Legitimating Foreignization in Bolivia: Brazilian agriculture and the relations of conflict and consent in Santa Cruz, Bolivia

by Lee Mackey

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Lee Mackey
Department of Planning, University of California, Los Angeles

1. INTRODUCTION

Brazil is a leader in tropical soybean innovation, the pretender to dominance of a global biofuels market, and the source of 78 bilateral agricultural cooperation agreements in nearly every country of the tropical world.[1] The globalization of a constellation of Brazilian actors in tropical agriculture and biofuels raises the specter of Brazil as not only a destination but also a driver of transnational land investments across the tropical world. Despite the global scale and magnitude of these emergent land-based dynamics there has been little analysis of Brazil as a source of production and landholding abroad within the current phase of land deals. In order to generate future research hypotheses on the emergent trajectories of Brazilian actors shaping land-based social relations beyond Brazil I analyze an actually-existing intraregional case of Brazilian landowning to ask the question: what are the relations of conflict and consent concerning Brazilian landholding in Santa Cruz, Bolivia? In Amazon frontiers the politics of industrial agriculture in landscapes of the rural poor, contested regional integration projects and shadow of Brazilian expansion suggest that the globalization of Brazilian agriculture will be mediated through the particular social relations governing land in this region.[2] The peripheral transnational frontier of Santa Cruz, Bolivia presents a valuable case through which to ground future analysis of the central role that the globalizing relations of Brazilian production are poised to play across the tropical world.

Popular currents of resource nationalism, official rejection of large-scale industrial agriculture and the prioritization of the rural poor in land reform in Bolivia have not prevented Brazilian producers from quietly consolidating vast tracts of land in the Bolivian soybean frontier since the early 1990s. Neoliberal expansion of soybean frontiers in the region underwrote Brazilian success as an agricultural giant domestically and propelled Brazilian producers as leading actors in the development of peripheral regions in neighboring Bolivia and Paraguay.[3] The increase in Brazilian soybean production in Bolivia in the last two decades paralleled indigenous and smallholder marches for land, a land adjudication and titling process begun in 1996 and a new Evo Morales administration swept to power on social mobilization for national control of natural resources in 2000 and 2003. In the midst of these ongoing processes how have Brazilian

[1] Mauricio Antonio Lopes, "Embrapa Africa: A Brazilian Strategy to Support Agricultural Development in Africa" (presented at the Special Seminar at the International Technical Cooperation Center, Suwon, South Korea, February 19, 2010), http://labexkorea.files.wordpress.com/2010/02/embrapa-africa-powerpoint-presentation.pdf.
[2] Comparatively more research has been conducted on Brazilian production in Paraguay. See, for example: Ramon B. Fogel and Marcial Antonio Riquelme, *Enclave sojero: merma de soberania y pobreza* , Paraguay: Centro de Estudios Rurales Interdisciplinarios, 2005); Andrew Nickson, "Brazilian colonization of the eastern border region of Paraguay," *Journal of Latin American Studies* 13, no. 1 (1981): 111-131.

producers in Bolivia consolidated landowning despite these dynamics that might suggest struggle against large foreign landowners?

I proceed in this article by locating this case in in the literature on the social relations of foreign landholding through a conceptual framework of hegemony. In section three I present the historical background of agricultural development and land tenure in the study region of Santa Cruz, Bolivia. After presenting my research design in section four I briefly present updated soybean production data as a proxy for landholding distribution in order to introduce discussion of Brazilian producers in the land-based social relations of the region. In section five I analyze narratives of Brazilian "technology and capital" through the ideologies and discourses of different agrarian groups in Santa Cruz, Bolivia to explain processes of legitimation of foreign landowning in Bolivia. In the concluding section I discuss these results and their potential implications for analytical approaches to emergent global relations of Brazilian agricultural actors. In this article I call attention to the regional political economy of Brazil and Bolivia in explanations of Brazilian agricultural landholdings in Bolivia and I argue that technology transfer is in important terrain of consent between Brazilian producers and regional agrarian actors.

2. LITERATURE REVIEW

The "foreignization of space" is marked by the global scale and intensity of land purchases that extend beyond narrow frames of agriculture and include powerful new actors.[4] Chinese investment abroad has served as an archetypal case of a south-south actor in "land grabs" but there has been little consideration of Brazil and the other "BRIC" countries as quiet but looming drivers of the foreignization of land.[5] In order to consider how these new dynamics of foreign land purchases will provide benefits or provoke dispossessions for the rural poor, analysts have called attention to the construction of the social relations between foreign actors and domestic groups. Hall argues that a central analytical approach to the underlying mechanisms of landowning is to discern the "ideologies and discourses of legitimation employed in favor of land deals" by foreign actors.[6] Borras and Franco call for a disaggregated analysis of "of issue-framing and demand-making, as well as the underlying motivations" of domestic responses to land deals that incorporates class but also considers tensions between and within producer groups and social movements."[7] This article examines the ideologies and discourses of agrarian groups in Santa Cruz, Bolivia with respect to current landholding by Brazilian producers in order to

[4] Annelies Zoomers, "Globalisation and the foreignisation of space: seven processes driving the current global land grab," *Journal of Peasant Studies* 37, no. 2 (April 2010).
[5] John Wilkinson and Selena Herrera, "Biofuels in Brazil: debates and impacts," *Journal of Peasant Studies* 37, no. 4 (2010): 749; Peter Dauvergne and Kate J. Neville, "The Changing North-South and South-South Political Economy of Biofuels," *Third World Quarterly* 30, no. 6 (n.d.): 1087-1102.
[6] Ruth Hall, "The Many Faces of the Investor Rush in Southern Africa: Towards a Typology of Commercial Land Deals" (presented at the Africa for Sale: Analyzing and Theorizing Foreign Land Claims and Acquisitions, University of Groningen, Netherlands, 2010).
[7] Saturnino M. Borras Jr. and Jennifer Franco, *Towards a broader view of the politics of global land grab: rethinking land issues, reframing resistance* (ICAS Working Paper Series, 2010).

draw insights on Brazil as an emergent case of the "BRICs" in foreign land deals in the Amazon and tropical regions.[8]

In order to analyze the underlying social relations and win-win narratives of capital and technology transfer by foreign landholders in Bolivia I draw on Gramsci's concept of hegemony. Hegemony refers to the relations of consent that combine with economic force to legitimate, naturalize or universalize the relations of a powerful social class or groups over a subordinate group. Analysts concerned with transnational class relations in a global political economy have drawn on Gramsci's comments, such as the following one, that consider the international context in which social classes achieve hegemony within an "historic bloc" of the nation-state:

> International relations intertwine with these internal relations of nation-states, creating new, unique and historically concrete combinations. A particular ideology, for instance, born in a highly developed country, is disseminated in less developed countries, impinging on the local interplay of combinations. This relation between international forces and national forces is further complicated by the existence within every State of several structurally diverse territorial sectors, with diverse relations of force at all levels.[9]

A number of works have analyzed the role of agrarian elites in Santa Cruz through the development of agrarian capitalism and agroindustrial modernization in neoliberal export frontiers.[10] Valdivia complements analyses of production relations by analyzing the discourses, strategies and mechanisms through which Santa Cruz elites achieved hegemony over subordinate classes through informal technical arguments about agriculture, a focus on "production realities," and arguments about "unity" in the agrarian sector.[11] Despite the role of Brazilian producers as the leading producers in Bolivia's most important agricultural sector, the Brazilianization of Bolivian agriculture has been studied very little as a topic in its' own right.[12] I seek to build on these analyses of hegemony among agrarian classes in the Bolivian lowlands by considering the transnational position of Brazilian producers in relations with Bolivian groups in Santa Cruz.

Technology transfer has been invoked as an important potential development benefit of land deals in policy analyses but there has been little examination of the ideologies and discourses of

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[8] Leslie Elliot Armijo, "The BRICs Countries (Brazil, Russia, India, China) as Analytical Category: Mirage or Insight?," *Asian Perspective* 31, no. 4 (2007): 7-42.

[9] Antonio Gramsci, "Prison Notebooks," *J. Buttigieg. New York: Columbia University Press* II (1996): 180.

[10] Ximena Soruco, Wilfredo Plata, and Gustavo Medeiros, *Los barones del Oriente* (Santa Cruz, Bolivia: Fundacion Tierra, 2008); Susanna B. Hecht, "Soybeans, Development and Conservation on the Amazon Frontier," *Development and Change* 36, no. 2 (March 2005): 375-404; Mamerto Perez Luna, *No Todo Grano que Brilla es Oro: Un Analisis de la Soya en Bolivia* (La Paz, Bolivia: Centro de Estudios para el Desarollo Laboral y Agrario (CEDLA), 2007); David Kaimowitz and J. Smith, "Soybean technology and the loss of natural vegetation in Brazil and Bolivia," in *Agricultural Technologies and Tropical Deforestation*, ed. Arild Angelsen and David Kaimowitz, 2001.

[11] Gabriela Valdivia, "Agrarian Capitalism and Struggles over Hegemony in the Bolivian Lowlands," *Latin American Perspectives* 37, no. 4 (2010): 67.

[12] For an exception to this see: Heloisa Marques Gimenez, "O desenvolvimento da cadeia produtiva da soja na Bolívia e a presença brasileira: uma história comum" (unpublished thesis, Sao Paulo, Brazil: University of Sao Paulo, 2010).

technology transfer in foreign land investments.[13] Kaimowitz and Smith draw attention to new technologies as a critical economic input that shaped land use trajectories in the scale economies of industrial agriculture in Bolivian and Brazilian soybean frontiers.[14] Technology is an important arena for analysis of land deals because, as Ribot and Peluso describe, it is one of the "bundle of powers" beyond private property rights that shapes and influences effective access to benefits from land and natural resources.[15] Valdivia also draws attention to the technical discourses of seed technology in Santa Cruz as mechanisms through which capitalist agriculture is protected and elite arguments for regional autonomy are advanced.[16] I examine agricultural technology as a comparatively "neutral" terrain of land-based social relations that may be helpful in explanations of the consensual aspects of legitimation of Brazilian agricultural production in Santa Cruz and other tropical regions.

3. BACKGROUND

Approximately 35% of Bolivia's population of 10 million people resides in rural areas. Despite modest recent gains in socioeconomic indicators, Bolivia remains the Latin American country with among the highest rates of extreme poverty (38%) and income inequality (Gini coefficient of .58) in the region, with indices for the rural population even higher in both categories.[17] Bolivia's 2009 GDP of 17 billion is approximately 1/90th the value of the GDP of its' Brazilian neighbor to the east.[18] The Bolivian department of Santa Cruz covers 370,621 square kilometers (34%) of Bolivia between the Andes region in the west and the Brazilian states of Mato Grosso and Mato Grosso do Sul along Brazil's longest international border in the east.[19] Brazilian agricultural landholdings in Bolivia are concentrated in the agricultural frontiers of the *cerrados* wooded grasslands that extend from Brazil to the center of Bolivian commercial agriculture in the region to the north and east of the city of Santa Cruz in the department of Santa Cruz, as shown in Figure 1.[20] Agriculture drives Santa Cruz's leading 27% share of Bolivia's GDP, along with cattle ranching in the eastern part of the department, timber in the dry forests of the northern region, and extractive industries in the southeast. With a population of 2,029,471, Santa Cruz anchors the Bolivian East (*Oriente*) or Lowlands (*Tierras Bajas*) region that includes the departments of Beni and Pando and overlaps with political and ethnic divisions as a counterweight to La Paz and the Andes region in contentious regional struggles.[21]

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[13] Michael Kugelman and Susan Levenstein Levenstein, "Land Grab?," *Race for the world's farmland. Washington, DC: Woodrow Wilson International Center for Scholars* (2009); Klaus Deininger and Derek Byerlee, *Rising Global Interest in Farmland: Can It Yield Sustainable and Equitable Benefits?* (World Bank Publications, 2010).

[14] Kaimowitz and Smith, "Soybean technology and the loss of natural vegetation in Brazil and Bolivia."

[15] Jesse C. Ribot and Nancy Lee Peluso, "A Theory of Access.," *Rural sociology* 68, no. 2 (2003): 29.

[16] Wendy Wolford et al., "Everyday forms of political expression," *Journal of Peasant Studies* 36, no. 2 (2009): 411.

[17] George Gray Molina and Ernesto Yañez, *The Dynamics of Inequality in the Bestand Worst of Times, Bolivia 1997-2007*, Discussion Paper (New York: United Nations Development Programme, undefined).

[18] "World Bank, World Development Indicators", n.d., http://data.worldbank.org.

[19] Ismael Montes de Oca, *Geografía y recursos naturales de Bolivia*, vol. 574 (La Paz, Bolivia, 1997).

[20] Christian Brannstrom, "South America's Neoliberal Agricultural Frontiers: Places of Environmental Sacrifice or Conservation Opportunity," *AMBIO: A Journal of the Human Environment* 38, no. 3 (May 2009): 141-149.

[21] Jeffery R. Webber, "Rebellion to Reform in Bolivia. Part III: Neoliberal Continuities, the Autonomist Right, and the Political Economy of Indigenous Struggle," *Historical Materialism* 16 (November 2008): 67-109.

Figure 1: Map of Bolivia with department boundaries

History of agricultural development and land tenure in Santa Cruz

Until the second half of the twentieth century agricultural development in Santa Cruz was limited by the small size of the local market, isolation from markets in the Bolivian highlands, and economic policies focused on the highlands mining sector.[22] Land tenure in the lowlands was determined through inherited colonial land grants or mere possession of land with little formal recognition or issuance of titles. On the eve of the 1952 Bolivian revolution only 58,000

[22] Mario Arrieta Abdalla et al., *Agricultura En Santa Cruz: De La Encomienda Colonial a La Empresa Modernizada (1559-1985)* (La Paz, Bolivia: ILDIS, 1990); Her , *Oriente boliviano* ," 1988).

hectares were devoted to agriculture, and Pacheco estimates that only 1% of lands in the highlands were being used effectively.[23] The limits of the hacienda system and groundswell from peasants in the Bolivian revolution led to an agrarian reform in 1953 with differentiated regional goals and outcomes that in the western highlands region included redistribution of unproductive land from haciendas to peasants on the principle of land to those work it, the end of the hacienda labor system and an increase in food production by peasants.[24] In the east the agrarian reform sought to convert unproductive lands into agricultural enterprise via a junker path to capitalist agriculture and to provide an outlet for freed highlands peasant as colonists and labor for commercial agricultural enterprise. The large properties and unequal pre-reform agrarian structure remained largely unchanged and there were very few expropriations because of official conversion to the category of agricultural enterprise, limited distribution of some excess lands to former tenants, the availability of state lands for distribution to smallholders but also political connections and corruption of governing party and public officials.[25]

The agrarian reform of 1953 and subsequent colonization programs, large land grants during military dictatorships, and the stimulus to the commercial agricultural sector are the principal determinants of current land tenure in Santa Cruz with a dual system of commercial agriculture alongside the persistence of a large number of smallholders.[26] Development planning for Santa Cruz in the decades after the agrarian reform has been strongly influenced by the recommendations of the Bohan Plan conducted by a United States economic mission to Bolivia in 1941 and 1942 that sought to diversify the mining economy after the global depression, Chaco War and crisis in the mining sector [27] After 1952 these recommendations were implemented with United states aid through development pole planning based on large-scale agriculture in traditional products as well as cattle, state intervention in agroindustrial processing, subsidized credit for mechanization and production, and transportation infrastructure such as the Santa Cruz-Cochabamba road in 1954 that integrated the region to markets and the rest of the country for the first time. Sugarcane and also rice were the main cash crops from the late 1950s, with the increasing importance of cotton, cattle and timber in the 1960s and 1970s. In the 1960s and 1970s there were a number of planned and spontaneous national and international colonization projects with small private properties from 20 to 30 hectares and agrarian cooperative trade unions as the primary form of land tenure.[28] Military dictatorships in the 1970s increased support to the Santa Cruz agricultural elite, with concessionary credit and other resources to

[23] Ministerio de Asuntos Campesinos y Agropecuarios., *I Censo Agropecuario - 1950*, Edición corregida y reeditada por la Fundación TIERRA. La Paz: (La Paz, Bolivia: Fundacion TIERRA, 2009); Pablo Pacheco B., Center for International Forestry Research and CEDLA (Organization), Taller de Iniciativas en Estudios Rurales y Reforma Agraria, *via*, Serie Bosques y sociedad no. 2 (Bolivia? Centro Internacional de Investigaciones Forestales, 1998).

[24] Dwight B. Heath et al., *Land reform and social revolution in Bolivia* (FA Praeger, 1969).

[25] Alan Bojanic, *Tenencia y uso de la tierra en Santa Cruz: evaluación de la estructura agraria en el área integrada de Santa Cruz* (Centro de Estudios para el Desarrollo Laboral y Agrario (CEDLA), 1988).

[26] Miguel Urioste and Diego Pacheco, *Las tierras bajas de Bolivia a fines del siglo XX* (Fundacion PIEB, 2001), 182.

[27] *Plan Bohan, Bolivia.* (La Paz Bolivia: Editorial Carmach, 1988); J. Dandler, "El desarrollo de la agricultura, políticas estatales y el proceso de acumulación en Bolivia," *Estudios Rurales Latinoamericanos* 7, no. 2 (1984): 81-149.

[28] Lesley Gill, *Peasants, entrepreneurs, and social change : frontier development in lowland Bolivia* (Boulder: Westview Press, 1987).

commercial agriculture as well as the largest distribution of frontier large grants that continues to influence unequal land distribution in Santa Cruz to the present day.[29]

Neoliberal soybean frontiers and new land reform measures

Brazilian landholding in Santa Cruz expanded within the context of agricultural liberalization and structural adjustment programs in both Brazil and Bolivia that led to the regional growth of soybean frontiers in the South American *cerrados*.[30] In 1990, Brazil implemented a sweeping economic liberalization called the *Brasil Novo*, or *Collor Plan* reforms that led to sharp reductions in agricultural credit, elimination of price supports, and other changes in agricultural policies resulting in high interest rates and changes in the distribution of farmland that may explain push factors leading to Brazilian migration and investment in Bolivia.[31] [32] Bolivia implemented structural adjustment programs in 1985 that attempted to deal with macroeconomic crisis and inflation rates of over 8000% through macroeconomic policies, the elimination of agricultural subsidies, the removal of price supports and the liberalization of trade barriers and controls.[33] In 1990, the World Bank provided $35 million dollars for the Santa Cruz Eastern Lowlands project (*Tierras Bajas del Este)* to improve balance of payments and increase soybean exports by developing the technology and credit mechanisms to increase and sustain large-scale agricultural productivity, improving transportation and storage infrastructure, introducing market pricing of public lands, as well as establishing a land use zoning plan and demarcation of some indigenous lands in the region.[34] This project jumpstarted agricultural development in the region and soybean production and exports expanded dramatically but the primary beneficiaries of this growth were medium and large scale producers as the credit component failed to reach smallholders whose land tenure inhibited on-lending through banks.[35] The growth of the Santa Cruz soybean sectors was due to Bolivia's preferential access to the Andean market, the inexpensive cost of fertile frontiers lands (especially in comparison to Brazil), road construction,

[29] Soruco, Plata, and Medeiros, *Los barones del Oriente*.

[30] Hecht, "Soybeans, Development and Conservation on the Amazon Frontier."; David Kaimowitz, Graham Thiele, and Pablo Pacheco, "The Effects of Structural Adjustment on Deforestation and Forest Degradation in Lowland Bolivia," *World Development* 27, no. 3 (March 1999): 505-520; Pablo Pacheco, "Agricultural expansion and deforestation in lowland Bolivia: the import substitution versus the structural adjustment model," *Land Use Policy* 23, no. 3 (July 2006): 205-225.

[31] Steven M. Helfand and Gervasio Castro de Rezende, "The Impact of Sector-Specific and Economy-Wide Policy Reforms on the Agricultural Sector in Brazil: 1980-98," *Contemporary Economic Policy* 22, no. 2 (2004): 194-212; Jose Garcia Gasques, "Gastos Publicos na Agricultura," in *Transformacoes da Agricultura e Politicas Publicas*, ed. Jose Garcia Gasques and J. C. P. R. Conceicao (Brasilia, Brazil: Instituto de Pesquisa Economica Aplicada, Ministerio do Planejamento, Orcamento e Gestao, 2001).

[32] . A recent media interview with the Brazilian executive of Santa Cruz's largest soybean agribusiness producer explained his migration to Brazil as a result of the Collor Plan: "Suddenly, one night I went to sleep as a successful farmer and the next day I woke up as a farmer, but busted…I already knew Argentina and Paraguay, but I had little knowledge that in the Bolivian east there were good conditions for agriculture. I came, toured the agricultural lands and I was impressed." Author interviews suggest that the expansion of Brazilian producers occurred primarily through social networks between Brazilian contacts in Bolivia and others in Brazil primarily from the states of Mato Grosso, Mato Grosso do Sul and Parana.

[33] Pacheco, "Agricultural expansion and deforestation in lowland Bolivia: the import substitution versus the structural adjustment model."

[34] *Eastern Lowlands: Natural Resource Management and Agricultural Production Project, Credit 2119-BO*, Implementation Completion and Results Report (World Bank, May 13, 1998).

[35] Ibid.

government land grants, export promotion policies and high international prices and rising domestic demand.[36] Today Bolivia's share of .6% of global production of soybeans remains peripheral in comparison to Brazil 26% share as the world's second leading producer but soybeans remains central to the Santa Cruz economy and Bolivia as the country's leading agricultural export.[37]

Pressure from social movements over the limits and corruption of the agrarian reform process begun in 1953 combined with an international push for market-assisted reforms to shape a new second land reform law in 1996 known as the INRA law (*Ley INRA*).[38] This reform called for the distribution and redistribution of seized lands to peasants and new communal indigenous lands through an adjudication process known as *saneamiento* that would determine the legality of previously-distributed land titles and provide for ongoing regulation of land through the development of a land registry. A decade later in 2006, discontent on behalf of the rural poor with the slow process of titling and lobbying efforts of large landholders that reduced land taxes and watered down some of the law's redistributive intent led the newly elected Evo Morales government to approve a new Law 3545 known as the Communal Redirection of Land law (*Ley de Reconducción Comunitaria*). This change sought to prioritize the role of the state in a clarified land reform process that prioritized smallholder and indigenous land claims and more explicitly established procedures for determining the appropriate use of land and the grounds for expropriation on the basis of fulfillment of a "social function" for communal and smallholder lands and a "social-economic function" for individual and agribusiness lands that includes ongoing productive use, compliance with labor laws and environmental regulation.[39] The new Bolivian constitution of 2009 introduced new land regulation that includes a maximum limit of 5,000 hectares for individually owned properties and 5,000 hectares per partner owned by agribusinesses, although this is not retroactive and only applies to lands acquired after the new constitution.[40] While the land adjudication processes has sped up during the Morales administration and the formalization of communal indigenous lands (*tierras comunitarias de origen or TCOs*) have been implemented, the legal-bureaucratic process has only adjudicated a fraction of the large commercial agricultural lands of Santa Cruz.[41] This land adjudication process continues, however, the technical orientation of the land reform process and the few expropriations of land suggest that the Santa Cruz agricultural sector and Brazilian landholdings within this sector can be considered a case of what Borras and Franco call "non-redistribution of land that formalizes patterns of inequality."[42]

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[36] Hecht, "Soybeans, Development and Conservation on the Amazon Frontier."; Kaimowitz and Smith, "Soybean technology and the loss of natural vegetation in Brazil and Bolivia."; Soruco, Plata, and Medeiros, *Los barones del Oriente*.

[37] *FAO Stat* (Food and Agriculture Organization of the United Nations).

[38] Cristóbal Kay and Miguel Urioste, "Bolivia's Unfinished Agrarian Reform," in *Land, Poverty and Livelihoods in an Era of Globalization*, ed. A. Haroon Akram-Lodhi, Saturnino M. Borras Jr., and Cristóbal Kay (London and New York: Routledge, 2007).

[39] Vera Koppen, *Land regularization, land titling and cadastre in rural Boliviawith special regard to communal and indigenous lands* (GTZ Land Management, February 2008).

[40] Esteban Sanjines, *Tierra y territorio en la NCPE* (La Paz, Bolivia: Fundacion TIERRA, March 2009).

[41] Miguel Urioste, *Land Governance in Bolivia*, Working Paper (La Paz, Bolivia: Fundacion TIERRA, June 2010).

[42] Borras Jr. and Franco, *Towards a broader view of the politics of global land grab: rethinking land issues, reframing resistance*.

4. BRAZILIAN LANDHOLDING IN BOLIVIA

Research Design and Methods

In order to generate dissertation hypotheses on how the emergent constellation of Brazilian actors may shape land-based social relations in the Amazon beyond Brazil, this pre-dissertation research sought to analyze the relations of conflict and consent between existing Brazilian agricultural landholders and Bolivian agrarian groups in Santa Cruz, Bolivia. I approached the study as an anomalous case where soybean producers from Brazil have quietly persisted in ownership of lands despite land-based mobilization by Bolivian social movements, resource nationalism, and the official smallholder orientation of the Morales government that might suggest more overt patterns of conflict with large foreign landowners. I conducted within-case tracing of the processes articulating Brazilian producers to a broad cross-section of Santa Cruz agrarian groups in order to better understand the social relations that produce outcomes of conflict and consent. In order to introduce analysis of Brazilian landholdings I first present updated data on land area for soybean production from the Oilseed Producers Association ANAPO (*Asociación de Productores de Oleaginosas y Trigo*) as a proxy for the distribution of Brazilian agricultural landholding in Santa Cruz. Any analysis of Brazilian landholding in Santa Cruz, Bolivia encounters two broad challenges, one being the conceptual treatment of Brazilians as "foreigners," "Bolivian" or "transnational" and the second being the lack of data across agrarian sectors. For the purposes of this study I make the assumption that "Brazilian" landholders are "foreign" on the basis of this designation in production data and recognition as such by a number of observers; and while Brazilian landholding across agrarian sectors is an important dynamic requiring additional analysis I focus in this study on the soybean sector for which there is available, if limited, data.

I conducted forty semi-structured key informant interviews in Bolivia from August through October 2010 in order to understand the different interests, strategies, and discourses of a broad selection of Bolivian agrarian groups and Brazilian producers concerning Brazilian landholding in the region. An initial list of Brazilian soybean producers was drawn from the Bolivian Brazilian Chamber of Commerce membership list. Bolivian informants were drawn widely from social groups concerned with land or agricultural production in the Santa Cruz region and included representatives of social movements, producer associations, current and former government agencies concerned with land and agriculture, and research and advocacy non-governmental organizations. This research sought to cast a wide net of informants concerning Brazilian landowning in order to define hypotheses and groups for "thicker" future research on these issues in the light of broader Brazilian globalization across the tropical world.

Brazilian landholding

Brazilian landholding as a case of "foreignization" in Santa Cruz should be seen in the context of the population of foreign migrants in the region, with post-war planned colonization communities of Japanese as well as Mennonites primarily from Mexico and Paraguay, more recent patterns of large-scale Argentine soybean landholding, and a lesser number of foreign

migrants from a variety of other countries. Very little analysis has been conducted on the nature and extent of Brazilian presence in Santa Cruz or Bolivia.[43] Data from the Bolivian census on the population resident in Bolivia that was born in Brazil shows 8492 residents in 1976, 8586 in 1992 and 7740 in 2001.[44] In 2001, 77% of Brazilians resident in Bolivia were located in the lowlands departments of Santa Cruz, Beni and Pando, with the largest group (38%) resident in department of Santa Cruz and the city of Santa Cruz in particular. Brazilians resident in Bolivia have been concentrated primarily in the agrarian sector, with the majority of all economically active individuals involved in agriculture, ranching, forestry and fishing, as shown in Table 1.

Table 1: Bolivian residents born in Brazil by sector of economic activity (1976, 1992, 2001)

Sector	**1976**		**1992**		**2001**	
Agriculture, ranching, forestry and fishing	2281	68%	1871	51%	1,612	32%
Mining	10	0%	68	2%	101	2%
Manufacturing	139	4%	192	5%	366	7%
Electricity, gas, water	3	0%	9	0%	12	0%
Construction	76	2%	130	4%	171	3%
Retail, repairs, hotels and restaurants	180	5%	308	8%	910	18%
Transportation, storage and communications	99	3%	102	3%	192	4%
Financial services, real estate	41	1%	116	3%	180	4%
Community, social and personal services	535	16%	503	14%	1,037	21%
Security and army	na	na	3	0%	na	na
Unspecified	0	0%	316	9%	394	8%
First time seeking work	na	na	36	1%	42	1%
Total	3364		3654		5,017	

*Notes: (*a) data is for economically active persons age 10yrs of age and older (1976) and 7yrs of age+ (1992, 2001) (b) In 1976 and 2001 the security and army sector did not exist, as is the case for First time seeking work in 1976 census

Source: Bolivian Census (1976, 1992, 2001), adapted by author

Land distribution

Beyond the census data, which in any case may present only a limited reality in a border region with little regulation of migration, estimates suggest that there is Brazilian participation in large landholdings not only in the soybean sector but also in the agricultural sector more widely, in the cattle- ranching borderlands provinces of eastern Santa Cruz, as well as the timber sector in the northern regions of the department. Preliminary scoping studies by the land titling agency INRA suggest that Brazilian landholding in the ranching provinces of Puerto Suarez, German Busch

[43] Sylvain Souchaud, Roberto Luiz do Carmo, and Wilson Fusco, "Mobilidade populacional e migração no Mercosul: a fronteira do Brasil com Bolívia e Paraguai," *Teoria & Pesquisa, São Carlos* 16 (2007): 39-60.

[44] Souchaud et al cite census numbers from ECLAC's IMILA dataset based on Bolivia's INE census data that are discrepant for the same census year from the INE website (2001 census population of 14,428 versus 7,740). For purposes of consistency in this article I utilize INE data from www.ine.gob.bo

and San Juan Velasco may comprise 30% of land titles.[45] Urioste provides the only, and best, available estimate of Brazilian landholding beyond the soybean sector in a preliminary discussion of research results that suggests that Brazilian have landholdings of 1.2 million hectares, with 500,000 hectares of agricultural land and 700,000 in cattle ranching in Santa Cruz.[46] For the purposes of the present study I focus on Brazilian landholding in the soybean sector because of available data but also because this case may represent dynamics that form part of larger global trends that are distinct from cattle ranching along border regions.

Data on landholding by Brazilian producers began to be recorded one year prior to the 1993-1994 summer harvest and this group grew by the late 1990s to become the largest group of foreign producers in the Bolivian soybean sector, rivaling or exceeding the total production area of Bolivian national producers, as shown in Table 2. This data shows the land area produced by Brazilians to have remained at a similar level since the late 1990s, with a slight decrease in both real and relative terms in 2008-2009, although some caution is required in interpretation as the data does not make explicit how producer origin is determined.[47]

Table 2: Evolution of landholding area under production by origin of producer (1993-2009)

Origin of producer	**1993-1994**		**1998-1999**		**2003-2004**		**2008-2009**	
Nationals	86,760	36%	131,760	26%	189,700	32%	301,715	43%
Brazilians	19,075	8%	166,700	33%	185,500	31%	175,886	25%
Mennonites	103,490	43%	142,330	28%	145,800	24%	113,116	16%
Argentinians	-		-		-		70,480	10%
Japanese	27,700	11%	37,800	7%	40,500	7%	32,044	5%
Others	4,768	2%	30,450	6%	40,500	7%	7,090	1%
Total	241,793		509,040		602,000		700,331	

Notes: (a) data may not total due to rounding errors in source data
Source: ANAPO Informe de Soya based on summer harvest of 93/94, 98/99, 08/09, Perez Luna (2007) based on 03/04 ANAPO data, adapted by author

Santa Cruz media accounts cite 200 to 300 Brazilian producers in the Santa Cruz soybean sector, and Perez Luna estimates that "the large landowners who cultivate more than 1,000 hectares does not exceed 300, of which the majority are Brazilians, with a powerful nucleus of not more than 100 producers, who would possess properties between 3,500 and 8,000 hectares."[48] According to the most recent ANAPO data from the summer harvest of 08-09 there are 22 Brazilian properties in the "integrated" production sub-zone, with 45 Brazilian properties in the Cuatro Cañadas and San Pedro municipalities of the "expansion" sub-zone. If we extrapolate

[45] Author interview with INRA
[46] Fundacion Tierra, *Concentracion y extranjerizacion de la tierra en Bolivia*, Boletin Mensual (Fundacion TIERRA, March 2011).
[47] Urioste cites ANAPO data from the 2006-2007 harvest that shows the Brazilian producers with 40% and national producers with 25% of landholding, a significant change from the 2008-2009 data.
[48] Perez Luna, *No Todo Grano que Brilla es Oro: Un Analisis de la Soya en Bolivia*.

from this data and assume the same pattern exists in the other municipalities of the expansion sub-zone (for which disaggregated data does not exist) this adds up to less than 100 Brazilian properties in the soybean sector. A smaller number of producers may also own multiple plots, either directly or through business partners or family members, which suggests the hypothesis for further investigation that no new producers from Brazil have continued to enter the Santa Cruz region in recent years.

Brazilian producers are often referred to in media accounts as the largest soybean landholders in Santa Cruz, with a Brazilian-led agribusiness as subsidiary of a Brazilian company cited in 2003 as farming 30,000 or more hectares of soybeans in the summer.[49] Table 3 presents the most recent available soybean landholding and production data from the summer harvest of 2008-2009 by the origin of landholding producer. While there is no available sector-wide data on the number of properties, analysis of the data by the author at the municipal level in the northern "integrated" zone of production in Santa Cruz finds 22 properties held by Brazilians with an average farm size of 1739 hectares per property. Municipal level from the municipalities of Cuatro Cañadas and San Pedro in the "expansion" zone has 45 Brazilian properties with an average of 1886 hectares. Table 4 shows the distribution of landholdings by property size, in which 83% of the total quantity of small properties represents 28% of the total area of land in the soybean sector, while 308 large properties represent 57% of land area. Note that this data represents properties and not necessarily producers, as one producer or one agribusiness may directly or indirectly hold multiple properties.[50]

Table 3: Soybean landholding under production producer origin (2008-2009 summer harvest)

Origin of producer	Area of production (ha)	% of total area (ha)	Yield (t/ha)	Production (mt)
Nationals	301,715	43%	1.91	575,167
Brazilians	175,886	25%	2.16	379,468
Mennonites	113,116	16%	nd	204,674
Argentinians	70,480	10%	1.83	128,894
Japanese	32,044	5%	2.40	76,972
Others	7,090	1%	1.88	13,346
Total	700,331	100%	1.97	1,378,521

Notes: (a) values may not sum due to rounding errors in source data (b) nd = no data
Source: ANAPO Informe de Soya 08/09, adapted by author

[49] Adhemar Camacho, "Grupo Monica es el mayor productor de soya del pais," *El Deber*, 2003,
[50] Land rental is officially prohibited in Bolivia, although in practice there is anecdotal evidence of use of fictive names or "palos blancos," as well as family members and informal land rental in large landholdings. Suarez et al (2010) estimate that 25% of smallholder lands are also rented.

Table 4: Soybean landholding under production by property size (2008-2009 summer harvest)

Size of property (ha)	# of properties	% of total # properties	Area of Production (ha)	% of total area (ha)	Yield (t/ha)	Production (mt)
Small (<50)	7,421	83%	177,522	28%	1.84	326,279
Medium 50-500)	1,266	14%	95,410	15%	2.04	194,554
Large (>500)	308	3%	419,900	57%	2.04	858,087
Total	8,988	100%	692,832	100%	1.99	1,378,920

Notes: (a) values may not sum due to rounding errors in source data (b) there is no data on the distribution of the 7 properties in the El Puente municipality, for the purposes of this study these 7 properties are included in large category based on their average area.

Source: ANAPO Informe de Soya 08/09, adapted by author

Regulations governing foreign land tenure

As foreign producers in Bolivia, Brazilian producers may technically be subject to certain distinct classes of treatment under Bolivian regulation of land. Prior to the INRA law of 1996 the primary regulation of land tenure for foreigners in Bolivia was that established in article eighty of the 1953 agrarian reform decree that established the parity of foreigners under land laws as long as they complied with immigration and colonization guidelines. In practice, the pronouncement belied the actual land tenure in the region that was defined by the accumulation of overlapping and fraudulent land titles for Bolivians and foreigners inherited from prior government administrations that the INRA law sought to redress. As the most significant pronouncement on land since the agrarian reform decrees of 1953, the INRA law of 1996 included regulations on foreign ownership of land in Bolivia. The law, later restated in the new Bolivian constitution, stated that natural or juridical persons could not receive state lands, changing the Immigration Law 13344 of 1976 that had stated that immigrant colonists could receive free grants of Bolivian land. The INRA law and subsequent regulations did not, however, prohibit foreigners from purchasing lands from a Bolivian party that had received lands through state grants, as was the likely status of many properties distributed during the 1970s that were later purchased by Brazilians entering the soybean sector.[51] The main "integrated zone" of the soybean sector has been part of market process for land for some time, and in 2000, over 90% of landholders in Santa Cruz in the agricultural regions of the department had obtained title through private purchase, with only a small percentage being the original recipients of agrarian reform titles.[52] In an analysis of Santa Cruz land markets, Zoomers finds segmented land markets between smallholders and large land properties in the region, with large agricultural properties transferred through land markets.[53] The INRA law stated that in order to hold titles natural or juridical foreigners should reside in in the country and be eligible to conduct agricultural activities although the law did not establish what constituted agricultural activities or

[51] In author interview an ANAPO representative questioned whether "they were legal or illegal titles" but argued that in any case that "it would be difficult for the foreigner to know if it was legal or illegal." Author interview with INRA representative suggested the rough estimate that he thought that 80% of Brazilians bought titles in good faith.

[52] Urioste and Pacheco, *Las tierras bajas de Bolivia a fines del siglo XX*, 181; Bojanic, *Tenencia y uso de la tierra en Santa Cruz: evaluación de la estructura agraria en el área integrada de Santa Cruz*.

[53] Annelies Zoomers, "Land liberalisation and sustainable development in Latin America: Unravelling the land sales market of Santa Cruz, Bolivia," *International Development Planning Review* 25, no. 3 (2003): 245-262.

residence. Foreign governments or their intermediaries were prohibited from possessing agrarian property, as were foreign individuals or juridical persons of all types in land within 50 kilometers of Bolivia's international borders. The law allowed Bolivian property owners to enter shared-risk partnerships with foreign individuals or groups, but only as long as those investors were not from countries such as Brazil that share borders with Bolivia.

5. LEGITIMATING BRAZILIAN LANDOWNING

In this section I use results from key informant interviews to discuss the ideologies, strategies and discourses of Brazilian producers and Bolivian groups with respect to Brazilian landholding. Potential concerns over national sovereignty of land from Brazilian producers plays out publicly through contests over the "rules" of the technical process of land adjudication and in terms of "capital and technology." The economic position of Brazilian producers as capitalized large landholders explains much of the social relations with different agrarian groups and the Bolivian state, but I also draw attention to the silences in many interviews on the presence of Brazil's wider political economic relationship with Bolivia as a potential factor that may explain the lack of conflict with respect to foreign landholding. In a climate in Santa Cruz where issues of land distribution permeate political debate, I discuss how the "transfers" and production "expertise" of Brazilian producers provide a terrain of relatively neutral interaction between different groups that may explain consent around Brazilian landholdings, although this too may be vulnerable to environmental contestation of agroindustrial production systems.

Concerns of sovereignty but muted conflict in foreign landholding

In the ongoing process of land adjudication Brazilian producers face similar concerns as other medium and large landholders with respect to validity of land title and the requirements for the appropriate and productive use of land in the land reform process. These issues of juridical security for Brazilian producers as large landholders overlap with some distinct aspects of tension over "foreign" landholding in Santa Cruz. One Brazilian producer referred bluntly to the land adjudication process: "that's our biggest concern" and later expanded on the unique political tenure sensitivities of Brazilians in Bolivia:

> Now with this racial situation that the government has implanted in the country, it's a little bit more difficult for strange [foreign] persons… But I think Bolivian guys have the same problem. But they are a little bit more for strange people.

Producer associations, analysts and current and government informants concurred that the majority of land issues were the same regardless of national or ethnic origin, but recognized the concerns over being "foreign." A representative of the Agricultural Chamber of the East, CAO, (*Cámara Agropecuaria del Oriente*) that aggregates producers in the lowlands but is often associated with representing large regional producer interests said that the issue for Brazilian landowners is "the theme of juridical security of land because even in the media you have seen various producers, Germans, Brazilians who are being questioned about the property rights for land." A member in a leadership position of CSUTCB, the Confederation of Bolivian Peasant

Trade Unions (*Confederación Sindical Unica de Trabajadores Campesinos*) that is a principal force of land-based mobilization with close relationships to the Morales government framed his perspectives on contemporary Brazilian landholding in terms of historical questions of peasant sovereignty from foreign interests tracing back to the period of:

> those that lived here before there was a republic and those that inhabited this territory when the Spanish discovered the land. From that moment we the peasant organizations have been fighting. Even though separated by time, with the passing of time, we have to unite ourselves, everyone. We cannot allow an invasion from outside….And we keep fighting, one part has been freed, has been taken out of the servitude system like in the west [of Bolivia]. Here in the east nothing has been touched. They have stolen, the foreigners most of all.

A member of MST, Landless Movement of Bolivia (MST) (*Movimiento Sin Tierra-Bolivia*) that had contested occupation of a number of properties, including those of Brazilian agricultural producers, in the early part of the decade discussed Brazilians as foreign landowners when there continues to be Bolivians without land:

> The majority of lands here in Bolivia are in the hands of Brazilian foreigners. Many Brazilians for example here in the *Chiquitanía* zone have quantities of land. We as Bolivians are here fighting for the land but the foreigners are here.

These strains of national sovereignty of land combined with a new political landscape of nationalization in 2006 as the new Morales forced the renegotiation of contracts with the important Brazilian parastatal hydrocarbons producer Petrobras, stating that "the time has come, the awaited day, the historic day in which Bolivia retakes absolute control of our natural resources." A Brazilian soybean producer who was a director in the Oilseed Producers Association (ANAPO) and the Brazilian Bolivian Chamber of Commerce that represents Brazilian commercial interests in Bolivia was quoted in a media account saying that Brazilians are concerned with the Morales administration and fears of expropriation of lands: "Everyone that has property here is concerned. The situation is extremely serious."[54] Despite these overtones of Brazilians as "foreign" producer in Santa Cruz, the larger political and economic disputes over landowning have largely been publicly debated within the technical process of land adjudication.

Interviews with Brazilian producers showed a preoccupation both in terms of the substance of the legal bureaucratic requirements for fulfilling the social economic function of productive land but also with the perception that Brazilian producers be seen to be following the law. After the election of Evo Morales, the Brazilian producer cited above continued by presenting the strategy of "producing" and following the rules in order to maintain their lands: "the only way that we have to protect ourselves is working, producing on the land. That is why we are within the law and the constitution." A former high-level leader in INRA the National Institute of Agrarian Reform (*Instituto Nacional de Reforma Agraria*) explained that a few years prior when a group of the largest Brazilian soybean producers sought a meeting with him to address concerns about juridical security of their lands their main point was: "what we are looking for are clear rules."

[54] "Bolívia: Produtor brasileiro de soja teme invasões de terras," *Globo.com from BBC Brasil*, September 13, 2008.

Informants with agrarian groups representing indigenous and smallholders in the lowlands who have been most concerned with land issues in Santa Cruz stressed that they do not object to Brazilian ownership of land as long as they "follow the rules" of Bolivia and the land adjudication process. An interview with the representative of CSUTCB who had discussed concerns about "foreign" landowning explained that:

> We are advancing with a process of change to be able to live in tranquility and harmony, if they are foreigners who come with respect, we want to work with everyone, but not with abuses, all that we want is for them to behave, but not if they don't want to wait for the leaders of our country.

A representative of CIDOB, the Confederation of Indigenous Peoples of Bolivia (*Confederación de Pueblos Indígenas de Bolivia*) that is the largest umbrella indigenous federation in eastern Bolivia argued that the "best way" for dealing with Brazilian and foreign landholdings was "within the process of *saneamiento*" through careful revision of the land documentation of foreign landowners. Despite previous concerns over expropriation, one Brazilian producer described how the technical process of land adjudication did not impact Brazilian lands, arguing that the 5,000 hectare limit on landowning implemented in the new Bolivian constitution in 2009 was just a political measure but that it would have little impact on expansion or production models.

> The law is clear, it has no effect retroactively. If someone has the idea of having 15 or 20 thousand [hectares] there's no problem. The problem is from now into the future, from now on you can't do that. So, no one was affected. It's not going to influence at all the agricultural growth of Bolivia, absolutely not. You can even have 10,000 and put 5,000 in your name and 5,000 in the name of your child. It is a purely political law.

Despite the concerns over large landholdings and the overtones of national sovereignty that enter the discussion of Brazilian landholding, the technical orientation of the land reform process focuses much of the public debate within the legal bureaucratic procedures of land adjudication.

Brazilian capital

The economic position of well-capitalized modernizing Brazilian producers and agribusiness explains much of the social relations in a dual Santa Cruz agrarian sector marked by a land-rich domestic elite and the persistence of high levels of participation of the rural poor in smallholder agriculture.[55] The CAO informant's quote on Brazilians as "producers from the outside [who] come with more technology, with more money to invest" provided an often-heard explanation of the role of Brazilian producers as important sources of capital investment in land and soybean production as the Bolivian government aimed to increase private investment in agricultural production. Brazilian producers were important sources of investment and land purchase capital

[55] Rosa Virginia Suarez, Sara Camburn, and Sara Crespo, *El pequeno productor en el "cluster" de la soya: Caso cruceno* (Santa Cruz, Bolivia: PROBIOMA, 2010).

to Bolivian sellers of land and economic sectors of the Santa Cruz who depend on the soybean economy.[56] An interview with the MST representative said that "the majority of the foreigners are united with the right here in Bolivia, because you know, one side has resources and the other side has resources and well, you could say that they make unity." The perspectives of groups of the Bolivian rural poor stressed that the normal relations with Brazilian producers are marked by social distance and often geographical separation of landholding due to the economic power of Brazilians. A representative of CAPPO the Chamber of Small Agricultural Producers of the East (*Cámara Agropecuaria de Pequeños Productores del Oriente*), a recently formed umbrella organization seeking to represent the associations of small agricultural producer interests as an alternative to the CAO repeated that Brazilians are defined by having money, and that this made large Brazilian producers and a comparatively large Bolivian producer as essentially the same in the eyes of smallholders. However, despite the Morales administration's stated preference for the development of a model of smallholder agriculture envisioned by the CAPPO, analyst Ormachea Saavedra argues that the government has continued the approach to land issues from the establishment of the INRA law and incorporated Brazilian interests into the framework of the land reform process. He states that "while the INRA Law prohibited land grants to foreign persons or companies, it purposely allowed for purchases by foreigners as well as land lease generally in order to facilitate investment in the soybean sector, a fact which is evidenced by the large number of Brazilians in the soy sector."[57] He argues the MAS government continued neoliberal land laws, despite proclamations to the contrary, because the government continued neoliberal economic policies that rested on agricultural exports and foreign investment. The economic position of agribusiness producers is a familiar framework of discussion in running debates over land distribution in Santa Cruz, both from the perspective of "investment" by those concerned with growth in the soybean sector or by small producers discussing the power of Brazilian "capital" but rarely was the larger issue of Brazilian capital in the political economy of Bolivia-Brazil relations raised by either group.

Drawing on the debates of neo-gramsican analysts on the transnationalization of class interests and production of hegemony in an international political economy, I suggest that the social relations of Brazilian landholding in Bolivia must be located within the wider political economic relationship between Brazil and Bolivia.[58] While groups of the rural poor rarely if ever drew attention to the place of Brazilian capital more broadly in Bolivia, a few government leaders and analysts discussed the perception of "untouchable" Brazilian lands because a "deal has been done," with examples given by the reduction in conflict and the incorporation of Brazilian landholding interests into the land reform process. This calls attention to the need for further analysis of the hypothesis that the position of Brazilian producers in Santa Cruz land adjudication processes are related to and incorporated into relationships between Brazil and

[56] Valdivia, "Agrarian Capitalism and Struggles over Hegemony in the Bolivian Lowlands."
[57] Enrique Ormachea, *¿ Revolución agraria o consolidación de la vía terrateniente? El gobierno del MAS y las políticas de tierras* (La Paz: CEDLA, 2007).
[58] Robert Cox, "Gramsci, hegemony and international relations," *Antonio Gramsci: Contemporary applications* 12, no. 2 (2002): 357; Sean W. Burges, "Consensual Hegemony: Theorizing Brazilian Foreign Policy after the Cold War," *International Relations* 22, no. 1 (March 1, 2008): 65-84.

Bolivia that extend beyond the agrarian sector.[59] Despite the renegotiation of contracts after the nationalization at the beginning of the MAS administration, Brazil's Petrobras maintained and increased its' role in the Bolivian hydrocarbons sector, accounting for over half of production in each of the last five years, and 63% of production in Bolivia's most important economic sector in 2009.[60] A purchase contract makes Brazil the primary market for Bolivian gas through a transnational pipeline network established in the 1990s, with the value of hydrocarbon exports to Brazil during the first quarter of 2011 alone valued at 10% of the GDP of Bolivia.[61] Brazil also provides credit to Bolivia for infrastructure in the context of regional integration as well as agricultural credit for smallholder mechanization. Brazil is Bolivia's second-leading creditor after Venezuela based on disbursements between 1996 and 2010, but Brazil is Bolivia's largest source of bilateral credit if we also consider approved credit which has not yet been disbursed as of the end of 2010, as shown in Table 5.

Table 5: Bilateral Credit to Bolivia, by creditor country (1996-present)

Creditor country	Distributed disbursements 1996-2010, in millions USD	% total	Balance of disbursements pending on 12/31/2010, in millions USD	% total	Total of distributed and pending disbursements, in millions USD	% total
Germany	160	15%	17	1%	178	7%
Canada	14	1%	0	0%	14	1%
Argentina	7	1%	0	0%	7	0%
Brazil	164	16%	591	44%	755	31%
Spain	121	12%	0	0%	121	5%
United States	25	2%	0	0%	25	1%
France	16	1%	1	0%	17	1%
Italy	23	2%	56	4%	79	3%
Japan	23	2%	0	0%	23	1%
China	82	8%	367	27%	449	19%
Korea	23	2%	41	3%	64	3%
Venezuela	384	37%	280	21%	665	28%
Others	5	1%	0	0%	5	0%
Total	1048		1,352		2,400	

Notes: (a) values may not sum due to rounding errors
Source: Bolivian Central Bank www.bcb.gob.bo, adapted by author

[59] For good examples of the few analyses that make these connections see: FOBOMADE, *Relaciones Energeticas Bolivia-Brasil* (La Paz, Bolivia: FOBOMADE, March 2009); Maria del Carmen Vera-Diaz et al., *Effects of Energy and Transportation Projects on Soybean Expansion in the Madeira River Basin* (Conservation Strategy Fund, May 2007).
[60] Bolivian Central Bank, www.bcb.gob.bo; Carlos Arze, *Antecedentes, contexto y orientacion del gasolinazo del MAS*, working paper (CEDLA, 2011).
[61] Bolivian Central Bank, www.bcb.gob.bo

Brazilian credit to Bolivia provided through the Brazilian National Development Bank (BNDES) during the administration of Evo Morales was primarily for infrastructure as part of the regional integration projects of the Initiative for the Integration of Regional Infrastructure in South America (IIRSA), with 230 million in funding for the Northern Highway (*Corredor Norte*) and 332 million for the Villa Tunari-San Ignacio road. Credit also included 35 million dollars for the Credit for Agricultural Mechanization Program (PCMA) to provide credit for purchase of tractors for Bolivian small and medium farmers. In response to a question about relationships with the Brazilian and Bolivian government in the context of the political insecurity in 2008 between the MAS government and regional political interests in Santa Cruz, one Brazilian producer stated that their strategy was that they:

> dialogued with the departmental government, we dialogued with the national government. The national government assured us that nothing was going to happen to us, the embassy helped us a lot, assisted us a lot, and thankfully everything was resolved well. I mean, we already passed the worst part, there was no property invasions, there was no conflict. So, I think that being calm was the key to all of this.

Discussion of land distribution pervades political debate on all sides of the agrarian sector in Santa Cruz, but further analysis of the incorporation of agrarian interests into larger political economies of regional integration beyond the agricultural sector require suggest the hypothesis that there is a broader quiet hegemony of Brazilian economic interests in Bolivia.

Technology

As the second half of the mantra of Brazilian participation in the Santa Cruz agricultural sector through "capital and technology," agricultural technology is one of the few arenas of interaction between Brazil and Bolivia as well as between different classes of producers that provides for relations of consent. Analysts have highlighted technology as a key input to the agroindustrial production model that drove the growth in soybean production in Bolivia.[62] Kaimowitz and Smith argues that seeds, mechanization and agronomic practice technologies were causal in the expansion through "improved varieties and cultural practices which increased productivity," and through mechanization and economies of scale which led to expansion to frontier areas with cheap land, concluding that "technology was the key in all this."[63] In a context where Brazilian public sector investment in research represents over 50% of the public sector research budget of Latin America, Brazilian seeds developed by EMBRAPA and other state, university and private research institutions in Brazil made possible the expansion of soybean production in Bolivia.[64] Discussion of Brazilian capital may draw attention to land distribution issues, and since agro-

[62] Hecht, "Soybeans, Development and Conservation on the Amazon Frontier."; Pablo Pacheco and Benoît Mertens, "Land use change and agricultural development in Santa Cruz, Bolivia," *Bois et Forets des Tropiques* 2, no. 280 (2004): 29-40.

[63] Kaimowitz and Smith, "Soybean technology and the loss of natural vegetation in Brazil and Bolivia."

[64] Nienke M. Beintema and Gert Jan Stads, "Public Agricultural R&D Investments and Capacities in Developing Countries" (2010); Javier M. Ekboir, "Research and technology policies in innovation systems: zero tillage in Brazil," *Research Policy* 32, no. 4 (April 2003): 573-586.

industrial soybean production has little demand for labor technology is a comparatively "neutral" terrain of technical interaction between agrarian classes. In this section I argue that legitimacy of Brazilian landholdings with respect to smallholders and the agrarian sector is partially explained through Brazilian "transfer" of technology as well as through their position as sources of Brazilian expertise. I also draw attention to instances of groups representing or concerned with the rural poor that contested Brazilian landowning by drawing attention to environmental and food sovereignty implications of Brazilian leadership at the technological frontier of agroindustrial production models.

Transferring technologies

Building on soybean technology as an economic input, Brazilian producers' ability to "transfer" technologies more widely to other Bolivian producers is an area of interaction between different classes and groups of producers and a comparatively "neutral" mechanism of forging consent. When asked about the sources of cooperation between Brazilians and Bolivians, one Brazilian producer highlighted technology transfer as an important aspect which spread the benefits of Brazilian migration to the Santa Cruz region: "We came with money, we put in technology, it was really a win-win relationship. We all win, the Brazilians won, Bolivia won, and the Bolivian producer won." A prominent Brazilian producer commented in a media interview in 2008 in the context of the new Bolivian constitution that the Morales administration should use technical progress as an alternative to the politics of agrarian reform:

> Developing frontiers in a sustainable manner to make the country more productive and competitive, it would be better. He could have called the producers to a consensus to raise the technological level of the country. Now, he should sit with those parties who weren't in favor of the law and make a social pact so that the country begins to develop.[65]

The transfer of soybean technology from Brazil to Bolivia predated the increase in migration of Brazilian farmers in the early 1990s. The regional Center for Research on Tropical Agriculture ,CIAT (*Centro de Investigación Agrícola Tropical*) linked to the departmental government of Santa Cruz had established a technology transfer agreement with Brazil's public sector Brazilian Agricultural Research Corporation EMBRAPA (*Empresa Brasileira de Pesquisa Agropecuária*) from the 1980s, and the majority of the soybean cultivars registered in Bolivia in the 1980s were from Brazil.[66] ANAPO was also involved in agricultural research and development with Brazilian counterparts, including an agreement with the Federal University of Viçosa in Brazil for genetic research on soybean seeds. A Brazilian producer argued that the lack of Bolivian innovation potential was the reason that the region needed outside technologies from Brazil saying that "Bolivia doesn't generate technology" and that "they don't have interest in making research in agriculture. Not only talking about rice or soya beans but even on coca leaves they have no interest." Brazilian producers had the economic necessity of adapting and testing soybeans but as part of the innovations system between Brazil and Bolivia, technology became a less politicized arena of interaction within debates of production and modernization.

[65] Helena Carnieri, "Limitar terras é forma de atingir 'meia-lua' - Mundo - Gazeta do Povo" (Sao Paulo, Brazil, 2009).
[66] Oficina Regional de Semillas Santa Cruz, "Llistado de Variedades Registradas."

Neo-gramscian analysts have argued that if giving is collectivized that it can serve an important mechanism which forges common identity among donors and that "the significance of giving for neo-Gramscian inquiry is that it creates a very powerful mechanism of consent."[67] When I asked the representative of ANAPO if there was resentment on behalf of Bolivian producers toward Brazilian producers he said that while there are always a certain few who might complain, but that the vast majority had no conflict "especially towards those that have come with technology." One Brazilian producer explained that Brazilian producers transferred technology "because in the beginning we didn't have specific seeds here in Bolivia, even the varieties we brought from Mato Grosso, [Brazil]." Individual-level mechanisms of technology transfer were important relationships between Bolivia and the Brazilian Agricultural Research Agency EMBRAPA, as one Brazilian producers stated: "the connections, the contacts have been of a very individual manner. Each company, each person makes their own contact." A representative of ANAPO discussed how these processes of transnational innovation continue today: "technology is used more by Brazilians, contacts that they have in Brazil, they go abroad more to Brazil, Argentina, to be up to date." These responses suggest that the ability of Brazilian producers to transfer and disseminate soybean technologies was related to their transnational position between Brazil and Bolivia. Leading Brazilian producers were also leaders in the creation of more established institutional mechanisms to facilitate technology transfer from Brazil to Bolivia. Fundacruz, the Foundation for Agricultural Development of Santa Cruz (*Fundación de Desarrollo Agrícola de Santa Cruz*) is a nonprofit organization founded in Santa Cruz in 1999 with the mission to conduct soybean local adaptation research and dissemination on the basis of an agreement with the Mato Grosso Foundation (*Fundacão Mato Grosso*), in Mato Grosso, Brazil to transfer soybean technologies to the Santa Cruz region. The organization's research contacts in Brazil made it the source of over 50% of the soybean seeds used in Santa Cruz in the early years of the 2000s.[68] Brazilian producers have been an important mechanism of technology transfer to the Santa Cruz region by transferring technologies from Brazil to the wider Bolivian sector.

The transfer of technologies not only occurred geographically between Brazil and Bolivia but also was one of the few inter-class relationships between producers, even if such interaction must be viewed in the context of the structuring economic relationship. Respondents from smallholder and commercial agricultural perspectives discussed informal venues of events, courses, seminars and seed fairs as points of interaction between classes of producers, with the informant from CAO arguing that technology was an important basis for relationships between Brazilians and Bolivian producers, stating that "those [interactions] of a technical nature have always produced the connection among producers." While it can be argued that these narratives of what Valdivia describes as "sector unity" do not often represent smallholder interests, other interviews with smallholder soybean producers recognize that technology transfer was one of the few areas of interaction between smallholders and Brazilian producers, even if they discuss it in the context of the economic distance between groups. A representative of an non-governmental agricultural research organization that works with smallholder production systems said that there are groups of Brazilian producers who get together to analyze technologies for themselves, and that they may use a seed technology for a season or two and then pass it on to small producers. An analyst in a NGO concerned with smallholder and indigenous land issues also mentioned

[67] Tomohisa Hattori, "Giving as a Mechanism of Consent: International Aid Organizations and the Ethical Hegemony of Capitalism," *International Relations* 17, no. 2 (June 1, 2003): 153 -173.
[68] Author interview with Fundacruz

this, stating that Brazilians transferred technology specifically to Bolivian smallholders but purposely not to other middle and large farmers. While, the relations of technology transfer between classes of producers in Bolivia must be seen in relationship to the larger economic relationships, and more research needs to be conducted on the social paths of transfer and their outcomes, these relatively neutral terrains provide mechanisms of consent from Brazilian producers who transfer the technologies sector-wide or to groups of smallholders.

Brazilian expertise

Many groups in Bolivia view Brazilian producers as sources of expertise in agriculture. Brazilians have the highest yields in soybean production, and they are seen as technologically progressive farmers at the frontier of new innovations. Groups representing or concerned with soybean production by large and small producers alike listed the areas where Brazilian producers are recognized as the frontier of technology and agronomic techniques: seeds, direct-planting, management techniques, philosophy, and precision agriculture. One Brazilian producer discussed their role as a source of agricultural expertise in a Bolivian region lacking innovation:

> The greatest influence that we see from Brazil is technology…machinery, training of people. The heart of the matter is that no one [in Bolivia] knew how to work with agriculture, no, no-till planting and techniques, no.

Aspects of this attitude are also reflected among some Bolivian producers. The representative of ANAPO said that as Brazilians become more competitive "it forces national producers to themselves improve their production systems and be more competitive." He said that the role of Brazilians was a good influence for other farmers:

> Obviously the other farmers go by imitation, it is very important that this exists because other farmers see, visit, pass by properties and see new things and ask and learn. For us Bolivians, their contribution has been very important in this respect.

When I talked with an informant at an NGO working on agricultural technologies and advocacy for smallholder soybean producers I probed for areas of conflict between smallholders and the large Brazilian producers. He responded that in fact the opposite was often the case as among smallholders there is often a belief that Brazilians are on the technological frontier, and that smallholders always try "to keep an eye" on them to see what they are doing, what seeds and techniques they are using. This attitude is reflected among Bolivian government agencies, as one interviewee at the Vice Ministry of Lands said that while there have been and continue to be lots of different nationalities represented in the Santa Cruz agricultural sector, the difference between Brazilians and the others was that "they brought good technology transfer."

Brazilian producers in Bolivia may also benefit by default from their transnational relationship related to global stature of Brazil as a leading source of agricultural innovation and production. Many conversations conflated the difference between Brazilian producers and "Brazil" as a national force of innovation and production. When I asked about technology in the context of how Brazilians came to Santa Cruz, one Brazilian producer framed this in terms of Brazil:

> Brazil has given an historic contribution to Bolivia and it continues contributing with technology. Brazil is a technology-generating country, Brazil is a continental country and we have a border of 3,000 kilometers with Bolivia and along that border of 3,000 kilometers Brazil is generating technology. So the technology generated by Brazil comes to Bolivia.

This was echoed by an official at CIAT, the Santa Cruz departmental agricultural research agency who said that there has been a long history of technical interaction with Brazilian producers:

> there has always been the technical area, there has always been a proximity. Including events, courses, seminars and all of that, we always bring Brazilian or Argentinian presenters because they are the source of world agriculture.

The economic resources of large Brazilian producers allow for purchases of the best frontier lands and capital-intensive production systems that produce the sector's highest yield levels, but their transnational position in agricultural innovation systems from the Brazilian agricultural giant also creates relations of consent among other producers and agrarian interests in Santa Cruz.

Contesting land through technology

In a context where the public debate over land adjudication and Brazilian landholding has been mediated through the procedural "rules" of the land, the environmental and food sovereignty aspects of technology are also avenues through which Bolivian environmental and rural poor groups have contested the Brazilian production model. Peluso discusses how the trajectories and strategies of agrarian movements concerned with land reform may change in relationship to environmental movements within changed political spaces and political economic conjunctures.[69] As described above, Brazilian producers are important sources of technology transfer and innovative production techniques in Santa Cruz. A number of groups of the rural poor concerned with the environmental aspects of production systems associate Brazilian producers with technologies such as genetically modified soybean seeds, as well as a production model based on mechanized agriculture with implications for deforestation and monoculture. Where critiques of the environmental and food sovereignty implications of production techniques politicize "technical and "apolitical" concerns of technologies they can also shape larger debates on foreignization and landholding distribution.

Brazilian producers are thought to be the first producers that introduced herbicide resistant soybeans to the Santa Cruz region through family networks.[70] Distance between regulatory decrees and the regulatory practices of agricultural technology in Bolivia leave a potential political space that some Bolivian groups have used to protest the production model of industrial agriculture. The Bolivian constitution prohibited the use of transgenic seeds, although herbicide

[69] Nancy Lee Peluso, Suraya Affif, and Noer Fauzi Rachman, "Claiming the grounds for reform: agrarian and environmental movements in Indonesia," *Journal of Agrarian Change* 8, no. 2-3 (2008): 377–407.

[70] Rodrigo Paz et al., *Socio-Economic Considerations of Genetically Modified Soybean Adoption: The Case of Bolivia*, Country Case Study Summary (Washington D.C. International Food Policy Research Institute (IFPRI) and Asociacion de Productores de Oleaginosas y Trigo (ANAPO), 2008).

resistant soybean were regularized given the widespread use of such seeds in an environment where regulation and enforcement left a wide space in which transgenic food crops were increasingly utilized and imported into Bolivia. Originally introduced in the new constitution as a complete ban, article 409 of the new Bolivian constitutions was altered after lobbying by producers to state that "the production, importation and commercialization of transgenics will be *regulated* by law." Article 255 states that negotiation, agreement and ratification of international treaties will be subject to the principles of food security and sovereignty for the population; prohibition of importation, production and commercialization of genetically modified organisms and toxic elements that are harmful to health and the environment. In 1994, a Brazilian producer was jailed and his seeds confiscated for importing herbicide resistant seeds without a license, drawing much media attention, although little action was taken after the initial even. Officially approved transgenic crops of herbicide resistant soybeans were allowed in 2005, and as of the 2008-2009 harvest represent 82% of the soybean production area (576,016 hectares), with the remaining 18% (124,184 hectares) planted in conventional varieties.[71]

When I asked a representative of the Center for Peasant Research and Advocacy CIPCA (*Centro de Investigaión y Promoción del Campesinado*), a nonprofit supporting peasant and indigenous interests about the relationships between Brazilian landholders in the lowlands, the response centered on the role of Brazilian producers in introducing genetically modified seeds. A number of groups of the rural poor, including producers, NGOs, the landless movement, and advocacy organizations framed smallholder concerns with discussions of opposition to genetically modified soybean seeds. Organizations such as Fobomade, CAPPO and Probioma have been engaged in transnational organizing with the rural poor and Brazilian small producers, and MST as part of Via Campesina, on environmental grounds in critiques of industrial agricultural production systems.[72] Production techniques have also emerged as a site of environmental contestation in the context of land-titling process, including deforestation and other management techniques because improper environmental management can technically be grounds for the land not fulfilling its social economic function which is necessary for land titling.[73] While Brazilians have only been a limited object of these environmental grounds, these are potential sites of future contestation by groups concerned with Brazilian landholding because it is an example of breaking the rules which has emerged as the consensus around the way forward on land among the coalition of the Morales government. As producers seen by many to be at the technological frontier of high-input agroindustrial production, Brazil producers have been the target of limited but potential sources of contestation of production on socioenvironmental grounds.

6. CONCLUSIONS

[71] Asociacion de Productores de Oleaginosas y Trigo (ANAPO), *Informe Tecnico de Campana Verano 08/09, Cultivo de Soya*, n.d.

[72] *Primera Conferencia Nacional sobre Reforma Agraria, Soberania Alimentaria y Desarollo Integral Comunitario*, Conference Proceedings (La Paz, Bolivia: Movimento Sem Terra - Bolivia and Veterinarios sin Fronteras, November 2009); "Alianza Internacional de Pequnos Productores de Soya y de Agricultura Familiar; Conclusiones del III Encuentro Realizado en la Ciudad de Asuncion-Paraguay", April 24, 2009.

[73] Daniel Redo, Andrew C. Millington, and Derrick Hindery, "Deforestation dynamics and policy changes in Bolivia's post-neoliberal era," *Land Use Policy* 26, no. 1 (2010): 227-241.

In this article I sought to generate future research hypotheses on the social relations of Brazilian landowning beyond Brazil by analyzing sources of conflict and consent between Brazilian soybean producers and a cross-section of perspectives from domestic agrarian groups in Santa Cruz, Bolivia. I presented data that shows the large area of soybean land under cultivation by Brazilian producers in large plots since the early 1990s and I updated data from the 2008-2009 harvest on landholding that suggests the persistence of Brazilian production in the region but argues that this is not a linear increase, requiring additional analysis of entry and exit from the sector by Brazilian producers. I approached Brazilian social relations and parsed win-win narratives of "capital and technology" through the conceptual framework of hegemony in order to consider the particular ways that Brazilian landowners legitimate their presence in Santa Cruz lands and to explore the mechanisms of consent that exist in combination with the economic forces of agroindustrial production in these frontiers. I draw attention to the role of Brazilian agricultural capital within the larger frame of Brazilian economic relationships with Bolivia that include regional integration in infrastructure, the extractive sector and bilateral credit. I pay particular attention to transnational Brazilian landholders in "transfers" of technology and as sources of expertise in terrains of consent with Bolivian producers but I also provide instances of Bolivian groups of the rural poor using technology as an avenue of contestation of the agroindustrial production model that makes Brazilian landholding in Santa Cruz viable.

This intra-regional case study of Brazilian soybean production in Santa Cruz can serve as a point of comparison and departure for future cases of foreign landowning in the Amazon that are part of new global patterns of Brazilian growth beyond Brazil. First, the commercial agricultural sector in Santa Cruz is looking for new sources of growth and important parts of the sector are interested in and actively pursuing the production of biofuels despite the federal governments' effective moratorium on their production.[74] As the representative of the CAO stated:

> Always in agriculture we have been behind in relation to Brazil…we are always waiting to see how the big ones advance, the agribusinesses… It has worked well for us, soy has been growing, improving the productivity and everything and now it's times for biofuels."

Second, there is continuity in actors as Brazilian soybean producers are major investors in a new sugar cane alcohol processing plant in Santa Cruz to fulfill export contracts to Europe in a pattern that follow's Kaimowitz and Smith's argument that the soybean frontier created powerful new interest groups in Brazil and Bolivia.[75] Third, as the Santa Cruz regional agricultural research agency CIAT looks to Brazilian contacts for biofuels crop and processing technology in sugar ethanol, soybean biodiesel and other crops, Bolivia's federal agricultural and forestry Innovation Institute INIAF (*Instituto Nacional de Innovación Agropecuaria y Forestal*) is signing a new technical cooperation agreement for technology transfer and technical consulting with Brazil's EMBRAPA in order to develop smallholder crop systems for food sovereignty. What are the potential implications of this case study for the future global cases of Brazil in foreign land deals? Soybean landholdings expanded through the actions of individual Brazilian

[74] *Biocombustibles sostenibles en Bolivia* (Instituto Boliviano de Comercio Exterior (IBCE) and Camara de Industria, Comercio, Servicios y Turismo (CAINCO), 2010).

[75] "Aguai purchases land for ethanol project," *Business News Americas*, April 1, 2010; Kaimowitz and Smith, "Soybean technology and the loss of natural vegetation in Brazil and Bolivia."

producers in neoliberal frontiers but I argue that the role of Brazilian state agencies (EMBRAPA, BNDES) in their relations to Brazilian landholders and commercial interests abroad requires additional analysis of their complementarities and tensions amongst Brazilian actors abroad that may influence land-based social relations in other regions. How does technology emerge as a terrain of consent between not only Brazilian producer groups and domestic interests, but also between state agencies and these interests across borders? A quote from former Brazilian president Lula on the direction of Brazil's EMBRAPA into the future may give some indication on the "technical" orientation of Brazilian agricultural internationalization:

> *The hallmark of EMBRAPA must always be technical expertise, nothing else. Brazil is plural and EMBRAPA must be plural and should search for synergies which serve all. And third, Brazil has to increase its' contribution to the world. Thus, the internationalization of EMBRAPA is not a mere desire of the government, but rather a state policy, a constant in the future.*[76]

Will Brazil's agricultural production and innovation potential provide new win-win opportunities of land-based investments and technologies in the global south, or will they be contested in new ways by socioenvironmental groups or the rural poor? In the Amazon region, the answers to these emergent global questions are likely to be mediated through the existing intraregional relations of Brazilian actors abroad.

[76] Araldo Peres, *Pedro Arraes assume a presidencia da Embrapa*, Press release (EMBRAPA, July 15, 2009),