Soy Expansion and the Absent State: Indigenous and Peasant Livelihood Options in Eastern Paraguay

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Abstract

Soy cropping expansion in Paraguay has displaced a considerable number of smallholders from their communities. Based on discussion groups held at peasant and indigenous communities, this article surveys smallholder attitudes towards soy expansion near a nature reserve in eastern Paraguay. Smallholders identify agrochemical pollution and a development model that seeks to eradicate smallholding through the mechanization of the rural landscape as principal problems. In contrast, several campesino (peasant) and indigenous communities have found ways to profit from the industry: some have legally integrated soy into their agricultural practices while others illegally lease their lands to soy patrons. Through interviews, smallholders revealed the relationships between their livelihoods, big soy, and the marijuana trade, giving the sense that engaging in illegal forms of agriculture may help some smallholders resist displacement caused by shifting economies of scale. While these accounts challenge simplistic big-soy/smallholder binaries, they also underscore the deficiencies of weak governance linked to neoliberal economies in developing regions. The article concludes with recommendations on strategies to ameliorate conflicts and engage in sustainable development based on the strengthening of local institutions.

Keywords: soy, sustainable development, campesino, Ache

Resumen

La expansión de la soja en Paraguay ha desplazado a un número considerable de campesinos de sus comunidades. Basado en discusiones grupales en comunidades campesinas e indígenas, este artículo examina actitudes hacia la soja entre pequeños productores cerca de una reserva natural en...
la Región Oriental del Paraguay. Pequeños productores identifican como principales problemas la contaminación por agroquímicos y un modelo de desarrollo que busca erradicar la agricultura campesina e indígena a través de la mecanización del paisaje rural. Sin embargo, varias comunidades de pequeños productores han encontrado maneras de beneficiarse de la industria sojera: algunos han integrado la producción legal de soja en sus tierras mientras que otros alquilan sus tierras ilegalmente a sojeros en la región. Los pequeños productores entrevistados también revelaron relaciones entre sus medios de vida, grandes sojeros, y el comercio ilegal de marihuana, sugiriendo que la participación en formas ilegales de agricultura puede ayudar a que ciertos grupos resistan las presiones de desplazamiento causadas por cambiantes economías de escala. Si bien estos relatos desafían discursos que confrontan grandes sojeros contra pequeños productores, también resaltan las deficiencias de un estado, con poca presencia, vinculado a economías neoliberales de países en desarrollo. El artículo concluye con recomendaciones sobre estrategias para aminorar los conflictos expuestos y participar en el desarrollo sostenible basado en el fortalecimiento de instituciones locales.

Palabras claves: soja, desarrollo sostenible, campesinos, Aché

Introduction

Latin American governments have attempted to foster the wellbeing of smallholder communities through a multitude of initiatives, including subsidies to fund agriculture and land-tenure laws to secure territories. As most of Latin America transitioned towards neoliberal governments in the 1980’s and 1990’s, many of these smallholder benefits were modified or cut in favor of policies established to encourage market solutions for rural development issues (Robinson 2012; Petras and Veltmeyer 2014). A significant part of the Latin American countryside has been
mechanized, with some national governments paying more attention than others to how peasant and indigenous groups adapt to such changing conditions.

In Paraguay, the shift towards increasingly stronger neoliberal policies and a weaker state presence has given rise to resentment among the poorest rural sectors. After the fall of Alfredo Stroessner’s dictatorship in 1989, peasant groups advocating for agrarian reform have emerged as large cattle ranches and soy fields continue to increase in size and number while smallholder agriculture shrinks (Fogel 1998; Elgert 2016). Landless peasant grassroots groups underscore the difficulties in securing productive lands and related titles. Some recent peasant invasions of large properties owned by absentee landlords have escalated into violent confrontations. The parliament impeached President Fernando Lugo in 2012 because of his alleged mishandling of the peasant occupation of a property politician Blas Riquelme acquired during Stroessner’s dictatorship. A total of six police officers and eleven peasants were killed in the crossfire during the attempted eviction (Marsteintredet, Llanos, and Nolte 2013; Elgert 2016). This violence surprised Paraguayans; peasants had usually not threatened authorities with firearms during such conflicts. It is believed that the increasing integration of sectors of the peasantry into drug trading and radical paramilitary groups has contributed to the arming of some smallholder communities.

The present article reports on smallholder livelihood responses to the expansion of broad-scale soy cultivation near and within indigenous and peasant communities in eastern Paraguay. The study area is near the town of Curuguaty in the Department of Canindeyú, close to Brazil and adjacent to where the aforementioned 2012 incident happened. The study area is also within a UNESCO biosphere reserve, which includes the protected area Mbaracayú Forest Nature Reserve (MFNR) (Figure 1). Paraguay is one of the largest soy exporters in the world, Brazil being one of the main investors of soy in Paraguay and, also, Paraguay’s main port for soy exports. Lower production costs, highly fertile soils, and proximity to Brazil place the study area in a strategically advantageous
location for soy production. At the same time, the fact that this region is part of a conservation area situates this study and local livelihoods within discourses of sustainable development.

I (the first author) visited smallholder communities in this region in order to explore their relationships with neighboring, expanding soy plantations, positing that—like in other parts of Paraguay—such soy expansion causes localized conflicts. I also investigated whether smallholders have started integrating the soy industry, and if the state and conservation efforts associated with the protected area mediate these relationships. Based on group discussions and interviews with smallholders and key informants, this research reveals ways in which peasant and indigenous communities are benefitting and hurting from soy expansion, complicating simple binaries that confront broad-scale soy production with smallholders. This study also reports on illicit smallholder livelihoods that have emerged in the area linked to marijuana cultivation and trade, which are encouraged by growing demands and insufficient government control. Despite the disparate viewpoints related, most smallholders justified their actions as reactive to the often mentioned “*estado ausente*” (absent state), a state that has not helped them thrive in an increasingly mechanized landscape. Most smallholders also related their participation in local, regional, or national networks (social, political, and commercial) that help them resist displacement pressures from soy expansion. More than condemn the absent state, this article seeks to identify areas in which nonprofit initiatives and state policies are most needed to further integrate—and in some cases reconcile—the smallholder economy with regional neoliberal development, discussing also sustainable development in the biosphere reserve.

**Soy in Paraguay**

Soybeans are Paraguay’s main export and represent twelve percent of the gross domestic product (GDP) (Bajekal 2015). Exported soybeans, soybean meal, and soybean oil together
represent over half of all exports in Paraguay (OEC 2016). In 2015, the country ranked fourth among soy exporters in the world—only behind the U.S. and neighbors Brazil and Argentina, a remarkable position considering Paraguay’s much smaller territory (CAPECO 2015). In the last sixteen years, soy acreage in Paraguay has more than tripled, now reaching over three million hectares with an annual production of over eight million tons that is estimated to increase in nine percent in 2016 (Bajekal 2015; CAPECO 2015). Soy acreage represents nearly half of all agricultural lands in Paraguay (Bajekal 2015).

The prosperity of the soy industry has not helped bridge the deep socioeconomic disparities in the country (Hetherington 2013; Elgert 2016). Poverty levels have allegedly decreased in Paraguay in the 2010’s; still, nearly 32 percent of the rural population was classed as poor in 2014 (DGEEC 2015). Low taxes and treaties with Brazil and Argentina have allowed foreign actors to control and profit from the soy industry in Paraguay (Galeano 2012; Itriago 2012; Elgert 2013). This approach to an export-dependent economy is cast as an important contributor to maintaining a rural binary in which broad-scale soy is in conflict with the Paraguayan smallholder (Fogel and Riquelme 2005; García-López and Arizpe 2010; Hetherington 2011; Galeano 2012).

Soy is considered one of the main causes for deforestation in eastern Paraguay. The forests in this section of South America are biologically unique and important globally, and the biodiversity losses linked to deforestation in the region are considered severe (Myers et al. 2000; Huang et al. 2007; Huang et al. 2009; Hetherington 2011; Richards 2011). Further, high yields of GM soybeans necessitate the application of herbicides and pesticides, which contaminate water and air and affect adjacent land uses and natural vegetation. Exposure to these agrochemicals has been suspected to cause health problems within Paraguayan rural communities (Hetherington 2011). Studies relating negative impacts of soy expansion in Paraguay often mention campesino struggles (Itriago 2012; Guereña 2013; Hetherington 2013; Elgert 2016). Besides exposure to contaminants, economic and
physical displacements have occurred because of payoffs by soy patrons to take over campesino lands and also because of the relative scarcity of smallholder livelihoods in an increasingly mechanized rural landscape (Hetherington 2013; Elgert 2016). Soy cropping stands in stark contrast to traditional, labor-intensive smallholder agriculture—a single person sufficing to work nearly 500 hectares of soy thanks to machinery (Bajekal 2015). These preoccupations are voiced by smallholder groups that spread the slogan “la soja mata” (soy kills) as linked to the death of campesino communities encroached by soy fields, both literally (contamination, violence during protests) and figuratively (displacement) (Hetherington 2013).

Proponents of GM soy production in Paraguay and South America argue that the industry can bring significant tax revenues and, at the same time, be socially and ecologically sound. An international group of soy producers, the Round Table Responsible Soy (RTRS), pledges to grow soy responsibly, by using agrochemicals efficiently, growing soy on already-existing agricultural fields, and providing a certification for soy grown in this manner. The RTRS also promises to work with neighboring smallholders to avoid soy-related pollution and displacement issues (Elgert 2013; Hetherington 2013; RTRS 2013; Elgert 2016). Soy producers in Paraguay, however, have yet to adopt such responsible soy certifications. Laureen Elgert (2016) reports that only two soy producers in the country had been certified by 2014. A recent report on soy expansion issued by the international non-governmental organization (NGO) World Wildlife Fund (WWF) alleges that deforestation has been drastically reduced in Paraguay in the last years because of a national deforestation moratorium established in 2004, which has been renewed a number of times and is still in place (WWF 2014; Elgert 2016). The measure forbids the clearing of native forests for agricultural expansion, suggesting that if enforced, soy expansion in the last decade has been occurring through agricultural intensification or at the expense of agricultural land rather than native forests (WWF 2014; Elgert 2016).
The biosphere reserve and its peoples

In 2000, the UNESCO established the 322,850 hectare Mbaracayú Forest Biosphere Reserve in the buffer zone of the MFNR, a private protected area. The biosphere reserve was defined based on the boundaries of the watershed that contains the MFNR (FMB 2014). The MFNR (with nearly 64,406 hectares) was established in 1991 to preserve a tract of Atlantic Interior Forest, a biodiverse biome that Paraguay shares with Argentina and Brazil (FMB 2014). The protected area is supposed to be intangible to human use, except for hunting and gathering by indigenous Ache communities (Hill and Padwe 2000). On occasion, small marijuana plantations are found in the reserve and game poaching by unauthorized neighboring villagers is reported. For the most, the MFNR has been well protected from deforestation pressures. The remainder of the biosphere reserve is comprised of a mix of land uses, including forest patches, smallholder lands, indigenous territories, urbanizing areas, and large soy fields and cattle pastures. The Paraguayan NGO Fundación Moisés Bertoni (FMB) manages the MFNR. This organization proposed the establishment of the larger biosphere reserve in order to encourage sustainable development practices in the MFNR’s buffer zone (FMB 2014). As of 2012, the FMB estimates (based on national census data) that the biosphere reserve has an approximate population of 36,000 persons in eighty eight smallholder communities (with roughly 7,700 households) and in the towns of Villa Ygatimí and Curuguaty.

Soy associated with colonists and foreign capital has been expanding in the areas adjacent to the MFNR because of land fertility, proximity to Brazil, and lower land costs relative to Brazil and other parts of Paraguay. When visiting the town of Curuguaty, the influence of the soy export industry and the presence of Brazilians is evident in the number of banks, agriculture equipment providers, and businesses advertising in Portuguese. Near Curuguaty, there are a number of soy storage and trading centers, which buy soy from producers in the region and prepare the beans for
international shipment through Brazil. These centers—mostly run by Brazilians—also provide technical assistance and financing to soy producers. Most of the soy grown in this region is genetically modified, thus, its production follows Monsanto and Cargill guidelines, which include the applications of pesticides and herbicides, and rotation between soy and other GM crops. Some large soy fields near the biosphere reserve belong to Paraguayan Mennonite communities that have lived in the region for a number of decades. Unlike those funding most soy enterprises in Paraguay, Mennonites live near their crops. The Mennonite communities near the study area continue to speak German as first language, have a strong religious background, and tend to function as cooperatives. Their main income sources are GM soy—sold to Brazilians—and beef production for Paraguayan markets. Other large holdings in the region specialize in cattle ranching and are mostly owned by absentee Paraguayan landlords.

Smallholder communities within the region include indigenous groups—particularly the Ache and Guarani—and campesinos of mixed indigenous-European background. In this study, campesinos and indigenous peoples are collectively referred to as smallholders—even if many of them do not legally own any land. As in the rest of eastern Paraguay, smallholders in this region combine subsistence and commercial farming with wage labor to support their households. Smallholders tend to be part of communities where many socioeconomic decisions are taken collectively. The emphasis on collective decisions is perhaps stronger in indigenous communities, where community-level and kinship relationships create hierarchies that tend to be rigid. Most of the indigenous communities in the biosphere reserve are nationally recognized and possess several thousands of hectares of community lands. Indigenous lands cannot be leased or sold. These lands are not legally fragmented into household-level titles. In Paraguay, an indigenous territory has one title and is to be managed by the entire community even if individual plots may be temporarily
assigned. Indigenous territories also have restrictions that limit the amount of forests that can be converted to agriculture and what can be grown or extracted for commercial purposes.

In campesino communities, each household occupies a plot. Campesino plots in the study area tend to be around ten hectares; depending on household size, campesino plots can be up to twenty hectares (Itriago 2012; Elgert 2014). Although campesino plots have a size limit, they do not have significant restrictions in terms of what can be grown/extracted for commercial purposes. Like indigenous lands, campesino lands cannot be leased. A household head may obtain the title for their plot, but processing such title costs money the household may not have. Consequently, many campesino families live on lands without titles while still being subjected to land-tenure restrictions. Most campesino families grow different (natively domesticated) varieties of corn, cassava, among other subsistence and cash crops. Campesino families also tend to have a garden for horticulture. Most of the sustainable development initiatives that the FMB conducts in the biosphere reserve target smallholder communities. Such programs include promoting the sustainable growth of crops of commercial value in regional and international markets. More recently, FMB projects to diversify farm production have included work with smallholders that grow soy. The FMB, however, has not incentivized soy cropping among these smallholders.

Brasiguayos form another group in the biosphere reserve. They are agricultural colonists of Brazilian national origin who have conducted smallholder- to broad-scale agriculture in eastern Paraguay since the 1960s, either with their own resources or as employees of Brazilian investors (Blanc 2015). Brasiguayos are now a diverse and permanent part of the Paraguayan population but have been often vilified in borderland Paraguayan societies as wealthy colonists taking advantage of traditional smallholders—a characterization more apt for a smaller number of rich Brazilians that own land in Paraguay (Albuquerque 2010; Blanc 2015).
Methods

The present research is based on fieldwork conducted between June and July 2015. Group discussions, interviews, and field observations focused exclusively on smallholder communities (with an average size of 88 households) that are part of the biosphere reserve. We visited two Ache communities and five campesino settlements. These communities were selected in order to explore different types of relationships smallholders may have with soy cropping, and the different relationships they may have with the Paraguayan state as linked to ethnicity (indigenous versus campesino). We particularly targeted smallholder communities where GM soy is grown in small fields and communities that are near large soy croplands.

The coauthors organized fieldtrips and meetings for group discussions. I conducted group discussions in Spanish with the help of my coauthors as translation from answers/discussions done in Guarani was needed. Group discussions were voice-recorded with the consent of participants, which ranged between three to fifteen persons per group, all of them adults, male and female household heads. Participants were assured individuals would not be identified by name (persons’ names are pseudonyms), but agreed with the release of their community and organization names. Still, community names are not identified in this article. Group discussions were loosely structured and usually started with my asking how the community and individuals relate to neighboring soy plantations, soy cropping, and state-led initiatives of any kind. Discussions took different trajectories in each case, particularly as my collaborators and I asked questions to clarify the reasons behind people’s support of or opposition to soy and their livelihood options in the region. Individual interviews with smallholders were performed when community meetings could not be organized, and also in the case of visits to indigenous communities. Ache community members contacted for this study preferred that I talk directly and exclusively with their leaders, even if leaders agreed that I approach villagers individually. A number of key informants were identified during fieldwork;
informal interviews were carried with them as deemed necessary, and the information obtained was noted in a journal.

**Smallholder responses to soy cropping**

*Ache communities and their support for soy*

The *caciques* (chiefs) of the Ache communities visited, *Don* (Mister) Juan and Don Pedro, expressed their enthusiastic support for soy growth in the region; their communities grow GM soy in their legal indigenous territories. Unfortunately, during this trip it was not possible to visit indigenous communities that do not grow soy, whose residents may have expressed different viewpoints. Don Juan mentioned his community has an agreement with a company to grow soy collaboratively. Key informants later explained the national government first deemed this alliance illegal because it was considered leasing of indigenous lands to external, for-profit interests. The community and investors eventually found a different way to represent their partnership, specifying that the company grows soy with the community as a business partner, and that community members are partner-laborers in the enterprise, allegedly sharing profits equitably. In practical terms, though, the unfamiliarity with mechanized soy plantation and the lack of required equipment make it difficult for the Ache to get involved in all aspects of soy cropping. Don Juan mentioned that community members participate in some operations, including agrochemical applications. However, operations with heavy machinery—like terrain leveling and soybean sowing and harvesting—are done by the partner company’s hired Brasiguayo labor force. Don Juan mentioned the partnership is currently producing soy in 160 hectares (of indigenous territory), but he did not specify for how long this has been happening, or how the cropped area has grown throughout the years. Perhaps Don Juan was cautious in revealing information because the legal issues regarding the partnership were resolved after soy had already been produced in their territories. Don Juan mentioned that his
community retains the profits of selling half of the soy production in addition to receiving a monthly stipend and part of the production of GM corn that is planted in rotation with soy. Don Juan emphasized that “because of the lack of state support we started trying [to plant] soy;” without specifying what type of state support they expect. He also said that GM soy does not cause pollution or health problems if agrochemical applications are done carefully, and he is confident that the training provided by the Brasiguayo technicians has satisfactorily illustrated safety measures to community members. Finally, Don Juan mentioned that the money received from soy sales and monthly stipends is used to care for the health, children education, and food needs of all families of his community.

Don Pedro’s community also partners with a company to grow and sell GM soy. He emphasized their partnership will not be renewed in the next few years, once the community has the resources and expertise to grow GM soy independently. At the time of the interview, the community was negotiating the legitimacy of this partnership with state institutions. The partnership has yielded profits for three years and now includes 185 hectares of soy. Don Pedro was passionate about changing the perspectives that assume a traditional role of indigenous communities. He mentioned that, as the cacique in charge of over 100 families, he is responsible for his community’s wellbeing. Because the national government cannot provide for all of his community’s needs, they have become “like an independent state from Paraguay… I’m in charge of healthcare, medicine, food, maintenance of [our] tractor…”

Don Pedro feels almost obligated to engage in soy production because “soy is the only income activity that provides money. [In this region] if it isn’t soy, it’s marijuana. Beans, peanuts, corn, etc. are for subsistence; they don’t have a market.” Don Pedro is part of a group of indigenous leaders that are trying to amend the laws that restrict agricultural expansion in indigenous lands:

“The indigenous law is from 34 years ago, and it doesn’t reflect what many indigenous persons want,
which is to be [agricultural] producers. Environmentalists are lobbying so that the law won’t be changed, but I and the Union of Indigenous Producers [UPI or Unión de Productores Indígenas] want the law to change.” He added that “there are indigenous people who [say they] want to remain traditional and oppose [changes in the law], but even them walk around with TV, mobiles, and they will need more and more money.”

Don Pedro also said his community is open to receiving income from conservation incentives like carbon sequestration, as their territory still has large expanses of native forest, but thus far the community has yet to secure any such fund. Don Pedro finds that even from a conservation viewpoint, soy is beneficial for their region and the MFNR. He related that the community only intends to agriculturally develop around 25 percent of their territory so they can preserve the forests in the other 75 percent. He mentioned that other recognized indigenous communities in the region and Paraguay do not abide by the laws linked to indigenous territories, allowing external agents to extract timber and other forest products. Don Pedro said he feels frustrated with the Paraguayan government; he has submitted management plans, which include soy planting but also strict forest conservation. Allegedly, the Ministry of Environment (SEAM, Secretaría del Ambiente) has not responded to his plans’ submissions, which seek to legitimize their productive enterprises.

Key informants questioned the partnership these two Ache communities have with export soy companies, particularly in the case of Don Pedro’s community, which does not have a legal agreement in place. An informant mentioned “because they don’t have legal papers, the businessmen do what they want with them [the Ache]. Part of the [informal] agreement is that they also help with the subsistence crops, buy they [the company] don’t do it.” Another informant mentioned that Don Pedro’s initiative with the UPI to modify the existing laws limiting commercial cropping in indigenous territories is being supported and funded by the Guild of Producers of
Paraguay (UGP, Unión de Gremios de la Producción), which would benefit from expanding the amount of land under agricultural production in the country by including also the now legally off-limits indigenous territories.

Campesinos in favor of soy

I visited three campesino communities where my coauthors knew there were families in favor of soy. In these communities, there are both soy producers and families who do not grow soy. In two of these communities, soy producers reported being harassed and protested against by neighbors who oppose GM soy. Group discussions and interviews in these two communities were held separately among those who oppose and those who grow soy, as this arrangement was more comfortable for participants. In the third community, soy croppers coexist amicably with those families that do not grow soy. The campesino-soy enterprises reported during discussion groups appeared to follow land-tenure laws for campesino lands. Members of one community mentioned they were able to grow soy after applying for lands’ titles and securing funding from a Mennonite community located near the study area. They insisted their soy-cropping activities are legitimate and explained they are often accused of being presta nombres (name lenders) for illicit campesino-land leasing soy companies. While they acknowledged such situation is happening in other communities, they emphasized their own situation is legal and insisted in showing me paperwork that allegedly proves their soy harvest is sold to middlemen directly by them through an organization they formed for the purpose. Soy-growing campesinos in this community mentioned Mennonites have incentivized smallholder soy production through loans and technical assistance in exchange for exclusivity as their middlemen for export soy sales. Other campesino soy croppers interviewed mentioned they have formed partnerships with export-soy companies in the region, probably run with Brazilian capital. In both cases, campesinos have received external help when performing soy-
cropping activities that require heavy machinery and specialized technical knowledge. The campesino soy association working with Mennonites mentioned they have been engaging in soy-cropping for nearly three years now and are starting to see profits. The first year of soy in particular put them in debt because of the costs of terrain leveling and preparation for sustained mechanized cropping. Campesino soy croppers in the other two communities are in their first or second year of production and have yet to see profits, but are confident they will succeed.

Campesinos growing soy mentioned they saw how profitable GM soy could be based on experiences in neighboring larger farms, and decided to give it a try, particularly as they were approached by Mennonite cooperatives in the case of one community, and other (probably Brazilian) soy producers in the region, in the case of the other two communities visited. They also mentioned there are few options for growing cash crops in the region, or at least not as profitable as soy. In many cases, before I could even mention it, they told me that the reports on GM soy agrochemical pollution were exaggerated; their main justification was that agrochemical applications only happen a few times during the growing season, usually between October and February. These campesinos also complained about the violence linked to their soy operations, particularly in one of the communities. They said that neighbors against soy have tried to sabotage their operations by disabling their equipment and protesting as they try to work in their fields. On several occasions, the protests in their community required police intervention so they could continue working their fields.

The soy-growing campesinos consulted challenged ideas that they are to bring and incentivize monoculture and lack of diversity in their communities by growing soy. These campesinos engage in a number of other activities besides soy. In one community in particular, soy-growing campesinos also have an initiative in which the members of their (soy-cropping) organization travel together to Curuguaty to sell produce from their gardens (maintained by female
household-heads). Some of them also have animals, including bovine cattle and pigs, which are sometimes fed part of their GM soy and corn productions.

**Campesinos against soy**

As I traveled in the study area, I was surprised by how close soy plantations are to the main entrance of the MFNR. I had the same impression in some of the smallholder communities visited. In one in particular, our group discussion took place at the community’s elementary school, and soy fields, at the moment with rotational crops other than soy, were surprisingly close to the building, 300-400 meters away. The campesinos consulted in this session mentioned that before protests, soy fields had been even closer, less than 100 meters from the school. A tall-grass barrier has now been planted to shield the school and villagers’ houses from the soy fields—still visible from the school. I could imagine, from the school, being easily reached by any agrochemical spraying in those fields.

In all four communities visited where I met with campesinos against soy cropping, I heard some of the same rhetoric, with very similar words to the manifestos posted on the blog and Facebook websites of the political party *Partido Paraguay Pyahurã* (PPP), originally formed by campesino grassroots leaders (PPP 2015). At first it was difficult to obtain information that was specific to how broad-scale soy may be hurting their communities. Interviewees would mention passionately events that happened elsewhere. An event mentioned in all of the against-soy discussion groups relates the death of the child of a campesino family described in an article by Kregg Hetherington (2013). This is one of the few documented cases of poisoning linked to exposure to GM soy agrochemicals.

Interviewees mentioned this is not an isolated case, stating that other campesino children might have died or become ill because of exposure to GM soy agrochemicals. They also related local cases, stating that whenever they take their children to the doctor for what they think is a health
issue related to agrochemical exposure, doctors will not document in writing a cause for the illness because they fear legal repercussions from soy companies or the state. Adults also report feeling sick during agrochemical applications in the study area, particularly dizziness, eye irritation, and respiratory difficulties.

During all of the against-soy group discussions, though, the most passionate topic was what interviewees call a problematic “development model” or anti-smallholder “production model.” Interviewees said they perhaps would not have an issue with growing soy themselves if it were organic, or if soy were grown in a patchy landscape. However, they argued, the Paraguayan government has sided with big companies and foreign investors to implement a model that requires little (human) labor thanks to mechanization. They related how decades ago, the government subsidized campesino-grown cotton through easy-to-get loans, connecting campesinos to the thriving export industry of textiles. The state has never made a visible effort to include campesinos in the soy industry, which, in comparison to cotton-cropping, requires very little labor.

These campesino groups reported that soy-cropping efforts mentioned by neighbors are too recent and may be part of a land-grabbing scheme by local Mennonites and Brasiguayo soy patrons. Allegedly, patrons intend to displace campesinos from the region in the long-term as smallholders may not be able to compete with bigger soy producers—similarly to what happened years ago with cotton production. Key informants reported that a few entire campesino communities have been displaced in a similar way within the study area. First, soy patrons offer campesinos help in growing their own soy, or simply illegally rent their lands, asking campesinos to sell the soy production on their behalf—as “name lenders.” Later, campesinos are allegedly offered a money amount to leave their lands, and once abandoned, the government allows soy patrons to use the vacant lands. Although this land-grabbing scheme has not happened in the communities visited, consultants mentioned it has happened in other communities in the biosphere reserve, confirming information
provided by a key informant. Some contradictions, however, exist in the accounts of one community speaking against the association between soy-growing campesinos and Mennonite patrons. Most of those campesinos against soy near the Mennonite settlement in question confessed they believe Mennonites are mostly good people because of the frequent wage-labor opportunities they continue to provide.

In one community in particular, discussants focused on reporting the effects of GM corn—often rotated with GM soy—and herbicides on their traditional land uses rather than as health hazards. They believe the increasingly lower productivity of their fields is related to being surrounded by GM soy and GM corn fields. They also reported their native corn varieties are changing because of crosspollination with GM corn, showing me cob samples they have kept with different-colored grains, also explaining these impacts as they walked me around their fields. A number of farmers in this community resented that Paraguayan varieties of subsistence and cash crops may be lost if the rural landscapes continues to be transformed into large GM monocultures.

During a couple of the group discussions, interviewees suggested that if I visited each family that does not grow soy and studied their livelihoods, I would see that it is possible to lead a decent life without resorting to soy cropping, from traditional farming. These campesinos argued that the state should help them find better markets for Paraguayan farm products and create related industries instead of promoting soy. Because they feel the state will never do this, they have taken part in forming the PPP so they can, perhaps in the near future, “be actually part of the state and the government.”

**Smallholders and marijuana**

The debate over whether soy is a viable option for smallholders in the region is complicated by livelihood opportunities that marijuana provides. Marijuana growth and trade are illegal in
Paraguay; still, the country and Colombia are considered the largest producers and exporters of the drug in South America (Cooper and Ruffinelli 2012; Heinze and Armas-Castañeda 2015). The MFNR itself has been used for years to grow marijuana (Medina 2014; Última Hora 2015). Marijuana plots also exist elsewhere in the biosphere reserve, in smallholder lands. Journalist Pablo Medina and his assistant Antonia Almada were murdered on 16 October 2014 in the biosphere reserve, near the town of Villa Ygatimí where the FMB has its local headquarters (Acebes 2015). The persons held in custody in connection to Medina and Almada’s murder case have been linked in the media to disputes between local drug gangs, members of which were local government authorities (ABC Color 2014). Because of these recent murders, we decided not to ask about marijuana-related activities, fearing our safety would be compromised if we were perceived to be investigating drug gangs.

As road development and pavement densify because of the continual expansion of the soy frontier, the study area’s proximity to Brazil becomes ever more strategic for drug trafficking. Recently, there have been successful efforts to seize and destroy marijuana grown in the region, led by government agents in concert with reserve managers (Medina 2014; Última Hora 2015). Still, for campesinos that find it difficult to access markets for smallholder products, marijuana may be a viable option to contribute to the household economy. The fact that marijuana production and trafficking have been reported in the region for decades suggests that the associated illicit network is well established.

Despite never inquiring about marijuana production, the topic emerged spontaneously in conversations with a number of interviewees. Don Roger, for instance, volunteered information after our (voice-recorded) interview had concluded. As I and a coauthor were leaving, he and his partner invited us to have lunch with them. The meal was a delicious, hearty locro (a Paraguayan domesticated corn) soup made with some of the ingredients he had mentioned were endangered by
cross-genetic contamination from GM corn and pollution linked to land uses in neighboring soy fields. Away from the recording device and formal interview, Don Roger asked us—almost as criticism—why our line of questioning did not include the discussion of marijuana. He referred to the activity as a burden and a source of worries for his community. Don Roger said that those not involved with marijuana fear violence and do not welcome the presence of often-armed neighbors. A neighbor of Don Roger present during this conversation concurred and added that a “man with a gun” communicates that “he’s willing to kill” and also that “he’s willing to die.” The statement echoes with these residents’ sympathy for the families that participate in the trade. Don Roger and his neighbor said that once a member of a household enters the trade, other family members usually follow and become marijuana workers. They also said that getting out of the business is impossible, and if a family did, for drug patrons they would become a liability to be eliminated.

The topic emerged in other discussions. A proponent of soy production stated: “Many of those who oppose [soy production] say they don’t want soy in [or near] their communities because they’re hiding their marijuana.” This is an overgeneralization, as I heard complaints against campesinos’ involvement in marijuana from smallholders who are also against soy. Still, the statement resounds with other smallholder soy proponents who believe it is unjust for them to be criticized when trying to integrate the production of a legal crop while neighbors are engaging in illegal marijuana cropping.

**Discussion and conclusions**

*The absent state*

Most of the smallholders consulted for this study justified their behavior alluding to the “**estado ausente**” (absent state). It is the absent state that supposedly drives some to work illegally with big soy producers or drug lords. These reasons may sound like pretexts to justify illicit or
environmentally-degrading behaviors. In Paraguay, reference to the absent state among campesinos can also echo the promises and donations made during political campaigns for elections after the Stroessner’s dictatorship. Stroessner gifted large rural properties to fellow politicians. Despite the advent of democracy in 1989, subsequent governments have not redistributed or repossessed all of Stroessner-gifted properties, and campesinos continue demanding a more equitable agrarian reform in a country where an elite still controls large holdings (Nickson and Lambert 2002; Elgert 2016).

The stronger state presence campesinos demand relates to the enforcement of basic rights, regulations, and institutions to help them subsist and prosper in a region where soy patrons and drug lords have disproportionate advantages, particularly considering the area is within a biosphere reserve. Campesinos criticize a state that turns a blind eye so that soy patrons can do as they wish, with the pretext that embracing a neoliberal economy and the soy industry brings economic growth to the country. Campesinos criticize a state that makes it difficult for them to obtain land titles that would, perhaps, facilitate their legal and more competitive participation in the soy industry—albeit at smaller scales—or other enterprises.

In this sense, the Paraguayan state may be absent on purpose, as past smallholder subsidies (e.g., for cotton) did not yield the expected returns at the local or national levels, particularly when compared to mechanized soy. Since the late 1990s, soy has dominated as the main export crop in Paraguay, a reversal from its modest (if growing) position through the 1970s into the late 1980s, when (smallholder-produced) cotton held the top position as main agricultural export (Hetherington 2011). Cotton production, despite the subsidies, left many campesinos in debt with the state’s bank Crédito Agrícola (Agricultural Credit)—debts that for the most could not be paid and had to be pardoned (Hetherington 2011; Fogel and Riquelme 2005). Besides easy loans, the Paraguayan state also provided dedicated technical assistance to help campesinos grow cotton (Hetherington 2011). Soy production, however, has required little state intervention or investment, as technology,
financing, and workers with know-how to engage in mechanized cropping originally came from Brazil into eastern Paraguay, growing from the borderlands into the mainstream of the Paraguayan export economy (Hetherington 2011; Fogel and Riquelme 2005). As the neoliberal project continues in Paraguay, it is easy to conjecture the state has purposely abandoned the peasantry in favor of supporting, also with its absence, the (seemingly autonomous) expansion of the soy frontier.

Relationships between indigenous peoples and the state are equally complex. Consulted indigenous communities are in legal standing in terms of land tenure, having nationally recognized territories. Still, they clash with existing laws that restrict commercial land uses in their territories. For better and worse, the state mostly lets indigenous people do as they please. This works both for and against the Ache. While they may be profiting from soy cropping, their relationship with soy patrons is likely asymmetrical. Soy expansion has reached lands that were in part given to the Ache—traditionally forest hunters and gatherers—for biodiversity conservation purposes, as part of the buffer zone of the MFNR. Illegal land uses in indigenous territories could perhaps weaken the land tenure institutions that indigenous peoples fought so hard to attain in the first place, but this would require action from the state. In this sense, Ache communities in the reserve are at an advantage over campesinos, considering land-grabbing by soy patrons is less likely to happen when large indigenous territories are at stake. It is discouraging for conservation purposes, though, that no land appears to be off-limits for soy patrons, who have found their way even into indigenous territories within a biosphere reserve.

*Strengthening local institutions*

Focusing on the conflicts among smallholder communities, soy and drug patrons, and the absent state in the study area can paint a depressing image of the biosphere reserve’s future. Still, there are important triumphs that should be underscored from actions that different campesino
groups have taken in the study area. FMB and campesino-related protests have improved protection against GM soy fumigations with the creation of some vegetation barriers, wider buffer areas around large soy plantations, and increased community awareness and surveillance. The political organization of campesinos in the study area could be seen as strengthening their ties with other campesino communities in Paraguay, which increases their social capital and political power. This connection could bring more attention to local peasant struggles as they unravel and are communicated to other campesinos in the country, the same way in which local campesinos are very knowledgeable of issues happening elsewhere. In one community with both for- and against-soy groups, interviewees related that when it comes to supporting campesinos from other parts of Paraguay—affected by flooding or other hazards, for instance—most of the community comes together in collecting food and money for the affected. These collections are organized by against-soy campesinos but for-soy neighbors also collaborate, which suggests that these different groups still help each other.

While a number of smallholders may be working illegally with soy, field visits for this research provide some evidence of relatively recent legitimate (and potentially legitimate) smallholder soy ventures, particularly those involving Mennonite (instead of Brazilian) patrons. If these incipient ventures become lucrative in the long-term, perhaps they can function as models for other campesinos currently doubting whether soy can be grown profitably at smallholder scales. Also, sustained legal smallholder soy cropping in the area could reassure some communities that soy on campesino lands does not always have to be linked to illicit land leasing or land-grabbing schemes. In the case of indigenous groups, cacique Don Pedro mentioned that his community aspires to be like another Ache community in eastern Paraguay, Puerto Barra (Alto Paraná Department), which fought hard to have a management plan approved by the government, a plan that includes allegedly sustainable cattle raising and soy cropping. Thus, it may be possible that by
engaging in illegal soy enterprises, instead of weakening their communities’ rights, the Ache prove they have the knowledge to sustainably produce soy in lands that can also include conservation.

*Opportunities for sustainable development*

The classic agrarian question and its more recent iterations open at least two paths for the peasantry in the advent of capitalism and industrialization (De Janvry 1981; Giarracca 1999): Will development absorb peasants into the proletariat class? Or will peasants resist the industrialization of the countryside and somehow remain peasants? In the study area, peasants have persisted for a number of reasons, showing resilience against such landscape modernization while integrating capitalist modes of production. While there are accounts of campesino communities displaced by soy expansion in the biosphere reserve, the campesino and indigenous communities visited have resisted such displacement by fortifying local institutions as they connect with networks at regional (Mennonite and other soy patrons, drug lords) and national (the PPP political party, UPI, UGP) levels. While these alliances have caused conflicts in the study area, relatively small compromises among these different group—excluding, possibly, drug lords—may not be far-fetched and could be compatible with sustainable development at both smallholder- and broad-scales.

Elgert (2016) is rightly skeptical that the “responsible soy” discourse could help materialize sustainable development in Paraguay. The Mbaracayú Forest Biosphere Reserve, however, provides a unique opportunity to continue trying to make these responsible-soy tenets work (Elgert 2012; Elgert 2014). For instance, greater visibility of commodity chains of the soy produced in the biosphere reserve could put pressure on the Paraguayan government to enforce soy-related regulations. Luiz Barbosa (2015) illustrates how, in the Brazilian Amazon, greater enforcement of responsible soy tenets were achieved indirectly by reports that the international NGO Greenpeace published. By connecting Amazon deforestation with soy production to feed the livestock industry
in the European Union, Greenpeace brought attention to ecological destruction within a market with relatively high environmental standards (Barbosa 2015). Perhaps a similar claim that applies a neoliberal logic—regulations to gain access to markets—can be employed to bring visibility to GM soy impacts in the study area, especially considering the European Union is one of the main buyers of Paraguayan soybeans (CAPECO 2015). Politicizing the commodity chains of soy produced within the biosphere reserve could help exert more pressure on the Paraguayan government to enforce their existing soy regulations, like the soy-related deforestation moratorium, and also make it more attractive for soy patrons to adopt responsible-soy certifications from the RTRS. Emphasis needs to be placed, though, on meeting both environmental and socioeconomic tenets of the responsible-soy certification, bringing attention not only to native forests, but also to the unsettling consequences of the export industry on traditional peoples.

Socioeconomic consequences on particular communities will be different within the biosphere reserve. In our modest sample, such consequences add to the effects of the absent state and include—besides possible land-grabbing schemes, health hazards, and pollution—integration into marijuana trade, and conflicts between for- and against-soy smallholder groups. These conflicts have sometimes escalated into violence. Perhaps some of these conflicts will fade if examples of profitable legal smallholder soy ventures become more common. It is also fundamental that communication be established among these different groups, which in part is being done by the FMB as the organization continues developing inclusive programs for smallholder sustainable development. As opposing groups listen to each other, perhaps certain adjustments to GM soy-cropping can be made. An important one for some visited communities relates to the cultivation of Monsanto GM corn in rotation with soy. Could soy-cropping neighbors (of all sizes) avoid GM corn altogether given that the more profitable product is soy? Maybe GM-soy can be rotated with other crops that do not interfere with Paraguayan corn varieties if indeed cross-pollination occurs.
In summary, smallholders in Paraguay have been experiencing for a long time now a transitional moment in which they are in continual conflict with mechanization, conservation initiatives, illicit crops, and land tenure insecurity. Smallholder land uses, because of their patchy nature and lack of mechanization, can be more compatible with environmental conservation in the buffer zone of a protected area than, say, large monoculture expanses. But in order to achieve sustainable livelihoods, the different communities in the biosphere reserve need to continue working on compromises that ensure smallholder rights. Unfortunately, proximity to Brazil—a big buyer and intermediary of soy and marijuana—may make it difficult to create socially just livelihoods in the area without stronger state and NGO interventions. Hopefully, the strengthening of smallholder institutions and lessons from past violent confrontations will continue bringing attention to such needs, and the opportunities that being part of the biosphere reserve presents will continue informing strategies for the perseverance and progress of campesino and indigenous communities.
References


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