Small Farmers in Florida Province, Bolivia: Reciprocity in Practice

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Peasant societies are often seen by neoliberal or Marxist theorists as passive subjects of political-economic transformations occurring at a higher level, only surviving through acculturation to market requirements. By analyzing agricultural work organization in highland communities and a local system of water management called Acuerdos Reciprocos por el Agua (Reciprocal Agreements for Water), developed in 2003 by the Natura Bolivia foundation in Florida Province in Bolivia, we show that, contrary to this perception, traditional reciprocal norms still play an essential role in decision making. This suggests the agency of rural societies and the resilience of traditional reciprocity-based norms in mountain regions.

Keywords: Reciprocity; work organization; peasant societies; water management; Bolivia.

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Introduction

This study addresses a relatively old debate regarding the future of peasant societies in the double context of global metropolization and commodification of natural resources. According to Marxist theory, peasant societies live on but are usefully maintained in states of poverty, facilitating their exploitation by urban dwellers. Neoclassical theories consider rural exodus and the end of low-productivity agricultural activities in high-constraint areas—in terms of their climatic or accessibility characteristics—as an optimal reallocation of production factors benefiting the urban and industrialized modern sector (Cortes 2000). Within Latin America, these approaches have in common the depiction of rural societies as passive and obsolete, as well as the diffusion of an opposition between indigenous tradition and modernity, which are considered incompatible (Pitarch and Orobitg 2012). However, the literature shows many examples of complementarity (Laville 2007) between the two, especially within rural Amerindian societies (Garcia-Cancillin 2001), “linked to and affected by world capitalism, [but] in some ways remain[ing] outside of its main transformative thrust” (Mayer 2002: xiv).

This article provides a case study of these assembly processes. Our research is based on 80 semistructured interviews, conducted in the fall of 2012 and 2013 with farmers from local communities in the Florida Province, Bolivia. They included 10 narrative interviews with old tradition bearers and 40 interviews with farmers participating in a system of compensation for watershed services named Acuerdos Reciprocos por el Agua (ARA; in English, Reciprocal Agreements for Water), initiated in 2003 by the Natura Bolivia Foundation. Participative observation was also used during several meetings organized by the Natura Bolivia Foundation and during traditional community gatherings. The Natura Bolivia Foundation facilitated access to documents and stakeholders and let investigations be conducted with total freedom.

We first show that traditional reciprocity is still part of the way agricultural work is organized in the mountain region of Florida Province. Second, we point out that even if the ARA is based on the principle of payments for ecosystem services, which is considered emblematic of market logics within environmental governance, the logic of traditional reciprocity and its perceived advantages (cooperation and cohesion) indirectly influence decisions made by upstream peasants to participate—or not—in the ARA. The capacity of the ARA to satisfy reciprocal organizational principles is, for these watershed service providers, an essential criterion of evaluation. In this way, the ARA recognizes 2 normative frameworks: the market and the traditional collective.

Reciprocal Agreements for Water

Natura Bolivia has described the ARA as “an innovating community system of compensation for watershed services” (Natura Bolivia 2007: 1, translation by the authors). Natura Bolivia is a nonprofit organization, active in the region since the early 2000s, and essentially financed by European and US donors. Its mission is “the conservation of ecosystem goods and services that support healthy communities and maintain biodiversity”
The ARA was first developed in Florida Province in municipalities at the interface between 2 socio-ecological systems (the Quechua altiplano and the Guarani tropical plains). Although settlement in Florida Province dates to pre-Inca times, until the 1950s this part of the Bolivian Andean valleys (1000–3000 m above sea level) remained isolated with a small population, most of whom practiced subsistence agriculture. In 1952, the opening of a road connecting two major Bolivian cities, Cochabamba and Santa Cruz de la Sierra, led to increased settlement, especially in the downstream valleys along the road. Density increased to 6.6 inhabitants per km$^2$ (Prefectura del Departamento de Santa Cruz 2006). Since then, the province has experienced a high mobility of people and economic goods, leading to noteworthy population growth, increased cultural diversity, rising land prices, better access to urban markets, changes in agricultural production to adapt to market demands, and increased tourism.

Between 2003 and 2010, 4 municipalities established an ARA scheme (Table 1). Each municipality is composed of several downstream villages, often located next to a main road, and highland communities, located several hours away from the downstream villages. In each ARA, 3 downstream watershed service beneficiaries—the municipal government, the local water users cooperative, and Natura Bolivia—jointly created a fund to compensate upstream (highlands) villagers who agreed to conserve a part of their land and refrain from clearing forest for cultivation or livestock. The members of the fund decide the value of the water services provided through the conservation of upstream forest, and a price equivalent, based on the number of hectares conserved, is fixed. Peasants living in the upstream communities (comuneros) who find the price acceptable join the scheme; they and the director of the fund sign a private contract. Compensation is made in kind (e.g., beehives and training, fruit or coffee tree plants and barbed wire), according to the farmers’ preferences but based on the price equivalent previously determined.

The highland communities (Table 2), each with between 15 and 110 families (average 54.4), are located next to the region’s main biodiversity and water reserve (the cloud forest of Amboro National Park), where a high volume of precipitation supplies rivers used for downstream irrigation. Downstream water quality and quantity depend heavily on highland villagers’ agricultural practices.

All of the communities have organized domestic and irrigation water supplies through comités de agua (water committees) that function like users’ cooperatives but are not formally recognized by the government. The comités are directed by a council of 3 people, reelected on a 1- to 3-year basis (depending on the community), which is in charge of collecting comuneros’ contributions and organizing collective work to maintain or increase the infrastructure. Title to most of the land they live on has been officially registered, except for the community of Santa Rosa in the municipality of Los Negros, where some farmers still do not hold a formal property title.

When these communities were still very isolated, pig farming and subsistence agriculture (maize and potatoes)

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**Table 1** Communities participating in an ARA in Florida Province.

| Municipality | Downstream villages (name of municipal capital is in italics) | Elevation of capital (meters above sea level) | Highland communities |
|--------------|------------------------------------------------------------|-----------------------------------------------|----------------------|
| El Torno     | **El Torno**, Jorochito, La Angostura, Limoncito, San Luis, Santa Rita | 530                                           | Huaracal, La Lira, Quebrada Leon, Villa Paraiso |
| Los Negros   | **Los Negros**, Pampagrande                                 | 1500                                          | Palma Sola, Santa Rosa de Lima                   |
| Mairana      | Mairana                                                     | 1533                                          | Cerro Verde, La Yunga                              |
| Quirusillas  | Quirusillas                                                  | 1830                                          | Philadelfia, Rodeo, San Luis                      |

**Table 2** Elevation of communities participating in this study.

| Community     | Municipality | Elevation (meters above sea level) |
|---------------|--------------|-----------------------------------|
| Huaracal      | El Torno     | 597                               |
| La Lira       | El Torno     | 820                               |
| Quebrada Leon | El Torno     | 671                               |
| Villa Paraiso | El Torno     | 827                               |
| Palma Sola    | Los Negros   | 1539                              |
| Santa Rosa de Lima | Los Negros | 1795                              |
| Cerro Verde   | Mairana      | 2064                              |
| La Yunga      | Mairana      | 1925                              |
| Philadelfia   | Quirusillas  | 1546                              |
| Rodeo         | Quirusillas  | 1879                              |
| San Luis      | Quirusillas  | 1550                              |
dominated. Since access has improved (through unpaved but passable tracks), the cost of transport to Santa Cruz and Cochabamba cities has decreased, and crops have been diversified to suit the demands of these markets. Most comuneros interviewed for this study sold their products directly to wholesale markets in Santa Cruz or to retailers. Only a small part of their production was sold in local markets and regional ferias (fairs) held every Sunday in downstream villages. This transformation accompanied the mechanization of farming (with collective purchases of tractors and individual purchases of motorized pumps), an increase of inputs (mostly chemicals), and an extension of cultivated lands (through slash-and-burn of forest lands). Despite this modernization, 2 traditional reciprocal practices are still common. These are discussed in the next section.

Reciprocity in traditional mountain labor practices

In Andean indigenous cosmology, each natural or living element is first understood in relation to its purported complement (water and fire, men and women, people and nature). From this arises a moral imperative to preserve life through reciprocity between these complementary entities (Valdivia 2006). This reciprocity logic opposes market logic, in which relationships are not personalized and all partners are considered equivalent, independent, and commutable (Servet 2007: 262). Polanyi ([1957] 1975: 264) considers reciprocity to be a complex system of personalized relations based on “complementarity and voluntary interdependence” between actors who are not commutable, also occurring at a smaller scale within household units (producing goods for their own use and consumption), which he calls the householding principle (Polanyi 1983 [1944]). According to Sabourin (2007: 44), the market or “commutation” (Hillenkamp 2010) exchange principle refers to transactions about objects whereas reciprocity refers to relationships between persons. Ostrom (1998; 2003) gives reciprocity a critical role within collective action and affirms that reputation motivates trust, which generates reciprocity. Sabourin (2007; 2012) and Hillenkamp (2010) argue that reciprocity structures can also produce social ties and trust, and reciprocity can thereby create the conditions of its reproduction. In contrast, the decline of such structures should generate a decrease in community cohesion, social ties, trust, and friendship, which leads to a decline in reciprocity practices. In their theory of reciprocity, Temple and Chabal (1995) go a step further, asserting that the structures of reciprocity create ethical value. Sabourin (2012: 35) says that this value “becomes the economic value of an economy based on reciprocity.” The creation of these ethical or human values is the objective—the common project (living together)—of relations of reciprocity. However, reciprocity relationships also contain the potential for alienation.

Through fixed status, reciprocity can lead to patronage or exploitation, especially when it is unequal (Sabourin 2007; Fraser 2013).

Highland communities in Florida Province practice two traditional indigenous Bolivian forms of reciprocity: the minga and the ayne. A minga is an extra-familiar work party formed to carry out an agricultural task, often a labor-intensive, time-limited task like harvesting or clearing new land. A group of men work together on the land of one comunero. They are not paid in cash but receive food and beverages prepared by the women and distributed throughout the day, at the end of which a party is organized for them with music, food, and chicha (a traditional fermented maize beverage). The comunero who organized the minga is later morally obliged to participate when another member of the work group calls for a minga on his land.

Ayne, on the other hand, is a one-to-one arrangement in which one member of the community helps another; again, the recipient does not make a financial payment but is obligated to return the favor. Reciprocity does not have to be immediate or involve the same type of work; it can be done by a close family member of the original beneficiary. Ayne is not subject to a contract but is “a coexistence within the community with a normative action of reciprocity, of satisfying instinctive feelings of necessity” (Yampara et al 2007: 70, translation by the authors). According to Michaud et al (2003: 7), the ayne creates an “affective relationship lasting and going beyond immediate material needs satisfaction” (translation by the authors).

The first general statement that can be made regarding the organization of work in Florida Province, based on 120 interviews, is that a wide range of practices coexist within communities. In El Torno and Mairana, ayne is currently practiced only within the immediate family. The communities of Los Negros still practice minga, although not regularly and with fewer people than 15 years ago, and they practice ayne in a more extended way, sometimes with people from other communities. In the Quiruisillas communities, we noted the continuation of traditional mingas, associated with work parties, but also a new practice called minga fiada or prestada (borrowed minga), occurring within the local producers’ association, operating quite like an ayne, with all members of the association working every Saturday on the land of different members in rotation. Food and beverages are offered during the day, but no party is organized at the end of the working day. Women and new migrants, usually excluded from traditional mingas, are active participants in the minga fiada and in the producers’ association, showing that reciprocity customs are capable of change (Sabourin 2007).

In other cases, practices are influenced by both reciprocity and market logic (Table 3). This is the case when someone pays a day laborer to represent him during
TABLE 3 Reciprocity logic and market logic.

|                                | Reciprocity logic                                      | Market logic                             |
|--------------------------------|--------------------------------------------------------|------------------------------------------|
| Type of exchange relationship  | Personal, between known individuals                    | Impersonal, between commutable partners  |
| Basis of exchange relationship | Moral obligation                                        | Contractual obligation                   |
| Duration of exchange           | Not fixed                                               | Fixed                                    |
| Value definition               | Through custom                                          | Through the market                       |
| Aim of exchange                | Social cohesion and subsistence                         | Utility maximization                     |

a minga or to render the ayne, or when young adults are paid for their work during a minga or ayne, whereas members of older generations refuse payment. Al partido agreements, another mixed form, consist of oral contracts between owners (typically older people offering land) and partidarios (typically new migrants offering labor and inputs), who agree to share benefits after the harvest. Farmers emphasized that these agreements, although clearly formal market exchanges, were also personalized and long lasting. Their purpose is not only to produce resources but also to take care of the land. The participants perceive the personalized and lasting relationship of the al partido agreement as preferable to renting because it ensures that the partidario has “interest to take care of the land in the long term” (Leovigildo Ayala, Santa Rosa, interview on 10 October 2013). These cases clearly mix reciprocity and market logic.

Laville (2007: 98) postulates that this mixed arrangement allows participants to combine “the advantages of the monetary economy, a source of individual freedom through the market … with those of a nonmonetary economy that contextualizes exchanges and drives them out of anonymity” (translation by the authors). This arrangement is fragile, however, and its intrinsic contradictions can lead to “mutual paralysis of both systems or to the domination of one over the other” (Sabourin 2012: 235, translation by the authors).

The risk of domination or substitution is significant. The work formerly organized through generalized ayne and minga tends to be replaced by a wage system, called peonaje. To explain the shift from reciprocity to a wage system, farmers emphasized the role of mechanization (which reduces the need for labor), Protestantism (which prohibits the parties and chicha drinking that traditionally accompany mingas), and the growing availability of labor for hire (due to increased emigration by altiplano farmers who do not own land in the area). These changes transform farmers’ livelihood strategies. Our interlocutors pointed out the following changes: (1) a decrease in sharing of agriculture-related knowledge and experience, which potentially affects farmers’ human capital, and (2) the monetization of labor, which obliges landowners to acquire cash, sometimes by taking on debts that decrease the profitability of their production and make them more vulnerable to shocks and production failures.

The market pressure on traditional forms of agricultural work (Nina 2009) does not mean that traditional value systems have been discredited. Farmers emphasized the social ties and friendships produced through minga and ayne, even where mingas were no longer practiced. At the community level, some farmers mentioned the role of minga in preserving unity, solidarity, and relationships. This confirms theories of reciprocity as a space of sharing that contributes to community cohesion, justice, and development through its symbolic character (Temple and Chabal 1995; Sabourin 2012) and as preserving the meaning of action (Habermas 1984). The virtue of reciprocity compared with market logic should nevertheless not be overstated. Market regulation has historically been a “source of individual freedom” and a “means of release from constraints of rural family exploitation and from traditional gender roles” (Laville 2007: 98, 51, translation by the authors).

These reciprocity practices, and the validation of the related norms, play a major role in the development of local water management initiatives by Natura Bolivia. The foundation refers to it in its discourse with government and local participants. The comuneros refer to it as a key factor in decisions to participate in the ARA.

Reciprocity and the Reciprocal Agreements for Water

The leaders of Natura Bolivia say that communities’ acceptance of the ARA has been facilitated by references to ayne. *Ayne* is based on reciprocity: if I help you with sowing, you help me with harvesting, etc. We are doing the same, ayne, but with the forest. When we present things like this, people understand the principle of the ARA more quickly” (H. Azurduy, Natura Bolivia, interview in October 2012). The word “reciprocal” in the program name (Acuerdos Reciprocos por el Agua or Reciprocal Agreements for Water) echoes this perspective, even if this word also has a political dimension, allowing the ARA to be in line with the national government, at least discursively opposed to market instruments for natural
resource management (Poupeau 2013) and promoting a plural economy (Hillenkamp 2012). The comparison between ARA and ayne resonates with participating comuneros, even if a few of them spontaneously describe the ARA as similar to the ayne. In other words, even though farmers objectify characteristics of ayne and reciprocity when they explain the ARA and their motivations, they do not speak of ARA as an ayne.

Reciprocity was cited by upstream farmers as a key element in their decision to enter the ARA. The main motivation comuneros mentioned for their participation was not the market value of compensation but the hope that the ARA would contribute to the collective’s wellbeing, and to community cohesion and recognition from downstream actors, in the sense of Honneth (2000), and from the comuneros’ lifestyle and practices, or their lifeworld in the sense of Habermas (1984). The relationship with downstream actors is in itself much valued, and not only in terms of social utility.

The fact that the market value of compensation is not the main criterion for entering or leaving the ARA scheme also comes from 2 specific characteristics of the ARA. First, upstream comuneros, presented with fixed prices established by downstream actors, consider the compensation more as an indemnity or a reward for good behavior than as a payment proportional to the total economic value of the services they provide. Second, the expected benefits from new productive activities permitted by the ARA (honey, coffee, or fruit production) are difficult to estimate in advance. Upstream comuneros’ uncertainty regarding the economic benefit of the ARA encourages them to appraise it more in the light of traditional norms (enhancing social ties) than of market logic (individual profit).

This relates to the comuneros’ expectations of how relationships with downstream actors should be: personalized, long lasting, and friendship creating. Dissatisfaction regarding these criteria, due to the infrequency of visits by downstream actors or changes in who represents the downstream villages, leads to feelings of abandonment and neglect, sometimes causing comuneros to withdraw from the scheme. Downstream actors did not always understand the expectations of the comuneros; they sometimes saw the need to maintain personal relationships with them as a drawback rather than as a benefit of the arrangement. The foundation has undertaken mediation and communication work to make downstream users aware that, to ensure the long-term continuity of the ARA, they should pay more attention to the comuneros through meetings and festive events that bring all the actors together. Some of the comuneros who withdrew affirmed that these initiatives made them return to the scheme, without any change in the amount of compensation.

Downstream actors participating in the ARA scheme, on the one hand, act according to market exchange logic, privileging the object of exchange (water quantity and quality) rather than relationships between participants. Some of them even preferred buying the land of the upstream comuneros instead of entering a compensation relationship, considering the former option would provide more reliable access to water. These downstream actors tended to consider formal written contracts necessary, invoking a lack of trust (crucial within reciprocity structures) toward comuneros.

This shows that the ARA forms a place of functional complementarity and articulation of market and reciprocity logic, contributing to the creation of a significant innovation in watershed management. Natura Bolivia positions itself at the interface of these 2 forms of logic and mediates between downstream actors (motivated primarily by market logic) and upstream actors (motivated primarily by tradition and reciprocity), and in this way, tries to avoid one of the referents overcoming the other.

**Conclusion**

It would be inaccurate to see the mountain peasant societies in Florida Province as systematically absorbed or dominated by the market system and its logic (Cortes 2000). The ARA demonstrates that traditional rural reciprocity did not dissolve within a market-driven regulation of water ecosystem services. On the contrary, it is still widely mobilized by upstream comuneros in deciding whether to join the ARA, and articulated by them with other forms of market logic that underlie new forms of work organization. This way, farmers in the highland communities appear as “articulated peasants” (Mayer 2002), actively working on social change. It remains to be seen if this will consist of a transitory resistance or a sustainable anchoring of tradition or traditional norms within the communities under study.

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