government to accelerate the titling process, yet by 2005 only 14% of the land within TCOs had completed the land registration process and TCOs continued to suffer from encroachment and governance problems (INRA, 2005). Throughout the country, the rural and impoverished urban class claimed larger social control over natural resources such as water, natural gas and oil, minerals, and land – whether private for smallholders or communal for indigenous peoples (Webber, 2008). This period led to the election, in December 2005, of the first indigenous Bolivian president (Evo Morales, from the Movimiento al Socialismo-MAS).

6. Latest agrarian reform (2006–2012): 'Indigenous autonomies' or return to productivism

Morales' electoral victory resulted in the entrance of topics such as social justice and indigenous rights in the Bolivian national political agenda in unprecedented ways, although the debate exists of whether MAS policies only represent a continuation of the inherited neoliberal agenda (Ormachea-Saavedra, 2008; Webber, 2008). The new administration launched a National Development Plan with the overarching goal of reducing poverty and social inequality in Bolivia. The plan emphasized the need to promote natural resources industrialization, including the development of community forestry as a way to harmonize forest resources conservation and poverty reduction in forested landscapes (MDRAYMA, 2008; Pacheco et al., 2010). To tackle widespread poverty in rural areas, the plan included an agrarian reform, known as the communal reorientation of agrarian reform law (2006) that sought to redistribute public lands – mostly forests – among rural and indigenous communities. The new law, however did not challenge the logic upon which land had to be productive (Ormachea-Saavedra, 2008; Redo et al., 2011). Invoking the unfinished 1952 agrarian reform, the 2006 law expanded provisions for the acceleration of titling and centralized control over land categorization. At a practical level, the new agrarian reform significantly advanced the process of titling indigenous' and peasants' lands. From 2006 to 2009, 31 millions of hectares (60% within TCOs) were regularized (Chumacero, 2011).

More recently (2009), the government has also tried to address the indigenous demands for self-governance and territory by adopting a new constitution which includes an innovative and rather complex notion of territorial autonomy for indigenous groups. The new constitution seeks to grant more political autonomy to indigenous peoples. As a first step on that process, in December 2010 the government passed a decree (DS No. 727) converting all TCOs into a new land category named TIOCs (*Territorios Indígenas Originarios Campesinos*). TIOCs are collective lands belonging to indigenous and peasant communities, which do not necessarily match the limits of other administrative units (i.e., departments, provinces, or municipalities). The issue of limits is relevant, as there are provisions so TIOCs could become autonomous territorial units (*Autonomía Indígena Originaria Campesina*, AIOC). According to the 2009 constitution, TIOCs could create AIOCs even if their lands overlap with more than one municipality.

Contrary, TIOCs whose lands overlap with more than one department could not create AIOCs (Chumacero, 2011).

At a local political level, during the legislative elections in 2010, settlers' political organizations (mainly workers unions) and Tsimane' representatives established a coalition against cattle ranchers' factions, presenting the president of the GCT, Jorge Añes, as candidate to the municipal council running for Morales' political party. The election ended successfully for settlers and indigenous groups, and Añes became the first indigenous mayor of San Borja. The situation brought important changes regarding the administration of indigenous communities under decentralization mechanisms. For example, the municipal budget for indigenous rural areas has increased significantly and some new basic services infrastructures have been built in indigenous communities. Previous indigenous governance entities such as the GCT have not been dismantled but the new situation has created new forms of synergies between state and non-state organizations.

It is important to notice that, although the Morales administration seems to have favored indigenous people's land rights, it also faces important conflicts in areas where opposing interests are present. The more explosive situation takes place in the TIPNIS, where despite the dual status as protected area and indigenous land, the Morales administration has repeatedly acted against the interests of both conservationists and lowland indigenous peoples. Indeed, in 2009 Morales' government reallocated 10% of the TIPNIS area to coca planters encroaching upon the area since the 1970s. During the same period the government signed a contract to start

the construction of a road linking the cities of Cochabamba and San Ignacio through TIPNIS without previous consultation to the indigenous peoples who would be affected. Lowland indigenous peoples fiercely oppose the construction of the road and, over the last two years, the topic has become the cornerstone of violent conflicts between the government, peasants, and lowland indigenous peoples, with marked governmental repression of indigenous and non-governmental interest opposing the construction of the road (Ortiz-Echazú, 2011).

Thus, the succession of land policies has deeply fragmented the territory inhabited by the Tsimane' and it has complicated its governability as different state and non-state actors (including the Tsimane' themselves) hold different rights over land and resources. Tsimane' villages are now found in 4 TIOCs: some 55 Tsimane' villages are in the TICH, around 20 in the Pilón-Lajas, 7 in the TIM, and 3 in the TIPNIS. Due to the dual status of some areas, there are now some 36 Tsimane' villages in protected areas, including 8 within the limits of the EBB, 3 in the TIPNIS, and around 25 in the Pilón-Lajas. Around 31 other Tsimane' villages are in private lands, which include (but are not limited to) colonization areas. One village is in state land. Finally, 15 Tsimane' villages are in lands given to forest concessions, 4 of which overlap with private land (Fig. 2). Each of those territorial entities has different organizations in charge of its management, including indigenous peoples, and the organizations representing them (in the case of multiethnic territories, there are several organizations), municipalities, forest concessions, private owners, and protected area managers. This

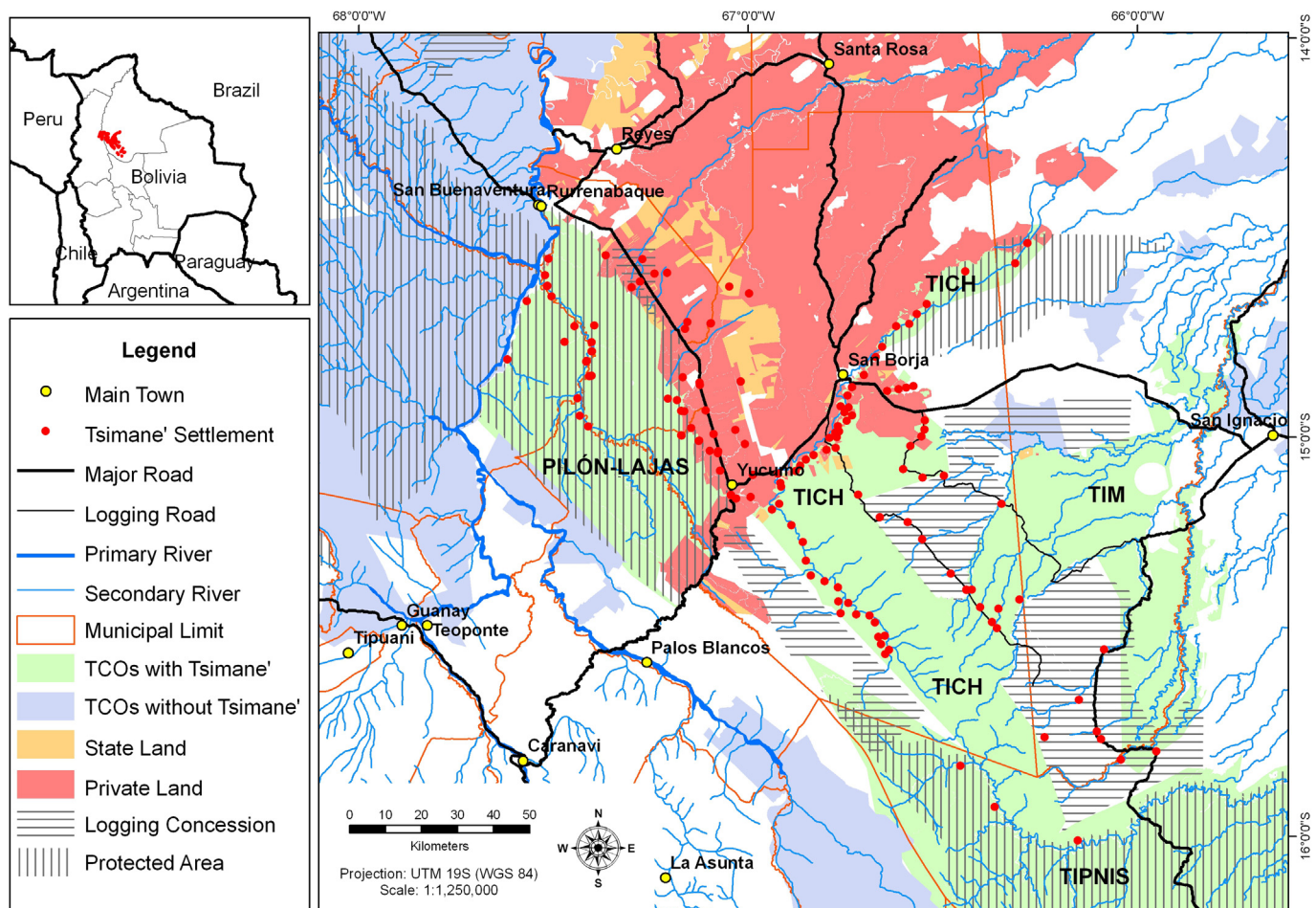


Fig. 2. Spatial distribution of Tsimane' settlements across land tenure types.

territorial and administrative overlap hampers the governance task for the indigenous political entities primarily concerned with the control of their lands. The situation is particularly difficult due to the fragmentation of the indigenous political entities themselves, having unclear competencies on land tenure and resource access (Bottazzi and Dao, 2013). Furthermore, although the arrival of Añes to the municipality could be interpreted as the arrival of lowland indigenous peoples into power, some authors rather interpret it as a part of a co-option process that subordinates previously independent organizations (with demands for land and governance rights) to the state and the established system of political parties (Regalsky, 2010).

The fragmentation of the Tsimane' nation in almost four formalized territories (TICH, Pilón Lajas, TIM and Isiboro-Sécure) makes it difficult for the Tsimane' to conserve a political and territorial unity thus weakening governability.

7. Threats and opportunities for the near future

Current events depict some threats but also new opportunities for the Tsimane'. The first threat comes from the new state land distribution policy and the development of the road network, as roads to Tsimane' villages are being planned and built and the inter-regional road that links the town of San Borja with the capital city of La Paz will be partially paved soon. As in the 1970s, the combination of new land distribution policies and improved access could facilitate the arrival of migrants to the area, potentially boosting the number of encroachers upon TIOCs with weak governance systems. This pressure is already evident in the occupation of lands within forest concessions neighboring Tsimane' TIOCs (personal observations). The boundaries of the TICH and the TIM were originally set respecting the existence of previous forest concessions, but provisions were made so once the concessions finished (in 2011), lands would be re-incorporated in the TCOs (Chumacero, 2011). The GCT aspires to recover some of the land for the Tsimane' TIOC, partly to make up for land lost under the *saneamiento* process. But, under the new agrarian reform, the land could be granted under collective ownership to new smallholder settlements (probably to newly arrived highland colonists). Because the demonstration of the social and economic function given to the land would help smallholders to obtain their legal tenure, several colonists have installed themselves in the land of commercial forest concessions, sometimes also using land within the Tsimane' TCO.

A second threat to Tsimane' lands comes from oil concessions. In the 1990's, three blocks (Securé, Rurrenabaque and Tuichi oil blocks) including large parts of TIPNIS and Pilón-Lajas were leased to REPSOL and PETROBRAS for exploratory work (Gavalda, 2003). Seismic lines were cut and several exploration wells were drilled. Activity on these blocks stalled for several years but in 2001 three new oil blocks were leased in the area (Rio Hondo, Tunchi Norte, Tunchi Sur), covering 15,000 km² and overlapping the Tsimane' territories. Exploration activities have been stopped since 2004 due to problems with environmental licenses. In April 2008, Evo Morales gave 5 new concessions for oil exploration in this area, three of them affecting Tsimane' lands (Lliquimuni, Chispani and Securé) (Agencia Nacional de Hidrocarburos, 2012). Rising oil prices and the TIPNIS road project have spurred the debate about a new wave of hydrocarbon activities expected to hit the region in the near future. In the same vein, as gold price rises in international markets as the world economic recession continues, gold mining-related conflicts are escalating in other regions such as the Peruvian Amazon (Orta and Finer, 2010) and could also be expected in the Tsimane' territory, where there have already been several booms of incursions aiming at exploiting the region's gold deposits.

The new constitution opens new possibilities for governance by giving current TIOC indigenous councils (like the GCT and the CRTM) the possibility to reach a higher level of autonomy in natural resource management, land governance, and even tax collection. However, negotiations about autonomy are actually evolving with high conflictivity at national and regional levels, including the participation of indigenous and settlers' organizations and the organization of multiple demonstrations and strikes (Bottazzi and Rist, 2012).

In any case, the level to which the Tsimane' can achieve some form of self-government is an open question. Several of the TIOCs where Tsimane' communities are found are shared with other indigenous groups, who probably also hold aspirations to self-government. Furthermore, although the TICH and the TIM are both integrally in the department of Beni, the two other TIOCs where Tsimane' are found overlap with different departments: TIOC Pilón-Lajas falls in the departments of La Paz and Beni and TIPNIS overlaps with the departments of Beni and Cochabamba. Thus, although the establishment of an AIOC between continuous TIOCs is legally possible, in the case of the Tsimane' this seems difficult as that would require the consent of different Tsimane' and non-Tsimane' indigenous organizations, different state organizations (municipalities, departments), as well as of other actors with a stake in their lands (protected area managers, logging concessions, cattle ranchers, and colonists farmers).

8. Conclusion

Indigenous struggles have led to the recognition that significant portions of the world's tropical forests are occupied and used by indigenous peoples who depend on them for their livelihoods. One of the outcomes of those struggles is that, over the last 20 years, national governments have increasingly formalized indigenous peoples' land rights (Sunderlin et al., 2008). The creation of a territorial entity named *Tierras Comunitarias de Origen* by the Bolivian government is part of this process. However, as the case study of the Tsimane' suggests, the granting of formal titles to – some-of the forest lands occupied by indigenous peoples is insufficient to truly strengthen and stabilize local control over land and forest resources (see also Larson et al., 2007; Stocks, 2005).

The recognition of indigenous peoples' rights to land occurred at the same time than other policies (productivist, neoliberal multiculturalism, and conservationist), strongly shaping the resulting territorial and political structure outcomes. Conservationists' policies imposed restrictions on the use of land and natural resources, while defending the principles of 'double conservation': biodiversity conservation and the conservation of a supposed indigenous 'traditional' culture (Dumoulin, 2003). Productivist and neoliberal multiculturalism policies largely divided the Tsimane' into fragmented and different land tenure systems and led to a multiplication of local political entities. Each of those territorial policies has strongly influenced the structure as well as the principles of indigenous agency and governance by creating different territorial ontologies within the same indigenous population.

Nowadays, a map depicting the Tsimane' territory is the results from the compromises between many actors' interests regarding the appropriation of natural resources located on Tsimane' lands. Furthermore, the Tsimane' territory map evidences the lack of indigenous self-government which reflects the late arrival of indigenous peoples to the negotiation table (as cattle ranchers, colonization projects and forest concessions preceded any recognition of land-rights for indigenous peoples). The current territorial configuration also reflects power asymmetries once indigenous peoples' land rights were instituted as explained regarding the process of *saneamiento* (as all land claimants had priority over the

Tsimane'). Thus, the interests of external agents including state bodies – forestry and protected area departments –, conservation NGOs, and logging companies have been the strongest drivers in the configuration of the current Tsimane' use of space.

Through exerted pressure but also alliances, external agents have influenced not only the spatial component occupied by the Tsimane' but also the institutional configuration that aims at defining their rights to access and control of the territory. The establishment of TCOs, and later on of TIOCs, gives the idea of a multiethnic state, but in fact has not resolve land issues, and conflicts over indigenous lands continue (Assies and Salman, 2000; Van Cott, 2000b). Although the current constitution opens the possibility for indigenous organizations to increase their control over their land and resources, the territorial and political fragmentation inherited from previous periods, and aggravated by the continuation of contradicting laws with the current government, challenges the real possibilities for this to happen.

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References

- Agencia Nacional de Hidrocarburos, 2012. Información Estadística de las Actividades del Upstream (Acceded 15.03.13.). <http://www.anh.gob.bo/index.php?area=Dtep>.
- Arrieta, M., Abrego, G., Castillo, A., Fuente, M.d.l., 1990. Agricultura en Santa Cruz: de la encomienda colonial a la empresa modernizada (1559–1985). Instituto Latinoamericano de Investigación Social, La Paz.
- Assies, W., 2006. Land tenure legislation in a pluri-cultural and multi-ethnic society: the case of Bolivia. *J. Peasant Stud.* 33, 569–611.
- Assies, W., Salman, T., 2000. Re-visioning cultures of politics – an essay on social movements, citizenship and culture. *Crit. Anthropol.* 20, 289–307.
- Bottazzi, P., 2008. Linking 'socio-' and 'bio-' diversity: the stakes of indigenous and non-indigenous co-management in the Bolivian lowlands. In: Galvin, M., Haller, T. (Eds.), *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe, Perspectives of the Swiss National Centre of Competence in Research (NCCR) North–South*. Geographica Bernensia, Bern, pp. 81–110.
- Bottazzi, P., 2009. Indigenous governance, protected areas and decentralised forestry: a comparative analysis of two tsimane' territories in the bolivian lowlands. In: Geiser, U., Rist, S. (Eds.), *Decentralisation Meets Local Complexity: Local Struggles, State Decentralisation and Access to Natural Resources in South Asia and Latin America, Perspectives of the Swiss National Centre of Competence in Research (NCCR) North–South*. Geographica Bernensia, Bern.
- Bottazzi, P., Dao, H., 2013. On the road through the Bolivian Amazon: a multi-level land governance analysis of deforestation. *Land Use Policy* 30, 137–146.
- Bottazzi, P., Rist, S., 2012. Changing land rights means changing the society: the sociopolitical effects of agrarian reforms under the government of evo morales. *J. Agrar. Change* 12, 528–551.
- Censo, I., 2001. Censo Indígena del Oriente, Chaco, y Amazonía. Secretaría de Asuntos Étnicos, de Género y Generacionales. Ministerio de Desarrollo Humano, La Paz.
- Colchester, M., Griffiths, T., MacKay, F., Nelson, J., 2004. Indigenous land tenure: challenges and possibilities. In: FAO (Ed.), *Land Reform. Land Settlement and Cooperatives*. FAO, Rome, pp. 8–27.
- Colchester, M., MacKay, F., Griffith, T., Nelson, J., 2001. A Survey of Indigenous land tenure. A Report for the Land Tenure Service of the Food and Agriculture Organization.
- Chapin, M., Lamb, Z., Threlkeld, B., 2005. Mapping indigenous lands. *Annu. Rev. Anthropol.* 34, 619–638.
- Chichon, A., 1992. Chimane Resource Use and Market Involvement in the Beni Biosphere Reserve. University of Florida, Bolivia.
- Chumacero, J.P., 2011. Territorios Indígena Originario Campesinos en Bolivia. Entre la Loma Santa y la Pachamama. Fundación Tierra, La Paz.
- Chumacero, J.P., Colque, G., Sanjinés, E., Sotomayor, C., Costas, P., Cameron, J., Salgado, J., Plata, W., Vadillo, A., 2009. Reconfigurando territorios. Reforma agraria, control territorial y gobiernos indígenas en Bolivia. Fundación Tierra, La Paz.
- Daillant, I., 1997. "Por ahí parió la mujer de Dios." La salina de los Chimanos y la destrucción de sus petroglifos. *SIARB* 11, 53–68.
- Daillant, I., 2003. Sens Dessus Dessous. Organization sociale et spatiale des Chimane d'Amazonie bolivienne. Société d'ethnologie, Nanterre.
- de Jong, W., Ruiz, S., Becker, M., 2006. Conflicts and communal forest management in northern Bolivia. *For. Policy Econ.* 8, 447–457.
- Dumoulin, D., 2003. Local knowledge in the hands of transnational NGO networks: a Mexican viewpoint. *Int. J. Soc. Sci.* 178, 593–605.
- Ellis, R., 1996. A Taste for Movement: An Exploration of the Social Ethics of the Tsimane' of Lowland Bolivia. St Andrews University, Scotland.
- Escobar, A., 1998. Whose knowledge, whose nature? Biodiversity, conservation, and the political ecology of social movements. *J. Polit. Ecol.* 5.
- Finer, M., Jenkins, C.N., Pimm, S.L., Keane, B., Ross, C., 2008. Oil and gas projects in the Western Amazon: threats to wilderness, biodiversity, and indigenous peoples. *PLoS One* 3, e2932.
- Gamarra, M.d.P., 2007. Amazonia norte de Bolivia. *Economía Gomera 1870–1970* (La Paz).
- Gavaldá, M., 2003. La Recolonización. Repsol en América Latina: invasión y resistencias. Icaria, Barcelona.
- Gullison, E., Panfil, S.N., Strouse, J., Hubbell, S., 1996. Ecology and management of mahogany (*Swietenia macrophylla* King) in the Chimanos Forest, Beni, Bolivia. *Bot. J. Linn. Soc.* 122, 9–34.
- Hale, C., 2005. Neoliberal multiculturalism. *PolAR Polit. Leg. Anthropol. Rev.* 28, 10–19.
- Hecht, S.B., 2005. Soybeans, development and conservation on the Amazon frontier. *Dev. Change* 36, 375–404.
- Hernández, I., Pacheco, D., 2000. La Ley INRA en el Espejo de la Historia: Dos Siglos de Reformas Agrarias en Bolivia. Fundación TIERRA, La Paz.
- Huanca, T., 1999. Tsimane' Indigenous Knowledge. Swidden Fallow Management and Conservation. University of Florida.
- Huanca, T., 2008. Tsimane' Oral Tradition, Landscape, and Identity in Tropical Forest. Imprenta Wagui, La Paz.
- Hunnisset, G., 1996. The Forest Sector and Deforestation in Bolivia. The World Bank, La Paz.
- INRA, 2005. Estado del Proceso de Saneamiento. Instituto Nacional de Reforma Agraria, La Paz, Bolivia. Mayo 2005.
- INRA, 2010. La Tierra Vuelve a Manos Indígenas y Campesinas. Cambia la Estructura de la Propiedad Agraria. INRA, Estado plurinacional de Bolivia, La Paz.
- Jones, J., 1980. Conflict between Whites and Indians in the Llanos de Moxos, Beni Department: a Case Study in Development from the Cattle Regions of the Bolivian Oriente. University of Florida.
- Jones, J., 1993. A native movement and march in eastern Bolivia: rationale and response. *Dev. Anthropol. Netw.* 8, 1–8.
- Kay, C., 2002. Agrarian reform and the neoliberal counter-reform in Latin America. In: Chase, J. (Ed.), *The Spaces of Neoliberalism. Land, Place and Family in Latin America*. Kumarian Press, Bloomfield, pp. 25–52.
- Killeen, T.J., Guerra, A., Calzada, M., Correa, L., Calderon, V., Soria, L., Quezada, B., Steininger, M.K., 2008. Total historical land-use change in eastern Bolivia: who, where, when, and how much? *Ecol. Soc.* 13.
- Kohl, B., 2003. Democratizing decentralization in Bolivia – the law of popular participation. *J. Plan. Educ. Res.* 23, 153–164.
- Langer, E.D., Muñoz, E., 2003. Contemporary Indigenous Movements in Latin America. Scholarly Resources Inc, Wilmington.
- Larson, A.M., Pacheco, P., Toni, F., Vallejo, M., 2007. Trends in Latin American forestry decentralisations: legal frameworks, municipal governments and forest dependent groups. *Int. For. Rev.* 9, 734–747.
- Lehm, Z., 1994a. The Chimane's forest: a stage for social conflict (1986–1993). In: Pendzich, C., Thomas, G., Wohlgent, T. (Eds.), *The Role of Alternative Conflict Management in Community Forestry*. FAO, Rome, Italy.
- Lehm, Z., 1994b. Estudio socio-económico del territorio indígena Reserva de la Biosfera Pilon Lajas. Veterinarios sin Fronteras and CIDDEBENI, La Paz, Bolivia.
- Martinez-Alier, J., 2007. Identity and power in ecological conflicts. *Int. J. Transdiscipl. Res.* 2, 17–41.
- Martínez, J.A., 2000. Atlas Territorios Indígenas en Bolivia: Situación de las Tierras Comunitarias de Origen (TCOs) y proceso de titulación. Plural Editores, La Paz, Bolivia.
- MDRyMA, 2008. Política Nacional para la Gestión Integral de los Bosques. Ministerio de Desarrollo Rural, Agropecuario y Medio Ambiente, La Paz, Bolivia.
- Medina, G., Pokorny, B., Campbell, B., 2009. Loggers, development agents and the exercise of power in Amazonia. *Dev. Change* 40, 745–767.
- Metraux, A., 1948. The Yuracare, Mosekene and Chimane. In: Steward, J. (Ed.), *Handbook of South American Indians*. Smithsonian Institution, Bureau of American Ethnology, Washington.
- Offen, K., 2004. Historical political ecology. An introduction. *Hist. Geogr.* 32, 19–42.
- Offen, K., 2009. O mapeas o te mapean: Mapeo indígena y negro en América Latina. *Tabula Rasa* 10, 26.
- Ormachea-Saavedra, E., 2008. ¿Revolución agraria o consolidación de la vía terrateniente? El gobierno del MAS y las políticas de tierras. CEDLA, La Paz.
- Orta, M., Finer, M., 2010. Oil frontiers and indigenous resistance in the Peruvian Amazon. *Ecol. Econ.* 70, 207–218.
- Ortiz-Echazú, M.V., 2011. TIPNIS, la coca y una carretera acechan a la Loma Santa: territorio indígena en Cochabamba y Beni. In: Chumacero, J.P. (Ed.), *Territorios Indígena Originario Campesinos en Bolivia*. Fundación Tierra, La Paz, pp. 265–287.
- Ostrom, E., 1990. Governing the Commons. The Evolution of Institutions for Collective Action, 1281. Cambridge University Press, Cambridge.

- Pacheco, P., 2002. Deforestation and forest degradation in lowland Bolivia. In: Wood, C., Porro, R. (Eds.), *Deforestation and Land Use in the Amazon*. University Press of Florida, Gainesville, pp. 66–84.
- Pacheco, P., 2006. Agricultural expansion and deforestation in lowland Bolivia: the import substitution versus the structural adjustment model. *Land Use Policy* 23, 205–225.
- Pacheco, P., 2007. El nuevo régimen forestal boliviano: una mirada retrospectiva a diez años de su implementación. *Recur. Nat. Ambiente* 49, 58–67.
- Pacheco, P., de Jong, W., Johnson, J., 2010. The evolution of the timber sector in lowland Bolivia: examining the influence of three disparate policy approaches. *For. Policy Econ.* 12, 271–276.
- Paneque-Gálvez, J., Mas, J.F., Guèze, M., Luz, A.C., Orta-Martínez, M., Pino, J., Macía, M., Reyes-García, V., 2013. Land tenure and forest cover change. The case of southwestern Beni, Bolivian Amazon, 1986–2009. *Appl. Geogr.* 43, 113–126.
- Peet, R., Watts, M., 2004. *Liberation Ecologies*. Routledge.
- Perez-Diez, A., 1989. Chimane-Mosetene: Dos nombres y una misma cultura? Museo Nacional de Etnografía y Folclore, La Paz, Bolivia.
- Redo, D., Millington, A.C., Hindery, D., 2011. Deforestation dynamics and policy changes in Bolivia's post-neoliberal era. *Land Use Policy* 28, 227–241.
- Regalsky, P., 2010. Political processes and the reconfiguration of the state in Bolivia. *Lat. Am. Perspectives* 37, 35–50.
- Reyes-García, V., Orta-Martínez, M., Gueze, M., Luz, A.C., Paneque-Gálvez, J., Macía, M.J., Pino, J., and TAPS Bolivian Study Team, 2012. Does participatory mapping increase conflict? A randomized experimental evaluation in the Bolivian Amazon. *Appl. Geogr.* 34, 650–658.
- Riester, J., 1993. *Universo Mítico de los Chimanés*. HISBOL, La Paz, Bolivia.
- Rubenstein, S., 2004. Steps to a political ecology of Amazonia. *Tipití J. Soc. Anthropol. Lowl. S. Am.* 2, Article 2.
- Schmink, M., Wood, C., 1992. *Contested Frontiers in Amazonia*. Columbia University Press New York.
- Stavenhagen, R., 2005. The rights of indigenous peoples: closing a Gap in global governance. *Glob. Gov.* 11, 17–23.
- Stocks, A., 2005. Too much for too few: problems of indigenous land rights in Latin America. *Annu. Rev. Anthropol.* 34, 85–104.
- Sunderlin, W.D., Angelsen, A., Belcher, B., Burgers, P., Nasi, R., Santoso, L., Wunder, S., 2005. Livelihoods, forests, and conservation in developing countries: an overview. *World Dev.* 33, 1383–1402.
- Sunderlin, W.D., Hatcher, J., Liddle, M., 2008. From Exclusion to Ownership? Challenges and Opportunities in Advancing Forest Tenure Reform. Rights and Resources Initiative.
- Surrallés, A., García-Hierro, P., 2005. The Land Within. Indigenous Territory and the Perception of Environment. IWGIA, Copenhagen.
- Thapa, B., 1998. Debt-for-nature swaps: an overview. *Int. J. Sustain. Dev. World Ecol.* 5, 249–262.
- Urioste, M., Pacheco, D., 1999. *Bolivia: Land Market in a New Context (INRA Law)*. Fundación Tierra, La Paz.
- Van Cott, D.L., 2000. Party system development and indigenous populations in Latin America – the Bolivian case. *Party Polit.* 6, 155–174.
- Vandebroek, I., Calewaert, J., De jonckheere, S., Sanca, S., Semo, L., Van Damme, P., Van Puyvelede, L., De Kimpe, N., 2004. Use of medicinal plants and pharmaceuticals by indigenous communities in the Bolivian Andes and Amazon. *Bull. World Health Organ.* 84, 243–250.
- VSF, 1995. *Diagnostico para la implementación de la Reserva de Biosfera – Territorio Indígena Pilón Lajas*. Veterinarios Sin Fronteras, La Paz, Bolivia, pp. 1–183.
- Webber, J.R., 2008. Rebellion to Reform in Bolivia. Parts I to III: domestic class structure, Latin-American trends, and capitalist imperialism. *Hist. Mater.* 16, 23–109.
- West, P., Igoe, J., Brockington, D., 2006. Parks and peoples: the social impacts of protected areas. *Annu. Rev. Anthropol.* 35, 251–277.
- Zeballos, H., 1975. *From the Uplands to the Lowlands: an Economic Analysis of Bolivian Rural-rural Migration*. University of Wisconsin, Madison, Wisconsin.
- Zimmerer, K., Bassett, T., 2003. *Political Ecology: an Integrative Approach to Geography and Environment—Development Studies*. The Guilford Press, New York.
- Zimmerer, K.S., 2011. “Conservation booms” with agricultural growth? Sustainability and shifting environmental governance in Latin America, 1985–2008 (Mexico, Costa Rica, Brazil, Peru, Bolivia). *Lat. Am. Res. Rev.* 46, 82–114.