



# Local views and structural determinants of poverty alleviation through payments for environmental services: Bolivian insights

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## ABSTRACT

Payments for environmental services (PES) are very often considered emblematic of the neoliberal trend in natural resources and ecosystem management. Even if they have been largely criticized as contributing to the commodification of nature, their worldwide application is obvious. The explanation of their diffusion in poor countries and regions can be partially attributed to the fact that PES are promoted as a “win-win” solution, capable of improving sustainable management of natural resources as well as reducing poverty. Inscribed in a liberal conception of poverty, most of the investigations on PES concentrate on the question of access of the poor to PES schemes—as well as to wider markets—on redistribution of benefits and on poor people’s income increase. Studying a Bolivian PES, we show that broadening the foregoing conceptualization of poverty to a more relational understanding allows better taking into account local views and structural determinants of poverty and therefore allows better reporting of the complexity of poverty alleviation implications of such natural resource management initiatives. It is a first and necessary step in designing PES that could increase both natural resource conservation and social justice in marginalized areas.

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## 1. Introduction

Payments for environmental services (PES) are a natural resource management principle that aims at internalizing positive environmental externalities. PES intend to transform environmental services (like carbon storage or water purification) into commodities for becoming objects of market transactions between sellers and buyers. PES are seen as belonging to a set of tools related to a neoliberalizing trend in environmental governance. Emphasis is placed on public–private partnerships and market-based mechanisms as efficient ways to use, conserve and allocate natural resources.

In spite of criticism about their underlying economic vision of nature and governance (Kosoy & Corbera, 2010), PES are now widely applied. Part of their legitimacy in developing countries comes from the assumption that they can promote forest conservation, as well as poverty reduction (McAfee & Shapiro, 2010), in a “win–win” approach. The contribution of PES to poverty alleviation mostly concerns PES’ ability to facilitate market access and/or

revenue increase. Accordingly, research on other than material and monetary impacts of PES on poverty is rare (Greiner & Stanley, 2013).

After recalling the foundations of the neoliberal analysis of poverty and their implications for PES assessment methods, we move beyond the money metrics by analyzing a Bolivian PES called “Acuerdos Recíprocos por el Agua (ARA)”<sup>1</sup>. We show that social recognition represents a central evaluation criterion of locals to participate in the ARA. We illustrate how the ARA are constructing recognition relationships and how this could lead to the transformation or reproduction of existing institutions and power structures.

## 2. Poverty and poverty alleviation through PES

The theoretical and conceptual anchor of neoliberalism refers to a “classical liberalism” claiming for minimal state interventions and submitting “all human activities, values, institutions, and practices to market principles” (p. 118) (Brown, 2011). Despite local variations in the implementation of the neoliberal paradigm, the dissemination of the neoliberal *doxa* has mutated public policy. Many States have moved from an interventionist and

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<sup>1</sup> Reciprocal agreements on water.

counter-cyclical economic governance to policies that prioritize deregulation as a means of enhancing entrepreneurial activity.

Hence, poverty is seen as a condition of a residual group of ill-adapted people (Thorsen & Lie, 2006). Poor people understood in this way can only be lifted out of poverty through trickling down of economic growth and through the suppression of all alleged “premiums on laziness” introduced by the welfare state (social security benefits without counterparts, etc.). The latter are considered as reinforcing the passive acceptance of unequal and clientelist relationships preventing individuals from “improv[ing] their capacities and inclinations as economic citizens” (p. 5) (Golooba-Mutebi & Hickey, 2009). Therefore, the main strategy for alleviating poverty consists in liberalizing economic relations and creating appropriate incentives for making agents fit the market conditions (p. 6) (Dixon, 2012).

We will see how this vision of poverty runs through the debate on PES’ poverty alleviation potential and why it needs to be nuanced to address both local views on poverty and structural determinants of the latter.

Engel, Pagiola, and Wunder (2008) considered the PES initiatives as having a win–win character from “generating profits to land users while generating [environmental] positive externalities” for society as a whole, measurable through the “net profitability of land-uses” (op. cit.: 670). Moreover, even if PES initiatives have not been originally designed as pro-poor but to promote conservation (Pagiola, Arcenas, & Platais, 2005), the UK’s Department for International Development (DFID) created in 2010 the *Ecosystem Services for Poverty Alleviation* initiative; the latter pretends to “provide new knowledge demonstrating how ecosystem services can reduce poverty and enhance well-being for the world’s poor” (p. 1) (ESPA (Ecosystem Services for Poverty alleviation), 2012). Since then, conservation through PES is also presented as “an unrivaled opportunity to combat poverty” (p. 3) (ESPA (Ecosystem Services for Poverty alleviation), 2011) because the poorest are often the most dependent on natural resources for their livelihoods. PES would then help secure the livelihoods of the poor. PES are also praised for their ability to formalize and secure private property rights on land (Leimona & Lee, 2008). In a Coasian perspective, this is a crucial element within the neoliberal vision of poverty alleviation, yet private land titles facilitate access to the credit system (Pirard, 2012).

A special issue of *Land Use Policy Journal* on the social dimensions of market-based instruments<sup>2</sup> illustrates this neoliberal framing of poverty and social issues. Zammit (2013) focuses on the question of access of the poor to PES.<sup>3</sup> She investigates the *a priori* capacities of the poorest to access PES but does not question whether accessing PES schemes equates with active participation of the poor and, above all, if this actually has a positive impact on their poverty situation. By doing so, such studies tend to create a positive bias toward PES, considering PES as systematically positive for the poorest as long as they can access it. As for Hoang, Do, Pham, van Noordwijk, and Minang (2013), who analyze the distribution of benefits among PES participants in Vietnam, and Courtney, Mills, Gaskell, and Chaplin (2013), who concentrate on the indirect effects of PES on regional employment in Europe. Those studies tend to focus on the distribution of material and monetary assets, conceiving poverty and equity in distributional terms only.

Few studies went beyond this distributional framing including criteria like “non-income-related provider social co-benefits” (p. 6) (Greiner & Stanley, 2013), “social status within society” (p. 171) (German, Ruhweza, Mwesigwa, & Kalanzi, 2010) and increase in local leadership. However, the measurement of the monetary and material impacts of PES remains dominant; Caplow, Jagger, Lawlor, and Sills (2011) argue for finding “measures that use

common metrics and scales for analyzing both biophysical and welfare outcomes” (op. cit.: 164).

### 2.1. Contextualized conception of poverty beyond material deprivation

The paradigm of material and monetary poverty explores poverty in terms of an individual falling below an arbitrary threshold of income, the poverty line, preventing him from acquiring goods and services considered necessary. This definition, as accurate as it is, does not take into account that if poverty means lack of resources, it is also a social construction since the lack of resources reflects the living standards and expectations within a particular society. Structuralists have focused on the influence of class or gender and their intersections on shaping poverty. Post-structuralists recognize the regulatory power of discourses and routines on the social practice and the construction of poverty. Agency<sup>4</sup> then interacts with those social structures (p. 111) Ifejika Speranza, Wiesmann, & Rist, 2014, leading to situations of relative well-being or poverty. Consequently, poverty is contingent, linked to social representations and individual experiences, and is embedded in value systems. These approaches justify adding qualitative perspectives and metrics of poverty assessments.

The importance of the status of the poor (Paugam, 2005) and the evaluation of who is considered by himself or others as poor—or not—is central in research on the Andean communities; especially because of the current spreading of the “*vivir bien*” concept, contributing to a postmodernist perception of well-being and poverty. “*Vivir bien*” refers to being “in a relationship” with other persons and nature, focusing on connectivity between biocenosis and biotope (Medina, 2011), or to an economy of care (León, 2008). The term poverty does not exist in the Aymara and Quechua languages (Mallard, 2014). In an emic understanding, poverty refers to not-*vivir-bien*, not being “in a relationship”, being isolated, not included in webs of reciprocity that span across different spheres of life. To some extent, the “*vivir bien y no mejor*” discourse of the Bolivian government could be considered as referring to the concept of degrowth (Martínez-Alier, 2012). Poverty does not only depend on access to a quantity of material goods or services but on the quality of goods and relationships between members of a community living in a specific milieu.

Consequently, from a scientific as well as from a policy point of view, the impacts of PES schemes on poverty alleviation should be carefully analyzed, using a broader conception of poverty, including both material and relational dimensions, and being sensitive to locals’ perceptions.

### 3. The case of the “Acuerdos Recíprocos por el Agua”

The PES scheme “*Acuerdos Recíprocos por el Agua*” concerns the creation of a new institution linking up- and downstream actors through a local fund, used for channeling of financial contributions from downstream water users, mainly municipal authorities and local water cooperatives of the downstream villages.<sup>5</sup>

Since the early 2000s, the *Natura Bolivia Foundation* (NBF), a local NGO active in the area of forest conservation in the department of Santa Cruz, eastern Bolivia, has coordinated the above mentioned actors and has also contributed financially to the local fund. The money of this fund serves to compensate farmers in the upstream communities, who previously agreed to put part of their forestland under conservation (i.e. not deforesting) and concentrate grazing in a small, enclosed portion of their land.

<sup>2</sup> 2013, vol. 31.

<sup>3</sup> Presenting a comparison of PES in various continents, they question the impact of unequal levels of wealth, knowledge and land tenure on individual access to PES.

<sup>4</sup> Understood as a capacity to act and react over structures, not always intentional.

<sup>5</sup> Municipal authority transfers part of its annual budget to the fund and cooperative members pay a supplementary fee on their water bills going directly to the fund.

**Table 1**  
Communities and respective municipalities investigated.

Municipality	Downstream villages (name of capital is in italics)	Highland communities
El Torno	<i>El Torno</i> , Jorochito, La Angostura, Limoncito, San Luis, Santa Rita	Huaracal, La Lira, Quebrada León, Villa Paraíso
Pampagrande	<i>Los Negros</i> , <i>Pampagrande</i>	Palma Sola, Santa Rosa de Lima
Mairana Quirusillas	<i>Mairana</i> <i>Quirusillas</i>	Cerro Verde, La Yunga Filadelfia, Rodeo, San Luis
Comarapa	<i>Comarapa</i> , Saipina, San Juan del Potrero	Verdecillos, Estancia Vieja, Cabracancha

Source: (p. 370) (Bétrisey & Mager, 2014).

These compensations are sustained in a contract between the fund and the farmers, which stipulates the duration of the agreement, the amount of land preserved, the type and amount of compensation granted to farmers and the allowed and prohibited activities of land management. Compensations are “in kind” contributions and consist of what NBF calls “productive alternatives”, like beehives, fruit trees or coffee plants, and includes trainings.<sup>6</sup> NBF also organizes *socialization activities*, which consist of small events, grouping downstream and upstream actors. Those events often have a festive atmosphere (with music and dancing or children’s poetry/drawing contests). In the last years, however, NBF decided to reduce these activities because of their time-consuming character, preferring to invest time in creating new ARA schemes in other municipalities (Anonymous, NBF, 2013).<sup>7</sup>

These ARA were subject to several investigations, which mainly focused on the analysis of the environmental and economic relevance of PES (Asquith, Vargas, & Wunder, 2008), as well as socio-economic analysis of the type of transactions occurring within the ARA (Bétrisey & Mager, 2015). However, as no analysis has, to date, focused on the impact of PES on poverty according to local views of the members of upstream communities participating in PES, this paper analyzes this important issue.

### 3.1. Methodology

Investigating the local perceptions of PES requires a specific methodological setting. Back in 2012, we conducted a qualitative appraisal of ARA impacts in upstream communities, covering 14 communities belonging to 5 municipalities (see Table 1). All had been participating for at least 3 years in the ARA. In 2013 and 2014, we conducted a total of 104 interviews with members of those communities.<sup>8</sup> Following an inductive approach, the discussions were based on semi-structured interviews, trying not to impose any preconceptions of social changes, and giving actors’ “lived experience, logic and rationality a forefront place” (p. 20, pers. trans.) (Blanchet & Gotman, 2010). We diversified our methods, including participative observations in community and municipal meetings involving community actors and/or the staff of NBF. In parallel, we conducted 16 semi-structured interviews with downstream institutional actors participating in the ARA scheme as well as 6 semi-structured interviews with the staff of the NBF foundation.

In this paper we do not claim to provide representative results for all PES. Instead, we aim at highlighting the complexity of PES

realities (bound to a specific place and time frame), through in-depth depiction of one case and the use of an original frame of analysis.

That said, as the heuristic value of semi-structured interviews consists in their articulation with the wider “*experiential context*” (p. 25, pers. trans.) (Blanchet & Gotman, 2010), we will depict hereafter the living conditions and the institutional context faced by the upstream communities.

### 3.2. Living conditions and institutional context of the investigated communities

The studied upstream communities count between 15 and 110 families. They live in isolated and peripheral spaces of the central villages located downstream. They are experiencing low accessibility, objective and subjective marginalization, as well as the exclusion from infrastructures supplying basic education and health. As an indicator, out of the 16 educative units located in the communities, only 3 could be considered as having good level infrastructures, and 11 had no electricity. On the contrary, good level infrastructure characterized 4 out of the 7 units located in the downstream villages, all equipped with electricity (pp. 36–37) (Prefectura del Departamento de Santa Cruz, 2006).

The formerly practiced subsistence agriculture and pig raising of the upstream communities have been modernized during the last 20 years. Peasants collectively purchased tractors and individually acquired motorized pumps, increased the use of chemicals and extended cultivated lands through slashing and burning of forest lands (Bétrisey & Mager, 2014). However, their standard of living remained rather precarious, if compared to the downstream villages and towns (Asquith et al., 2008).

Administratively, these communities belong to municipalities but are also self-organized through agrarian unions (*sindicatos*) or grassroots territorial organization (*Organizaciones Territoriales de Base – OTB*); their main responsibility is to “propose, ask for, control and supervise work execution and provision of public services according to the necessities of the community, to propose ratification or change of municipal authorities and access information about the economic resource intended for popular participation” (p. 75, pers. trans.) (Prefectura del Departamento de Santa Cruz, 2006), and is sustained in the *Popular Participation Law* launched by the neoliberal government of Sanchez de Lozada in 1994. Among the investigated communities, we first noted a very different level of participation of *comunarios* in the OTB, mainly depending on the communities but also on the personal characteristics of the *comunarios*. In communities organized around agrarian *sindicatos*, *comunarios* that do not own land may assist to assemblies and meetings but have no right to vote. Thus, because such recent immigrants’ access to land is limited, most of them *de facto* tend to be excluded from voting and power positions. However, even in cases where they formally participate in institutions,<sup>9</sup> recent immigrants are still perceived negatively by locals or older immigrants and suffer discrimination, sometimes even racism.

In communities organized around an OTB, women have more chances to reach power positions, even if there is a lot of variability regarding women’s participation in local institutions of investigated communities. Women can even preside over an OTB, as in the case of Palma Sola community, nevertheless not without suffering from prejudices. Women are also often organized in parallel institutions like *club de madres*, whose role is mainly to organize schooling and community *fiestas* (considered women’s activities).

Regarding the community presidencies (whether they preside OTB or *sindicatos*), some are considered passively fulfilling their

<sup>9</sup> Some OTB allow the non-owners to vote.

<sup>6</sup> On apiculture, coffee production, etc. . .

<sup>7</sup> This strategy also allowed to quickly increase the number of forest hectare under conservation contracts and might have followed (indirect) pressure of NBF’s international donors for increasing ‘relevance’ and/or scaling up the ARA to meet predefined objectives.

<sup>8</sup> 51 of them were done with actors participating in the ARA scheme and 53 nonparticipating actors were also interviewed.

role of intermediary and controller of municipal government activities; some community presidents are even living outside the community and are not perceived as representing the community interests. On the contrary, others are perceived as strong lobbyists of their communities, struggling to get municipal authorities interested for the sake of the community.

All things considered, many of the interviewed community members were concerned by the relationship between community authorities and downstream municipal authorities, and complained about a supposed abandonment by municipal authorities and unfairness in resource distribution. *Comunarios* perceived this as resulting from a low level of recognition and leading to situations of injustice.

The ARA, as new institutional arrangements, are parts of this “myriad of local dynamics occurring and in many cases even reshaping local governance institutions” (p. 2) (Retolaza Eguren, 2008).

### 3.3. Implications of the ARA at the intra-community level

Regarding intra-community relationships and organization, most of the *comunarios* that were participating in the ARA scheme reported an overall positive effect. In the Palma Sola community, the quality of relationships between *comunarios* participating in the ARA and the trust level among them is said to have improved: now, “(...) people are inspired and are starting to have faith in each other” (1, Palma Sola, 25.10.2012). Moreover, the new ARA institution was considered bringing personal recognition, communicatively expressed by the downstream actors during public events—through applause, photo sessions etc.—and increase the reputation and esteem of the individuals who participated in the scheme.

However, some nonparticipating *comunarios* asserted that there had been no significant changes in terms of intra-community relationships. This is mostly related to the fact that positive impacts tend to benefit the ARA participants more than the nonparticipants. The nonparticipating *comunarios* mainly concern two groups: recent immigrants and small landowners. First, immigrants that do not own land and are already socially and politically marginalized in community structures are *de jure* excluded from the scheme, even if they “would like to participate because we like bees and it is lovely to participate in the meetings” (2, Santa Rosa, 20.09.2013). Secondly, if owning land (formally or not) is *de jure* a condition to enter the scheme, the size of the land owned also matters; the compensation is proportional to the amount of land that the *comunarios* accept putting under a conservation contract; the ones who own very little land—and are already considered poorer—therefore receive only small compensations; this discourages them from participating in the scheme. *De facto*, small owners tend to exclude themselves from the ARA.

These access barriers to the PES scheme experienced by already marginalized and poorer individuals are strengthening material inequalities, which have already been analyzed by other “pro-poor” PES studies. However, what our interviews showed is that, although acknowledging a material dimension in these inequalities (access to material compensation), the non-access to the PES scheme was also expressed in terms of symbolic misrecognition of nonparticipating *comunarios*; thus reinforcing inequalities of symbolic status. This misrecognition has led to several conflicts inside the communities, as stated by an official of the Comarapa Municipality, “so much that the municipal government had to intervene, help and explain” (3, Comarapa, 08.08.2014). In the Santa Rosa community, conflicts even led to violence and the killing of the cow of a community member participating in the scheme (Asquith, 2013).

As far as women are concerned, they are neither *de jure* nor *de facto* excluded from the scheme, except if they are an immigrant or a small landowner. The statistics of NBF show that more than 26% of the contracts concluded in 2014 between the fund and the

*comunarios* were in the name of women. Moreover, the former female OTB president of the Palma Sola community asserted that she received support from the NBF in her role of OTB president. She appreciated this support, “because sometimes it is not easy as a woman” (4, Palmasola, 18.08.2014). However, many of the interviewed women asserted that they were not really aware of the project and that we would have better talked to their husband. We observed during several ARA meetings that women had different attitudes than their male counterparts. Even if they sometimes expressed opinions, they were shyer, many of them being reluctant to make decisions (starting to participate in the ARA or not) without “consulting the husband” (Meeting in Estancia Vieja, 20.08.2014). Men were more at ease making quick decisions without consulting their wives (*idem*).

Finally, as the ARA had only been done with individuals and never with collectives, they questioned the egalitarian concern being traditionally promoted within the communities: “They work individually, not with the community, and I don’t like that” (5, Quebrada Leon, 02.09.2013). They also question the legitimacy of community authorities,<sup>10</sup> which was perceived negatively by those authorities but also by some *comunarios*.

So, like the new producers associations or religious institutions (mainly evangelist) that appeared in the communities, the ARA appears as another source of recognition beyond community authorities. At the same time it is considered as a new space of solidarity and recognition for participating *comunarios* and as a space of sociopolitical and material exclusion for nonparticipating *comunarios*, creating social and individual conflicts within the community organization.

Yet, if we change scale and observe the relationships of participating communities with municipal authorities, the appreciation of the impact of the ARA institution on the existing relations and their fairness might be different.

### 3.4. Implications of the ARA on relations with the municipalities

Some interviewed *comunarios* of communities noted a change in the relationship between their community and the downstream formal authorities (i.e. the municipal council and heads of water cooperatives), benefiting their community as a whole. They first stated a quantitative improvement of this relationship through the increased number of meetings involving municipal authorities and community representatives. These meetings were first set up for the ARA project but rapidly became discussion forums for other topics. This linking of communities and municipal authorities is clearly perceived as a result of the ARA. Some downstream institutional members also perceived an improvement of those relationships in that they “don’t argue with upstream people anymore” (6, Irrigators Association, Comarapa, 19.10.2012).

Upstream *comunarios* also mentioned a qualitative relational improvement yet the ARA were leading to recognition of communities’ key role in the management of water resources and with regard to increased visibility of the communities in the local political arena: “many people got to know us so that, at the end, he [the mayor] couldn’t ignore us [the community] anymore but had to take us into account” (7, Palma Sola, 25.10.2012). This was also acknowledged by representatives of the downstream institutional actors, like the vice president of the irrigators association of Comarapa, who considered that the ARA improved the municipal authorities’ consideration of the upstream communities through the better understanding of upstream communities’ realities. According to him “downstream authorities (...) understand the problems of

<sup>10</sup> “Natura never took us into account as authorities. ... Sometimes they asked me to collaborate, but they never invited me with a written letter like they did with the ARA participants” (Don Luis, Santa Rosa, 18.09.2013).

upstream people” (6, Comarapa, 19.10.2012). But “*this changed with the local fund initiative from Natura*” (idem) creating a new sense of proximity between those actors. For some upstream *comunarios*, this even led further to the recognition of their “*human being*” status and of the necessity to cooperate to “*vivir bien*” (8, Villa Paraiso, 14.11.2012).

The *comunarios* also stated that this recognition of their role and status came along with a redistribution—through the ARAs in kind compensation—of economic resources from the municipal authorities toward the communities, mostly perceived as a fair reward for their water management activities: “(…) *We do something good for the land, and it is fair to receive something in return*” (9, Palma Sola, 02.11.2013). The manager of the downstream San Luis Water Cooperative in El Torno viewed it as “fair” to redistribute resources toward the upstream zones that have to bear the direct cost of conservation despite their tough living conditions and, this way “(…) *can have a higher income to eat every day?*” (10, El Torno, 06.11.2012).

The ARA were also sometimes perceived as improving participation of some community representatives in municipal decision-making arena. The former OTB president of the Palma Sola community stated that the ARA, and especially the staff of the NBF, increased her power in negotiation with municipal authorities regarding the budget allocated to her community. According to her, “(…) *this would never have happened without (...) this project that initiated everything because we were always talking together with the mayor and Natura (...)*” (4, Palma Sola, 18.08.2014).

However, even if downstream authorities, like the former mayor of Comarapa Municipality, claim to be “*more participative*” (11, Comarapa, 19.10.2012), some *comunarios* considered that the relationships between their community and municipal authorities neither improved nor deteriorated but expressed a *status quo*. Authorities in those cases maintained a low level of recognition and consideration toward the communities: “*I believe that the mayor is not interested in what happens in the communities*” (12, Filadelfia, 14.08.2014).

Some *comunarios* also expressed an increased distrust regarding municipal authorities. This was often based on a feeling of opacity of the management of the ARA, especially expressed by community authorities.<sup>11</sup> Indeed, if downstream actors, endeavor to increase transparency by communicating “*to explain where their money goes*” (13, Cooperativa de Agua Comarapa, 12.10.2012), this communication is mostly addressed to the downstream population and not upstream communities. As a result, some *comunarios* stated that their feeling of exclusion from municipal spaces is still strong and has even increased in the last few years<sup>12</sup>: “*We sometimes felt excluded from the whole process. (...) Before, we were all getting together, but today, no more*” (2, Santa Rosa, 25.10.2012).

Despite these criticisms, as far as the relationship between communities and municipal authorities is concerned, the majority of our downstream and upstream respondents pointed out the capacity of the ARA to improve public recognition of upland communities. In several cases, these marginalized communities have been made more visible, whether as environmental, economic or political subjects. In some cases, this recognition process also led to a transformation of the economic redistributive model of the municipality, for the material benefit of the communities and/or to the expansion of community representatives’ opportunities to participate in municipal spaces of politics by a collateral effect of taking

part in the ARA. Recognition therefore appears to be a key positive effect in the self-appraisal of the ARA. We will here question this notion and its potential in terms of poverty alleviation.

#### 4. Discussion: ARA alleviating poverty through recognition?

Critical philosophers, like Honneth (2000), proposed recognition as an essential component of “good life”. Honneth defines recognition as an intersubjective, mutual and moral relationship, necessary in the process of creation of identity and the self. It is a public and communicative act, expressed through different media and not “*in fero interno*” (p. 286) (Kocyba, 2012). The denial of recognition, which may take the form of contempt or “social invisibility”, constitutes an injustice or a “*symbolic discrimination*” (p. 321, pers. trans.) (Guérin, Hersent, & Fraisse, 2011). Recognition takes place not only within the space of public institutions but also through the “*daily routine of social behaviors*” (s.p., pers. trans.) (Tinland, 2008) and informal social norms. Fraser (Fraser, 2004) sees recognition as a necessary condition for social justice. She asserts that both redistribution and political participation—which she considers as the other conditions of social justice—are often made possible through preliminary recognition.

However, if Honneth sees recognition occurring through intersubjective relationships, other scholars showed that recognition could also be considered as a driver of subordination. Acknowledging that recognition is an important step in the determination of the subject, namely the passage from an object to a subject condition—and therefore holds emancipation potential—Butler (2009) also highlights how this recognition desire creates attachment and dependence towards the source of recognition. According to her, this dependence relationship reinforces domination of the ‘recognized’, and the powerful position of dominant social norms. So, where Honneth sees recognition as a vector of liberty and emancipation from power that, he admits, can be perverted, Butler sees it as a vector of subjection to power structures, legitimizing and reinforcing the latter. Emancipation would then not occur by merely providing recognition to the subjects, but by changing the conditions of it, through the formulation of subversive counter-hegemonic discourses and practices that can appear as “alternative recognition channels” (Allen, 2006) and lead to social change.

Using this recognition lens, our investigations show that the ARA scheme appears—for a majority of our interviewees—to both provide personal recognition in its own realm but also contribute to a wider recognition of the upstream communities by downstream municipal authorities. With this in mind, the ARA can be considered to alleviate not only material but also relational poverty. However, if the ARA contain a potential for reducing inequalities and bringing more socio-environmental justice—in terms of recognition, equitable distribution and participation—, some people pointed out that this capacity is not always fully realized and is fragile. Indeed, the poverty alleviation appears sometimes reversible and partial, constrained by existing power structures—e.g. expressed in uneven access to land and natural resources or imbalanced participation in community decision-making—, which the ARA have not significantly transformed. As long as the ARA will not be able to avoid the *de jure* or *de facto* exclusion of certain groups—e.g. immigrants, small landowners, women—they will not prevent injustice and unfair conditions from enduring, which seriously limits their potential of poverty reduction for all. Conversely, if the ARA would bring a more inclusive recognizability, they could contribute to a greater emancipatory effect and to larger poverty alleviation by being an alternative recognition channel for those who are excluded from traditional recognition structures. More mediating socialization efforts between upstream and downstream actors, combined with larger empowering strategies led by

<sup>11</sup> “*They capture money from several places, even outside Bolivia, and what do they do? They use it to pay their salaries*” (Don José, Comité de Agua, Quebrada Leon, 02.09.2013).

<sup>12</sup> Corresponding to the time when NBF started reducing the socialization activities and fiestas.

the NBF, could play a key role in creating the conditions that will make it possible.

## 5. Conclusion

Even if PES have been much criticized regarding their underlying neoliberal discourse on nature and nature governance, the neoliberal vision of poverty they convey still constitutes the norm used in their evaluations. However, as the sociological literature points out that poverty is also non-material and could be partially considered as a lack of recognition, it appeals to analyze PES beyond this usual emphasis on access and distribution of material benefits. Having studied the Bolivian PES (ARA) through this prism, we showed that the ARA contribute to creating a recognition of upstream communities by the formerly rather disinterested downstream communities and the municipality, in this way acting on structural conditions of poverty and bringing more social justice in the sense of Fraser. However, we also highlighted the fragility of the process and the persisting deprivation of the poorest of the poor (immigrants, small landowners) despite the ARA.

Moreover, like Petheram and Campbell (2010), who underlined the little use of participative methods and consequent lack of attention to the perceptions of local peasants, we consider that PES evaluations should be done through a more systematic and careful listening to local views on poverty. Paugam (Paugam, 2005) had long insisted on the fact that the perception of poverty is not universal and that its “plurality within the same society and its possible evolution depending on social, political and economic conditions” (op. cit.: 69, pers. trans.) should be insisted upon.

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## References

- Allen, A. (2006). Dependency, subordination, and recognition: On Judith Butler's theory of subjection. *Continental Philosophy Review*, 38, 199–222. <http://dx.doi.org/10.1007/s11007-006-9008-3>.
- Asquith, N. (2013). *Investing in Latin America's water factories: Incentives and institutions for climate compatible development*. ReVista, Harvard review of Latin America.
- Asquith, N. M., Vargas, M. T., & Wunder, S. (2008). Selling two environmental services: In-kind payments for bird habitat and watershed protection in Los Negros, Bolivia. *Ecological Economics*, 65, 675–684. <http://dx.doi.org/10.1016/j.ecolecon.2007.12.014>.
- Bétrisey, F., & Mager, C. (2014). Small farmers in Florida Province, Bolivia: Reciprocity in practice. *Mountain Research and Development*, 34, 369–374.
- Bétrisey, F., & Mager, C. (2015). Les paiements pour services environnementaux de la Fondation Natura Bolivia entre logiques réciprocatrices, redistributives et marchandes. *Revue Française de Socio-Économie*, 15, 39–58.
- Blanchet, A., & Gotman, A. (2010). *L'entretien* (second ed.). Paris: A. Colin.
- Brown, W. (2011). Neoliberalized knowledge. *History of the Present*, 1, 113–129.
- Butler, J. (2009). *Ce qui fait une vie: essai sur la violence, la guerre et le deuil*. Paris: La Découverte.
- Caplow, S., Jagger, P., Lawlor, K., & Sills, E. (2011). Evaluating land use and livelihood impacts of early forest carbon projects: Lessons for learning about REDD+. *Environmental Science & Policy*, 14, 152–167. <http://dx.doi.org/10.1016/j.envsci.2010.10.003>.
- Courtney, P., Mills, J., Gaskell, P., & Chaplin, S. (2013). Investigating the incidental benefits of environmental stewardship schemes in England. *Land Use Policy*, 31, 26–37. <http://dx.doi.org/10.1016/j.landusepol.2012.01.013>.
- Dixon, J. (2012). On being poor-by-choice: A philosophical critique of the neoliberal poverty perspective. *Poverty & Public Policy*, 4, 1–19. <http://dx.doi.org/10.1515/1944-2858.1200>.
- Engel, S., Pagiola, S., & Wunder, S. (2008). Designing payments for environmental services in theory and practice: An overview of the issues. *Ecological Economics*, 65, 663–674.
- ESPA (Ecosystem Services for Poverty alleviation) (2011). What if fighting poverty and protecting the planet were one and the same? <<http://www.espa.ac.uk/vision>> (accessed 13.02.2014).
- ESPA (Ecosystem Services for Poverty alleviation) (2012). ESPA's Vision. ESPA Directorate.
- Fraser, N. (2004). Justice sociale, redistribution et reconnaissance. *Revue du MAUSS*, 23, 152–164. <http://dx.doi.org/10.3917/rdm.023.0152>.
- German, L., Ruhweza, A., Mwesigwa, R., & Kalanzi, C. (2010). Social and environmental footprints of carbon payments: A case study from Uganda. In L. Tacconi, S. Mahanty, & H. Suich (Eds.), *Payments for environmental services, forest conservation and climate change: Livelihoods in the REDD?* (pp 160–184). Cheltenham (UK): Edward Elgar.
- Golooba-Mutebi, F., & Hickey, S. (2009). Governing chronic poverty under inclusive liberalism: The case of the Northern Uganda Social Action Fund, Chronic Poverty Research Centre Working Paper, <[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1524746](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1524746)> (accessed 26.10.2015).
- Greiner, R., & Stanley, O. (2013). More than money for conservation: Exploring social co-benefits from PES schemes. *Land Use Policy*, 31, 4–10.
- Guérin, I., Hersent, M., & Fraisse, L. (2011). Introduction. In I. Guérin, M. Hersent, & L. Fraisse (Eds.), *Femmes, économie et développement: De la résistance à la justice sociale* (pp. 7–27). Toulouse, France: Erès.
- Hoang, M. H., Do, T. H., Pham, M. T., van Noordwijk, M., & Minang, P. A. (2013). Benefit distribution across scales to reduce emissions from deforestation and forest degradation (REDD+) in Vietnam. *Land Use Policy*, 31, 48–60. <http://dx.doi.org/10.1016/j.landusepol.2011.09.013>.
- Honneth, A. (2000). *La lutte pour la reconnaissance*, Ed. du Cerf, Paris.
- Ifejika Speranza, C., Wiesmann, U., & Rist, S. (2014). An indicator framework for assessing livelihood resilience in the context of social-ecological dynamics. *Global Environmental Change*, 28, 109–119. <http://dx.doi.org/10.1016/j.gloenvcha.2014.06.005>.
- Kocyba, H. (2012). Les paradoxes de la manifestation de reconnaissance. In C. Lazzeri & S. Nour (Eds.), *Reconnaissance, identité et intégration sociale* (pp. 277–293). Nanterre: Presses universitaires de Paris Ouest.
- Kosoy, N., & Corbera, E. (2010). Payments for ecosystem services as commodity fetishism. *Ecological Economics*, 69, 1228–1236. <http://dx.doi.org/10.1016/j.ecolecon.2009.11.002>.
- Leimona, B., & Lee, E. (2008). Pro-poor payment for environmental services: Some considerations, RUPES-RECOFTC Brief (contributions from Sango Mahanty and Yurdi Yasmi).
- León, M. (2008). El buen vivir: objetivo y camino para otro modelo. *Revista La Tendencia*, 138, 105–123.
- Mallard, B. (2014). Vers une compréhension de la «pauvreté traditionnelle» en Amérique latine. In G. Uribe (Ed.), *Sociabilités, citoyenneté et liens sociaux en Amérique latine* (pp. 195–225). Rennes: Presses universitaires de Rennes.
- Martínez-Alier (2012). Environmental justice and economic degrowth: An alliance between two movements. *Capitalism Nature Socialism*, 23, 51–73. <http://dx.doi.org/10.1080/10455752.2011.648839>.
- McAfee, K., & Shapiro, E. N. (2010). Payments for ecosystem services in Mexico: Nature, neoliberalism, social movements, and the state. *Annals of the Association of American Geographers*, 100, 579–599. <http://dx.doi.org/10.1080/00045601003794833>.
- Medina, J. (2011) January 20. Suma qamaña, vivir bien y de vita beata. Una cartografía boliviana, La Reciprocidad, <<http://lareciprocidad.blogspot.ch/2011/01/suma-qamana-vivir-bien-y-de-vita-beata.html>> (accessed 22.05.2014).
- Pagiola, S., Arcenas, A., & Platais, G. (2005). Can payments for environmental services help reduce poverty? An Exploration of the Issues and the Evidence to Date from Latin America. *World Development*, 33, 237–253. <http://dx.doi.org/10.1016/j.worlddev.2004.07.011>.
- Paugam, S. (2005). *Les formes élémentaires de la pauvreté*. Paris: Presses universitaires de France.
- Petheram, L., & Campbell, B. M. (2010). Listening to locals on payments for environmental services. *Journal of Environmental Management*, 91, 1139–1149. <http://dx.doi.org/10.1016/j.jenvman.2010.01.002>.
- Pirard, R. (2012). Market-based instruments for biodiversity and ecosystem services: A lexicon. *Environmental Science & Policy*, 19, 59–68.
- Prefectura del Departamento de Santa Cruz (2006). Diagnostico Integral Socioeconomico del Municipio de Pampagrande, Prefectura del Departamento de Santa Cruz, Santa Cruz de la Sierra, Bolivia.
- Retolaza Eguren, I. (2008). Moving up and down the ladder: Community-based participation in public dialogue and deliberation in Bolivia and Guatemala. *Community Development Journal*, 43, 312–328. <http://dx.doi.org/10.1093/cdj/bsn016>.
- Thorsen, E., & Lie, A. (2006). *What is neoliberalism*. Oslo: University of Oslo, Department of Political Science. <http://folk.uio.no/daget/What%20is%20Neo-Liberalism%20FINAL.pdf>, (accessed 30.01.2015).
- Tinland, O. (2008). La reconnaissance: par les mœurs ou par les institutions ?, La vie des idées, <<http://www.laviedesidees.fr/La-reconnaissance-par-les-moeurs.html>> (accessed 14.02.2015).
- Zammit, C. (2013). Landowners and conservation markets: Social benefits from two Australian government programs. *Land Use Policy*, 31, 11–16.