

Situating a mobile environmental policy

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ABSTRACT

Passed by the Argentine Congress in late 2007, Argentina's national forestry law outlines two broad aims for conserving the country's native forests: reduction in deforestation and control of agricultural expansion. The law's principal instrument comes in the form of land-use zoning with extant forested lands defined according to conservation value. The national policy follows on pressures from regional, national, and international actors concerned over a rapidly expanding agricultural industry. The federal government has decentralized power to individual provinces for regional implementation. I draw on an emerging approach in geography, "policy mobilities," to consider the context that reproduced the national policy in the Salta province, and to situate a regional environmental policy that at first glance appears both globally and locally embedded. This essay is a reflexive exercise to support dissertation fieldwork I am currently conducting on environmental governance and conservation in northwestern Argentina.

Keywords: environmental governance, conservation, land-use, agricultural expansion, policy mobilities

Situating a mobile environmental policy

Introduction

Passed by the Argentine Congress in November 2007 and entering into effect in January 2008, Argentina's federal Law of Minimum Environmental Protection for Native Forests (*Ley de Presupuestos Mínimos de Protección Ambiental de los Bosques Nativos, Ley N. 26.331*) herein referred to as the National Forestry Law (NFL) dominates the environmental governance process I study in northwestern Argentina. The NFL establishes minimum requirements for the conservation and management of native forests throughout the republic, and provides specific, national objectives: (1) promote conservation through regional land-use planning and control of the expansion of the agricultural frontier; (2) regulate the reduction in area of native forests to thereby ensure native forests exist in perpetuity; (3) maintain the ecological and cultural benefits native forests provide to society; and (4) promote and maintain widespread use of precautionary and preventative principles regarding future use of native forests (Honorable Congreso de la Nación Argentina, 2007).

This essay is a reflexive exercise to support my ongoing fieldwork and to begin situating a provincial environmental policy within context and process. I begin by providing a brief background of the study area and a description of the National Forestry Law. I then turn to Salta's provincial land zoning policy, considering it in the light of environmental governance and political ecology, ongoing observations in the field, and a recently emerging approach to policy analysis within geography called "policy mobilities" (Peck, 2011; Peck & Theodore, 2010, 2012).

Context

Physical setting and land-use

Flat eastern Salta lies at the western extent of the Gran Chaco eco-region, an extensive natural plain broadly differentiated between the humid, eastern Chaco and the semi-arid, western Chaco (E. Bucher, 1982; E. H. Bucher & Huszar, 1999; Pennington, Prado, & Pendry, 2000). Annual rainfall averages 500 mm along the province's eastern border and gradually increases westward to approximately 700-900 mm, approaching the transition from the seasonably dry tropical forest of the semi-arid Chaco to the humid forests of Salta's Yungas eco-region (E. H. Bucher & Huszar, 1999; Grau, Gasparri, & Aide, 2008). The band of increased average annual rainfall at the Chaco's western edge supports large-scale, rain-fed production and marks the start of the province's agricultural frontier. The frontier's easternmost edge lies well into eastern Salta's semi-arid Chaco region and in place of intensive agriculture is characterized by extensive livestock production.

Following an industrial production model, agricultural expansion in the Chaco has had the greatest effect on areas of low topographical relief (Zak, Cabido, & Hodgson, 2004). Successive periods of deforestation and the introduction of increasingly drought-resistant varieties of soy have pushed the extent of the agricultural and livestock frontier deeper into the dry Chaco landscape. In a 2009 technical report on the province's forested areas, Salta's environmental ministry described land-use change patterns from 1972-2008 on a study area of 8,209,597 ha, corresponding to low relief (<5%) forested areas in the province. In 1975, nearly 300,000 ha in Salta had been cleared for agricultural production; this represented 3.6% of the province's forested areas of low topographical relief. Over the next thirty years, land clearance increased in both scale and rate. By 1986, 8.7% of low relief forested areas was transformed for

agriculture; in 1998 13.8%; in 2004 15.2%; and most recently in 2008 22.8%. The annual land clearance rate increased from 0.47% in 1984 to 1.9% in 2008 (Ministerio de Ambiente y Desarrollo Sustentable, 2009, p. 29-31). After 2008 and following a later Supreme Court ban on deforestation in four departments in eastern Salta, the annual deforestation rate fell from approximately 2.0% to 0.8% at the close of 2010 (Seghezzo et al., 2011), still more than twice as high as the 0.35% average rate for Latin America in 2002 (Achard et al., 2002; Eva, Achard, Stibig, & Mayaux, 2003; Fearnside & Laurance, 2003).

New policy and a regional land zoning experiment

In implementing the NFL, the federal government has decentralized considerable power to individual provinces, requiring each to reach national objectives but also leaving each to forge an individual path. The principal tool of the NFL, the Ordenamiento Territorial (OT), literally “land-use regulation” requires each province to conduct quantitative and qualitative surveys of extant native forests and subsequently categorize and map these forests by conservation value: Category I or Red, represents forests of high conservation value; Category II or Yellow, denotes forests of medium conservation value; and Category III or Green, denotes forests of little conservation value (see Table 1). The resulting 2009 map for Salta outlines areas identified as conservation priorities and concerns, and those available for agricultural production (see Figure 1). Salta’s provincial forestry and land zoning law was passed in December 2008 ("Ordenamiento Territorial de los Bosques Nativos de la Provincia de Salta," 2008).

Table 1. According to the 2007 National Forestry Law, provinces are obligated to inventory extant native forests according to their conservation value. (Honorable Congreso de la Nación Argentina, 2007)

Conservation category	Conservation value	Category description
Category I or Red	High	Areas of high conservation value in which deforestation is not allowed. This includes areas neighboring conservation reserves, areas important for connecting ecoregions, areas having high biological value, and/or areas neighboring river basins. These areas should remain unchanged although they may be inhabited by indigenous communities or be the subjects of scientific investigation.
Category II or Yellow	Medium	Areas of medium conservation value that may undergo some degradation, but that with restoration would have a high conservation value. Land clearance is not permitted. These areas are subject to sustainable use activities, tourism, sustainable harvesting or gathering, and scientific investigation.
Category III or Green	Low	Areas of low conservation value that may be totally or partially converted (to another land-cover).

The NFL provides a minimum of ten criteria for classifying native forests into the three conservation value categories: (1) minimal size required for maintaining extant plant and animal communities; (2) connection to neighboring ecosystems to maintain the ecological gradient; (3) connection to protected areas; (4) presence of important biological species; (5) potential as a corridor for connecting ecoregions; (6) current state of conservation; (7) potential as forested land; (8) potential as long-term agricultural land; (9) importance for conservation of neighboring river basins and watersheds; and (10) potential importance/use for local indigenous and rural communities in maintaining their existence and culture (Honorable Congreso de la Nación Argentina, 2007). Provinces remain free to include additional criteria. For example, the province of Salta added an eleventh criterion based on slope ("Ordenamiento Territorial de los Bosques Nativos de la Provincia de Salta," 2008).

The passage of the NFL in late 2007 coincided with a change in provincial governmental leadership in December 2007, from then Governor Romero to current (2012) Governor

Urtubey. Concomitantly with the change in leadership, a spurt of approved deforestation permits were approved by the province (Gasparri & Grau, 2009). A later inquiry by the Argentine Supreme Court found that the province issued permits to clear approximately 807,500 ha between September 2004 and December 2007. The permits to clear approximately half of this area were issued in late 2007, before the national policy went into effect in early 2008 and during the change in provincial leadership (Fundación Proteger, 2009).

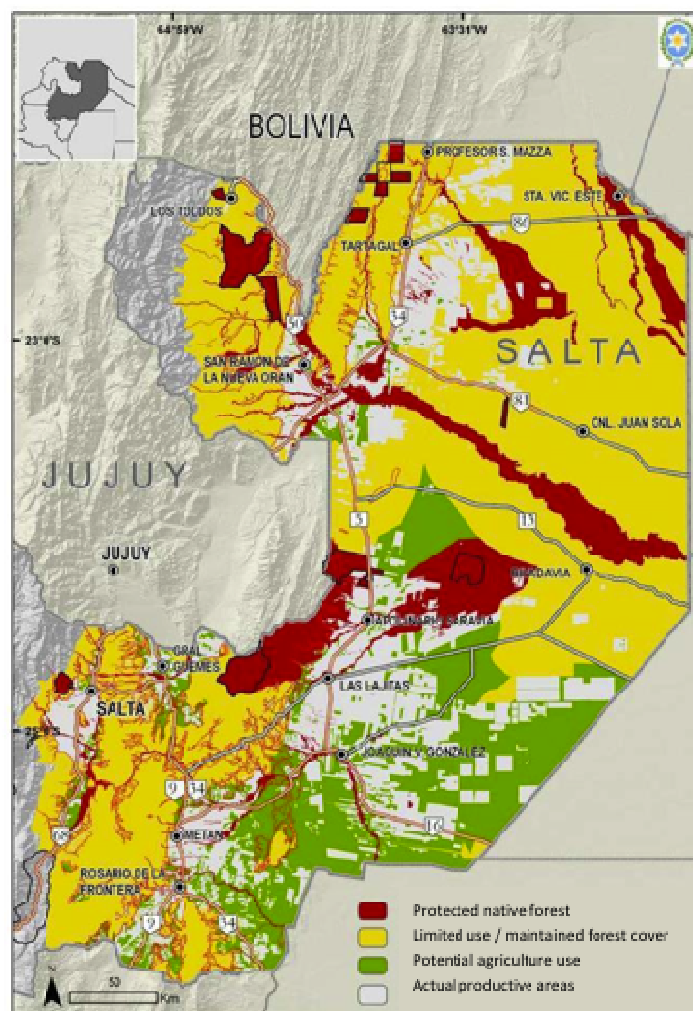


Figure 1: Salta's land zoning law creates three classes of conservation value for existing forested lands: 1,294,778 ha as areas of protected native forest (red); 5,393,018 ha as areas of limited use and maintained forest cover (yellow), and 1,592,366 ha as areas of potential agricultural use (green). (Ministerio de Ambiente y Desarrollo Sustentable, 2009, p. 59)

Theoretical context and reflexivity

My conception of this case draws on training in political ecology, environmental governance, and a recent approach to policy analysis called “policy mobilities.” Rather than having a single theoretical approach or methodology, political ecology analyses present a shared focus on a number of themes, including: integration into a globalized market, legitimacy of local users and uses, access to and control of natural resources, and power (McCarthy, 2002). Over the course of my work, I have analyzed textual documents (e.g., legal texts, mission and vision statements, planning goals, technical reports) as well as conducted semi-structured interviews with key actors involved in the creation and implementation of Salta’s land zoning policy (e.g., environmental NGOs, provincial and national government ministries, rural journalism service, national agricultural research service, university professors, agricultural development consultants).

Policy mobilities is an approach to understanding policy construction and implementation that emphasizes the “constitutive sociospatial context of policy-making” (Peck, 2011, p. 774). Rather than focus on policy-making as an exercise of transferring a package of best policy tools across jurisdictional space, the policy mobilities approach focuses on the ever-changing institutional and relational contexts in which policies are reconstituted (Peck & Theodore, 2010, 2012). Peck and Theodore (2012) suggest discourse analysis, ethnographic observation, and in-depth interviewing as tools for understanding the continuously changing contexts in which policies are realized, understood, and implemented.

My goal is to describe themes I have identified mid-course in my dissertation research and situate them in context. Drawing on political ecology and policy mobilities as described above I organize my discussion of Salta’s forestry and land zoning policies along three broad

themes characterizing the continuously changing socio-political landscape in which Salta's forestry conservation policy is implemented.

Discussion

Definition, political power, and real estate value

The land-use regulation of the NFL (the OT process) is an expression of territoriality in which the provincial government, following a federal mandate, demarcates some native forest areas as highly valuable and others as "conservationally" unused by painting them green and portraying a cornucopian or Promethean value at the policy's heart (Layzer, 2002b). As there is little conservation value of the counter-intuitively green-labeled lands, the land zoning policy appears to empty certain territories of conservation value and repurposes them as potentially valuable, productive terrain. By controlling the expansion of the agricultural frontier and the potential conservation value of land, the state extends its political power.

In a discussion of the intensification of land-use, Richards (1990) states that technology offers an efficient means to control and use the landscape (p. 167); I would extend his proposition beyond mechanical tools to ask if "technology" also refers to the conception and definition of environmental governance issues. With a color-coded system of conservation value and thereby an inherent framing of productive use of land resources and (an apparent) continual influence of productive elites, the province appears to have empowered only certain citizens of the Chaco, reinforcing those who have already accumulated wealth enough to produce commercial crops at a large scale (Blaikie & Brookfield, 1987).

The expanding agricultural frontier in Argentina's northwest region reflects the Chaco's positioning as the "cheapest, best" agricultural land available in the republic, and responds to

increasing international market demand for soy as global population and consumption patterns change (Hutton, 2010). “Give me green!” voiced an early study participant, echoing the desires of regional landowners to have their lands painted green, and therefore be of greater market value. From its conception to passage and implementation, elites in Salta appear to have had consistent influence on the provincial policy response to the NFL.

Changing provincial outlook and multi-scalar influences

A recurrent topic in my research has been the intersection of color category and land value, real estate, and development of the Chaco. This intersection of topics reflects the larger discursive themes of the provincial government, as they have changed in recent years from “sustainable development” to “development and conservation,” with provincial government action belying continued stress on “development” (Seghezzo et al., 2011). Formerly known as the Ministry of the Environment and Sustainable Development, late last year the provincial environmental ministry joined with its agricultural counterpart to form the Ministry of the Environment and Sustainable Production.

In examining Salta’s policy, I endeavor to understand how context and actors at the provincial level are connected to national and global contexts. I consider three propositions identified in the literature: (1) effective political power no longer rests solely with national governments but is shared across political scales; (2) it is no longer meaningful to consider a political community as existing solely within the boundaries of a single nation-state; and (3) there is a disjuncture between the practices of the state at the regional level and its formal, national authority (Held, 2003). For example, the same path identified as a potential course for well-funded enterprise agriculture – in which globalization may be a force for conservation opportunities with elites operating within defined environmental regulations (Brannstrom,

2009) – is also a global path familiar to social relations and institutions. Therefore, local incarnations and possibilities of political power are affected by happenings quite literally a world away (Held, 2003, p. 517-518).

So it is not enough to question whether agricultural intensification will “choose” to follow state environmental policy. We must also question the character of the policy, and whether the globalized nature of production and end-consumer choice also provides institutions the opportunity to ensure that policies are consistently open to critique and influence by local and regional political voices. As the political power of the national government responds to multi-scalar calls for conservation action and agricultural production, so too might the regional political and institutional community of the Chaco. Political power in neither case is bound to administrative or territorial borders, as in the same way governance processes themselves are no longer bound to the territory of the state (Held, 2003, p. 521-523).

Continued public participation?

An executive team under the direction of Salta’s Ministry of the Environment and Sustainable Development was tasked with creating the provincial level Ordenamiento Territorial project that would translate national policy to what would later become provincial law. The team operated under a threefold, multi-disciplinary structure: public participation, law, and technical support (Ministerio de Ambiente y Desarrollo Sustentable, 2008).

Cooperating with an external advisory committee that included stakeholders from national parks, the national agricultural and geological research services, and local universities, the executive team launched the provincial process at a public forum in April 2008. The provincial project required that four distinct spaces for public participation be included in the zoning process: regional workshops for small producers and indigenous communities, consultative

regional meetings open to all sectors, sectoral roundtables, and specialist/expert roundtables (Ministerio de Ambiente y Desarrollo Sustentable, 2008). In December 2008, the province of Salta passed *Ley N. 7543 Ordenamiento Territorial de Bosques Nativos de la Provincia de Salta (OTBN)*, transforming the national policy into specific, provincial law.

Community groups, and social and environmental NGOs alike criticized the stakeholder consultation process – some going so far as to term the process a “mockery” or “useless” (Seghezzo et al., 2011, p. 261-262). The participatory process appears to have focused on citizen level input during initial provincial policy formulation, not on creating a state-societal interface in which the structures of the state interacts with individual citizens and groups in any prolonged or deliberative way.

Concluding thoughts

Argentina’s NFL has encoded forestry conservation and land-use change for agricultural expansion within a land zoning system of color-coded conservation values. Yet, grasping the institutional and relational contexts in which the policy is reconstituted at the provincial level is critical to understanding the process and outcomes for conservation and production in each province. For example, the concentrated political will which first helped pass the NFL, a political expression of environmental values at the national level, appears to have faded at the provincial level because those actors expressing productivist, development values have exerted more influence on the provincial articulation of forestry conservation and land-use zoning policy (Layzer, 2002a, 2002b; Seghezzo et al., 2011). Currently, the “recategorization” process of applying the three conservation-value colors from the original regional-scale provincial map to individual parcels has come to the fore in Salta. The step-by-step process for changing the

conservation-value category of individual parcels is of utmost concern as land-managers make decisions for individual parcels and as deforestation continues in the province. Beyond questions of public participation, clear process, and access to information regarding changing conservation “color,” some actors question whether the act of recategorization itself delegitimizes the original NFL land zoning effort.

In December 2011, the Supreme Court’s ban on deforestation in four of Salta’s eastern departments was lifted; formerly legally protected from any type of deforestation, the territory in four of Salta’s eastern departments is now subject to deforestation as permitted under the NFL (Nuevo Diario de Salta, 2011). As it is currently implemented in the province, the Ordenamiento Territorial process that attempts to control the spread of deforestation appears to permit continued degradation along the province’s agricultural frontier, laying aside future options in favor of short-term profit for national gain (Blaikie & Brookfield, 1987).

As a work in progress, in this essay I attempt to identify major themes influencing the context in which provincial forestry and land zoning policy is implemented in the case of the province of Salta, Argentina. I welcome feedback and constructive criticism as I continue investigating environmental governance and the expansion of northwestern Argentina’s agricultural frontier.

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