

Between Grassroots Collective Action and State Mandates: The Hybridity of Multi-Level Forest Associations in Mexico

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Abstract

Multi-level collective actions and institutions play an important role in natural resource governance and rural development; however, the origins and transformations of these institutions have only recently begun to receive systematic research attention. To address this gap, we trace and analyse the historical processes driving formation and change of Mexican inter-community forestry associations over time, drawing on survey data and in-depth case studies from two Mexican states, contextualised within the national and international political-economic landscapes over time. While we initially categorise whether an association is grassroots ('bottoms-up') or state-mandated ('top-down'), the fifty-year historical review reveals a contested dynamic over political, economic and technical changes in multi-level commons governance. In this political-economic process, the line between self-organised and top-down is blurred, hybrid and continually evolving on multiple scales, driven by both cooperation and conflict across governance levels from the local to the global, and embedded in broader struggles over land, democratic institutions and market participation. Mexican forestry associations mediate between social movements; member needs such as political representation, economic cooperation and forestry services; conflicting political interest from a diversity of community and non-community actors including foresters, political party leaders and timber corporations; and state mandates and market forces. These findings fill a gap in institutional commons theory and practice, elucidating the political dynamics of polycentric and multi-level governance.

Keywords: commons, multi-level collective action, polycentricity, inter-community forest associations, political ecology, Mexico

INTRODUCTION

Studies have established that polycentric governance — interconnected and multi-centred local, regional, national and international institutions — is crucial for socio-economic and ecological success of common-pool resource management, especially given the challenges of an increasingly globalised

world (Armitage 2008; Basurto 2013; Heikkila et al. 2011; Mwangi and Wardell 2012; Ojha 2014; Ojha et al. 2016; Ostrom 1990; Ostrom 2010). However, assessing the potentials and limitations of these multi-level arrangements remains a key research concern (Armitage 2008; Gallemore et al. 2015; Poteete 2012), as well as how these linkages emerge and evolve, 'at what points in time, and in relation to what forces' (Heikkila et al. 2011: 141). While institutional studies of commons typically explain the emergence of collective action in relation to (mostly localised) resource characteristics, users and existing rules, political ecology and critical institutional approaches have emphasized the political economy in which commons governance is embedded, particularly, the role of state policies and politics, historical processes behind commons' institutions, social mobilisations and political contestations over rights and restrictions (Armitage

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2008; Saunders 2014; Scholtens 2016). Consequently, understanding multi-level institutional emergence and change requires situating local arrangements within ‘wider frames of governance’ — multiple scales, actors and structural factors — that ‘shape the possibilities for resource allocation, adaptation and negotiated solutions’ (Cleaver and de Koning 2015: 2). This allows for a more politicised analysis of polycentricity (Gruby and Basurto 2014).

Inter-community organisations are a particular type of multi-level collective action that have received increasing but still limited attention (Dupuits and Bernal 2015; García-López 2013; Hajjar and Kozak 2017; Paudel et al. 2012; Taylor 2012). To contribute to the emerging literature, we offer a historical, political economy analysis of inter-community forestry associations (FAs) in Mexico to understand how commons arrangements are produced through conflictive interactions between state and non-state actors in changing political-economic contexts (Cleaver and de Koning 2015; Johnson 2004). Our research approach combines multiple methods, incorporating survey data with in-depth case studies, archival research and interviews for historical scope, context and detail that serve to ‘politicise’ commons theory. Based on our findings, we present two main arguments. First, contrary to the predominant narrative of inter-community forestry organisations as autonomous efforts by communities to address members’ socio-ecological issues and market opportunities, FAs emerge and evolve as a combination of contested bottom-up and top-down forces: social movements seeking to redress injustices and alter existing institutions, communities’ self-organised attempts to address members’ practical needs, adaptations to changing political-economic conditions, and state and non-community actors’ strategies of political-economic control, embedded within processes of democratisation and marketization. Indeed, FAs’ position as intermediary between communities and the state often places them at the centre of socio-environmental struggles for rights over land and forests, paralleling similar conflicts for common resources around the world. Thus, the economic and political standing of community forestry at specific moments in history may be partly ascertained through the operation of FAs. Second, as a result of these multiple driving forces, FAs are hybrid institutions that carry out both member communities’ and state agendas, and their form and functioning reflect that combination.

In the next section, we describe the context of the study and the methods used. Section 3 traces the historical emergence and evolution of four FAs in Durango, each in distinct periods defined by shifts in national forest policies and political-economic conditions. Section 4 discusses the study’s main implications for commons’ sustainability paradigm. Section 5 concludes.

BACKGROUND AND METHODS

Mexico is a paradigmatic case for studying conflicts over multi-level commons institutions. Mexico’s experience with

forest management and conservation is unique and *avant-garde* in the extent of forests held under community ownership, the historical moment when this model began, the constitutional and policy framework supporting community forestry, and communities’ collective action around commercialising timber resources and conservation efforts (Antinori and Rausser 2008; Boyer 2015; Kashwan 2017). The country’s peasant revolution (1910-1917) instigated the first and largest land reform process in Latin America at the beginning of the twentieth century, institutionalised by the Constitution of 1917 that mandated land redistribution in collectively-owned parcels to indigenous and peasant communities (*comunidades* and *ejidos*, respectively). As a result, approximately 70% of the country’s forests, nearly 40 million hectares, are under state-recognised community ownership and thousands of community forestry enterprises have been associated with successful forest conservation and improved rural livelihoods (Bray 2013a). Research here thus informs the on-going, widely varied and highly contested process of forest tenure reforms and institutionalisation of community rights over forest across the world (Larson et al. 2017; White and Martin 2002).

Incorporating analyses of multi-level arrangements such as forestry associations (FAs) into commons theory shows the multiple and contradictory political forces that generate commons governance arrangements. Despite arguably providing a supportive institutional regime for the self-organisation of forest communities (Bray 2013b), Mexican policies have been ‘erratic’ (Klooster 2003) and ‘cyclical’ (Haenn 2005), alternating between pro-community and pro-corporate or ‘fortress conservation’ strategies, where FAs have been an intermediary between local and federal agendas, and increasingly, international ones such as REDD+. Moreover, in its environmental conservation efforts, the Mexican state cannot be characterised as a unitary homogeneous actor, but rather as fractured and contradictory (Haenn et al. 2014) with a longstanding ‘culture of accommodation’ to political-economic changes by peasant communities and FAs (Bray et al. 2012; Taylor 2012; Wilshusen 2010). The forest is thus a ‘political landscape’ with varying institutional arrangements across space and time and shaped by power relations (Bofill Poch 2005; Boyer 2015; Kashwan 2017).

In the commons literature on inter-community collective action, the underlying notion of ‘nested’ and ‘polycentric’ institutions highlights cross-scalar processes that influence use of the commons, and multi-layered institutions which emerge to manage them (Ostrom 1990, 2010). From the perspective of collective action theory, associations are understood as emerging in response to market failure (e.g. information gaps, imperfect competition, lack of property rights), economies of scale in marketing and political action (e.g. mobilisation, lobbying), and in solving ‘wicked’ environmental problems that cross multiple scales (e.g. US inter-state water compacts (Heikkila et al. 2011).

In contrast, political ecology and critical institutional analyses suggest multi-level arrangements are the result of power-laden conflicts and are often created with the purpose or effect of

increasing state authority over commons and weakening local self-organisation to control valuable economic resources, populations and territories. While decentralisation policies have created openings for secondary-level organisations to emerge and expand (Mwangi and Wardell 2012), they have also led to ‘closings’ through capture by powerful groups or subsequent recentralisation of state authority (Poteete and Ribot 2011; Sahide et al. 2016). Decentralisation and the resulting multi-level institutions are best understood as multi-scalar political ‘processes’ where different actors struggle over competing interests and values (Bray et al. 2012; Green 2016; Ojha 2014; Poteete and Ribot 2011). State exclusionary development and/or conservationist policies are sometimes confronted with grassroots social mobilisation promoting local access to resources, sometimes generating new more inclusive multi-level arrangements (Cronkleton and Taylor 2012; Kashwan 2017; Scholtens 2016).

Previous work on inter-community associations points to some of these political dynamics. Bebbington (1996) analyses how peasant federations in the Andes and Amazon formed to deliver technical services, advocate for political representation, and develop commercial enterprises as the public sector pulled back its rural presence, a pattern echoed in Boyer’s (2015) historical account of Mexican community forestry. Britt (2002), Paudel et al. (2012) and Ojha (2014) trace the origins of the Federation of Community Forestry Users of Nepal (FECOFUN) to a political struggle over communities’ forest rights and the desire to provide political and economic support, promote state-community collaborations and democratise forest governance. Taylor (2012) emphasises grassroots Guatemalan forest associations as dynamic response to regional, environmental and political-economic challenges, and Taylor (2001) demonstrates the adaptation of two Mexican forestry associations in Durango and Quintana Roo to policy reforms.

This paper grew from both quantitative and qualitative research to develop a comparative analysis of the historical trajectories of four FAs from Durango, Mexico. A 2007 national survey project provided data from a random sample of 40 forestry communities in Durango and Michoacán, including a specialised component on the formation, governance and services of FAs in which sample communities held membership. Durango and Michoacán were chosen as their distribution of forest communities most closely resembled the national distribution and were cost-effective locations¹. Using the ‘diverse-case’ approach (Gerring 2007), the first author selected four FAs in Durango to analyse associations identified by communities originating from their own collective action (‘bottom-up’) or external actors (‘top-down’)². The two ‘bottom-up’ FAs are *Unión de Ejidos y Comunidades Forestales ‘El Salto’* (‘El Salto’) and *Unión de Ejidos y Comunidades Silvícolas de Durango* (‘Sierra Sur’). The two top-down FAs are *Unión de Permissionarios de la Unidad de Conservación y Desarrollo Forestal #4 ‘La Victoria-Miravalles’* (‘La Victoria’) and *Unidad de Manejo Forestal “Región Norte”* (‘Region Norte’) (see Figure 1). The comparative case study follows

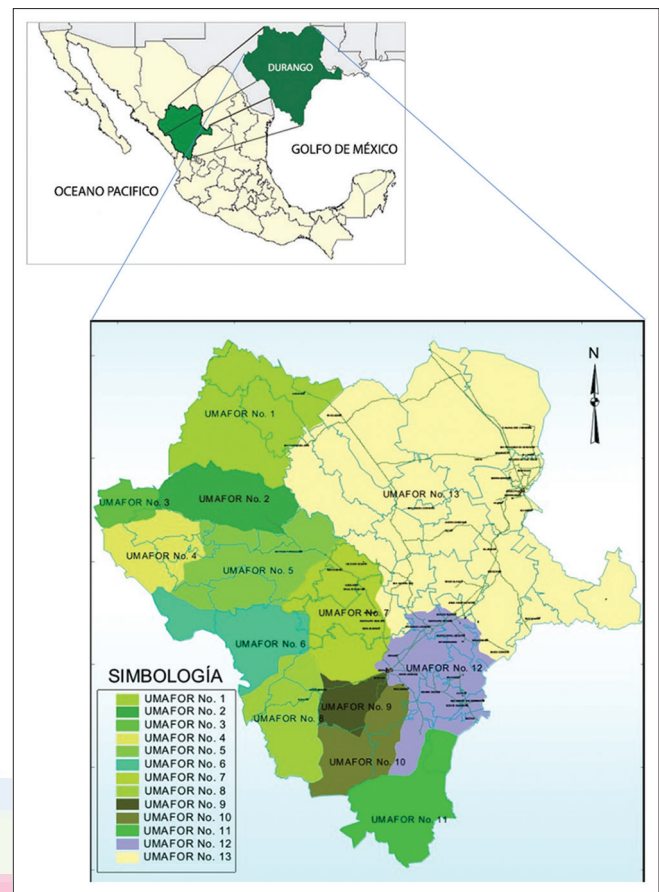


Figure 1
Durango and its forest regions. Region Norte FA located in UMAFOR No. 1, La Victoria in UMAFOR No. 6, El Salto in UMAFOR No. 8 and Sierra Sur in UMAFOR No. 9. Source: SRNMA (2006)

the ‘process-tracing’ approach (George and Bennett 2005, Britt 2002). Emergence and evolution of these FAs parallel the main historical phases of Mexican community forestry, from initial forest movements in the 1960s and 1970s, to community forestry in the 1980s, to democratisation and neoliberal market reforms and new forms of governance in the 1990s and 2000s. The first author undertook a review of archival sources (including newspapers and original FA documents, e.g. plans and bylaws) and carried out 200 semi-structured interviews of key actors within each FA (current and past leaders, community representatives of all or most of each FA, foresters, and federal, state and local government officials), participant observation and group discussions in FA and community assemblies, and observation of government advisory boards with FA participation³. Interviews focused on FA origins and goals, activities and services, major changes over time, and current operation and impacts.

POLITICAL CONFLICTS AND HYBRID EMERGENCE AND EVOLUTION OF DURANGO’S FOREST ASSOCIATIONS

In this section, we trace the histories of the four forest associations in our study. We find that the emergence and

evolution of these multi-level collective action institutions in Mexico can be understood in historical perspective, as embedded in the political-economic context of agrarian and forest policies that significantly shaped Mexican community forestry. The analysis, from the 1960's to present, is divided into four distinct phases, each followed by a detailed discussion of the FA that emerged in that phase and the evolution of other pre-existing FAs. All four FAs exhibit either predominant top-down or bottom-up characteristics typical of the period in which they were founded, but also hybrid sources of influence over time. The resulting narrative has the effect of repoliticising commons theory by historicising the conflictive and complex origins of these multi-level arrangements. Table 1 below offers a summary of the four FA case studies.

The ‘second revolution’ and bottom-up peasant appropriation of forestry under authoritarian corporatism (1960s-1970s)

Context

The Mexican Revolution’s promises of land and freedom to rural communities faced early opposition from business-friendly conservative presidencies that embraced a ‘modernisation’ and pro-market program (Durand Ponte 2009). From 1940 onward, the state declared ultimate ownership over forests for ‘national’ interests, and subcontracted timber extraction to private and later public corporations for timber extraction or conservation areas where all communal forest uses, even fuelwood collection, were prohibited (Klooster 2003)⁴. Moreover, policy-making for over 70 years was embedded in an authoritarian, single-party, corporatist political regime which made effective grassroots social organisation difficult (Gordillo et al. 1998; Wilshusen and Murguía 2003). Peasant groups ‘were often formed at the initiative and encouragement of the state ... as long as their loyalty to the state was not in doubt’, which usually meant joining the corporatist National Peasant Confederation (CNC) (Bartra and Otero 2005: 164). Most

ejido unions had to integrate into the CNC, often becoming controlled by corrupt *caciques*. In other cases, the government pressured against the creation of autonomous organisations or created parallel, loyal unions to counteract grassroots ones (Bray and Merino 2004; Chapela 1998; Gordillo et al. 1998). From the 1960s onward, this regime faced increasing opposition by social movements against socio-economic and environmental injustices of the concession system, but also to broader questions of land reform and democratisation. Student protests, guerrilla uprisings and peasant movements demanding ‘land and freedom’ spread throughout the country, and coupled with an economic downturn, marked the beginning of the ‘legitimacy crisis’ of the authoritarian-corporatist regime (Durand Ponte 2009). This was a ‘second’ revolution for those that had not benefitted entirely from the first one.

Many FAs emerged directly out of these movements. In almost all of the 17 concessions we documented across Mexico, at least one FA formed either during or soon after the timber concession in direct response to that concession (García-López 2012, chapter 2). Durango had three of these ‘anti-concession’ FAs. As early as 1964, a movement successfully opposed the renewal of a large Durango logging concession (Lucero González 2002, chapter 4). The 2007 Durango-Michoacán survey confirms that bottom-up FAs are the oldest in the sample, mostly forming in the 1960s-1970s, and that they originally had a distinct organisational focus on political empowerment and socio-economic development (Antinori and García-López 2008).

These mobilisations were in great part responsible for a change towards ‘pro-peasant’ policies during the presidencies of Echeverría (1970-76) and López Portillo (1976-1982), who initiated a new wave of land reform and state-supported rural sector ‘activism’ (Bofill Poch 2005; Klooster 2003). The 1971 Agrarian Reform Law promoted the creation of community and inter-community peasant organisations for access to credit and commercialisation of communities’ products, albeit through predominantly top-down schemes. Later, the

Table 1
FA Origin and Influences

FA	Context	Influences	
		Bottom-up	Top-down
El Salto 1968	Democratisation and land reform movements Economic downturn State’s authoritarian corporatism	Anti-concession movement Economic and political needs of emerging community forestry enterprises	‘Pro-peasant’ government policies CNC and PRI interventions
La Victoria 1989	Continued struggles for community forestry rights Inefficiency and corruption of government-run timber and forestry service concessions	Technical forest management needs Previous anti-concession movement Previous collective action within regional association	Forester from government-run forestry services 1986 Forest Law Government promotion of <i>permisionario</i> unions
Sierra Sur 1994	Neoliberal reforms Weakened state corporatism and reduced peasant political influence Social movements challenging reforms	Previous collective action within regional associations Desire to self-govern forestry services Infrastructure and forest management needs	1992 Forest Law (privatisation of forestry services) Foresters seeking control over association’s resources
Region Norte 2003	Continuing free-trade regime Increasing shift to conservation Social movements demanding more support for peasant communities	Previous collective action within regional associations Infrastructure and environmental management needs	2003 Forest Law and PROFAS program Foresters seeking control over association’s resources

government developed pilot community forestry schemes, which proved crucial for the expansion and endurance of this sector (Bray 2013b). By 1980, some 5,000 communities owned about 65% of forestlands (Klooster 2003).

Case study 1: 'El Salto'

The forestry association of El Salto, created in 1967 in the town of the same name, was the first FA in Mexico. It emerged out of local communities' discontent with the Durango Lumber Company (the 'Company'), which had acquired extensive prime forestland during the dictatorship. Peasant leaders interviewed described the formation of El Salto as a 'liberation struggle' and 'the revolution'. Communities sought to obtain land titles, end the Company's exploitative timber contracts, obtain rights to self-manage the forests, and promote community-owned forestry enterprises. Interviewees highlighted the social-ecological injustices by the Company and communities' shared sense of region and solidarity as detonators for the movement.

In these efforts, peasant community leaders played a strategic role, creating a local chapter of the National Peasant Confederation (CNC) to gain access to state-party decision-makers and have more legitimacy in making claims for land and forest. In the political shift towards a pro-peasant government, community leaders successfully organised community land claims, which served to weaken the Company economically. Almost half of the region's forest *ejidos* (21 of 44) were created in the 1960s (Hernández Díaz 2006), and by 1965 the Company had lost over half of its forestland to these *ejidos* (Luján Castañeda 1994). Thus, while in other regions forestlands were given to peasants 'almost as an afterthought' (Bray 2013a; Bray and Merino 2004), in this region the reform was purposefully aimed at obtaining such lands.

Local efforts to obtain timber extraction permits succeeded the contest over control of forestlands. Community leaders used the CNC to access federal echelons of power, bypassing opposition by Durango's governor and legislators. The El Salto association gained the support of major political figures, including the President, Agriculture Secretary and eventually the governor, and finally obtained extraction permits, allowing communities to negotiate terms from a stronger bargaining position. The Company went bankrupt a few years later.

With the end of the Company's concession, El Salto communities had to confront the practical challenges of managing their forests. This 'peasant appropriation' of the productive process seen in agricultural organisations in Mexico (Bartra and Otero 2005, Fox and Gordillo 1989) and elsewhere (Bebbington 1996), required multi-level organisation to develop economic and technical capacities, as well as continuing political influence. Many Mexican forest communities across the country similarly formed FAs in response to these problems (Antinori and García-López 2008; Bofill Poch 2005; Bray and Merino 2004). Thus, in 1976, the El Salto association reconstituted itself with the collective aim to 'organise and unite' forest communities, specifically to support the commercialisation of the communities' timber products

and avoid intermediaries and 'interruption of production' (El Salto FA, 1976). Interviewees confirmed that the goal was to 'protect' each other for collective strength under the norm of 'everyone for everyone'. Basic information about timber prices and sellers was limited. El Salto pioneered strategies to provide these services. It established a price list with set prices for logs and sawn products at which all member communities would sell in the market, and, pooling resources through membership fees and government programs, it developed capital infrastructure for this endeavor, including a regional sawmill⁵.

El Salto drew significantly on previous experiences acquired by community members as Company employees and through pilot community forestry endeavors, yet its evolution was also strongly shaped by political-economic forces from above. The federal government mandated the FA's 1976 reconstitution to comply with the 1971 Agrarian Law and the formally recognised status of '*ejido* union'. The CNC, in which El Salto became officially a member, led the process of drafting its statutes and provided training in business administration, accounting, and forest management. As such, its purpose became hybridised between member needs and its official role as intermediary between state and community for resource-channelling (i.e. connecting state programs to local levels) and political representation. The pro-peasant policies of the 1970s favoured El Salto's development. The government and its regional forestry officers provided financial and technical resources and sided politically with El Salto in conflicts, such as the initiative to establish the price list, which private timber corporations strongly opposed. Finally, its corporatist connections provided El Salto an effective channel for representation in state politics. These factors potentiated the FA as an organisation offering substantial political and economic benefits to its members (García-López 2013).

However, this political corporatism also served as a constraining force. As an interviewee explained, 'the Union (i.e. El Salto) was always managed as *Priísta*', i.e. as part of the ruling *Partido Revolucionario Institucional* (PRI). Political and economic resources were increasingly accompanied by internal conflicts as *caciques* (political bosses) — sometimes highly corrupt — attempted to use the union as a 'ladder' for more prominent positions and personal economic enrichment. Towards the mid-1980s, El Salto became increasingly unstable, and its timber processing and commercialisation project began to wither.

Foresters' top-down efforts in the liberalisation of technical forestry services (1980s)

Context

While FAs like El Salto emerged directly out of social movements and evolved within the context of state corporatism and the political-economic necessities of community forestry, other organisations emerged out of a different set of forces in the 1980s, responding to the *technical-scientific* dimension of community forestry. Since the 1970s, the federal government had provided extension services through regional forestry

administration units (UAFs according to its Spanish acronym). The 1986 Forest Law, in addition to ending timber concessions, transformed UAFs into region-specific concessions controlled by individual communities or inter-community associations known, simply, as UCODEFOs⁶ (Bray and Merino 2004) with similar territories as UAFs but different governance structure. The new law created the legal category of *permisionario* (title-holder) unions that included both communities and individual forest-owners. Little previous research on *permisionario* unions exists, but some suggest that foresters' wealth, technical knowledge and employment history in the government gave them an advantage in shaping the new unions to maintain the top-down management of the previous UAFs (Chapela 1998; Merino et al. 2008).

Case Study 2: La Victoria

La Victoria, created in 1990 in Durango's San Dimas municipality, was one of these *permisionario* unions. From 1958 to 1978, a private company held a timber concession in the region, after which the government created the UAF management unit. With the 1986 Forest Law, the UAF sub-director promoted the not-entirely-true idea that a *permisionario* union, as opposed to an *ejido* union, was legally required to receive forestry services, feeding into communities' existing discontent with the UAF director. After leading this process, the sub-director/forester was named La Victoria's first executive director as a *permisionario* union, a position he continues to hold presently.

Despite this top-down orientation, grassroots collective action also had a role in the formation of La Victoria. An anti-timber concession movement in the 1970s had created a rallying point for inter-community collective action (including a short-lived *ejido* union) and emerging leaders: La Victoria's first president was one of the founders of that movement. After the end of the timber concession and the creation of the government forestry services in 1978, communities had 'started to get together and to realise that they could do more if they were united' (FA executive director, La Victoria, interview, 2007).

Today, La Victoria's forestry services, described as the best in Durango if not the country, include not only forest management plans but also a radio frequency, watch towers, fire brigades, and a nursery producing two million pine saplings per year for reforestation and sale. A unique trait is its member-run timber corporation governed by a share-based voting system (as opposed to one member one vote). These characteristics have significantly shaped structure and benefit distribution, and combined with some authoritarian tactics by the lead forester, have created a stable institution, with significantly positive ecological outcomes, though unequal social ones (García-López 2017).

Bottom-up FA responses to the neoliberal counter-revolution (1990s)

Context

Illustrating the recurrently contested political landscape in which FAs evolved, neoliberal reforms of market liberalisation,

privatisation, deregulation and social cutbacks, initiated under President de la Madrid (1982-88) and intensified under Salinas de Gortari (1988-94), challenged the multi-level arenas of community forestry. A 1992 constitutional reform to the agrarian structure ended land redistribution and allowed the privatisation of *ejido* lands on agricultural and household plots, but excepted forestlands. The new law allowed community members to form 'work groups' that could exploit and commercialise agricultural and forest resources separate from the traditional, collective governance structure of the *ejido* assembly, weakening community-level authority which was the conduit for interacting with FAs (Taylor 2001; Wilshusen 2005). The same year, a new forest law fully privatised forestry services, eliminating the regional UCODEFO concessions, and allowing communities to select their certified forester. Under market liberalisation, many *permisionario* unions dissolved. Presently, in Durango, only two of the 14 original *permisionario* unions remain in operation. Simultaneously, the reforms substantially reduced financial support for community forestry (Bray and Merino 2004; Klooster 2003). Finally, the 1994 North American Free Trade Agreement (NAFTA) and a similar 1998 agreement with Chile eliminated commercial tariffs for timber such that Mexican timber faced stiffer competition from plantation-style industries from those regions.

These reforms provided both constraints and opportunities for collective action to emerge. While one of the policy intentions was to weaken the state's authoritarian corporatism, political manoeuvring diffused this effect (Bofill Poch 2005; Hollander and Palmer-Rubin 2015; McDonald 2001). State resources were doled out to peasant organisations in exchange for support of the reforms (Bartra and Otero 2005). As the leader of La Victoria explained, the social development chief under Salinas was a strong supporter of peasant organisations, and their symbolic 'father' (interview, 2010). This support arguably cushioned negative impacts of the new policies on FAs, but also served to sustain the corporatist regime.

Nevertheless, peasant and forestry organisations' mobilised during the Zedillo presidency (1994-2000) and achieved an institutional reform, including a new forest law and two flagship programs PRODEFOR and PROCYMAF (1997-2008), which for the first time in a decade provided support for community forestry with the specific aim of strengthening collective action (Segura-Warnholtz 2014). A portion of the budget supported regional forums that led to the creation of inter-community alliances, multi-stakeholder collaborations and increased capabilities for FAs (ibid).

Case study 3: Sierra Sur

'Sierra Sur', created in 1994, formed as a grassroots response to the disintegration of a *permisionario* union after the 1992 forest law. The *permisionario* union had been created in 1986 by the forester who had also directed forestry services under the previous government-led regime. Increasingly disliked because of his mismanagement of the forest and the organisation's resources, he took advantage of the 1992

law to dissolve the union and privatise its assets in his name. Seven of the 10 member communities left the (now private) organisation and created Sierra Sur for more decision-making authority, to ‘do the work [of forest management] themselves, so they could be the ones ordering the forester, and not the other way around’ (FA president, Sierra Sur, interview, 2010). Moreover, they sought more political power, aware that, in the context of weakened pro-peasant politics, ‘an *ejido* alone is not paid much attention to anymore’ (FA president, Sierra Sur, interview, 2010). In this objective, there was an important contextual factor: the weakening of the corporatist regime and the National Peasant Confederation (CNC) as the official venue for resource-channelling and representation, as well as its corrupt practices, motivated communities to form their own organisation separate from the local CNC chapter even while it remained allied to CNC. As such, Sierra Sur exemplifies how the 1990s’ reforms also spurred opportunities for new multi-level institutions and a new grassroots ‘thickening’ of civil society (Fox 1996; Wilshusen and Murguía 2003). In creating their new bottom-up organisation, member communities drew on their joint experience with another FA they had created in 1984, which in turn had motivated the creation of the 1986 *permisionario* union. Sierra Sur thus was built upon inter-community collective action that had been evolving historically due to different actors’ conflictive responses to changes in the political-economic context.

Reflecting its bottom-up origins, Sierra Sur took over the *permisionario* union’s forestry services and regional road-improvement activities for its members, investing in a motor grader and a tree nursery with support from federal, state and municipal governments. It also confronted illegal logging – a problem spurred by the 1992 forest law – with a regional committee to establish checkpoints along the main road, an idea other FAs adopted across the country (Bray and Merino 2004). Today it continues to successfully provide grassroots, community-directed forestry services (García-López 2013). The electrification of the region and the paving of its main road in 2010 are considered as two of the association’s highest achievements.

Sierra Sur’s case contrasts with that of El Salto, also considered a bottom-up FA. There, the 1990s reforms magnified internal governance problems. First, the freedom to choose technical forestry services under the 1992 Forest Law provided an exit to member communities which were discontent with the FA. Divisions especially opened up between small and large (and wealthier) communities. After a contentious election in 1992, larger communities formed their own union, though they later returned to El Salto. Second, in the previous regime, El Salto charged membership dues together with community forestry service fees through another, *permisionario* union that operated in the region. Communities thus had to pay their FA dues to obtain their timber extraction permits. The 1992 Forest Law prohibited this practice, facilitating communities’ non-payment of FA membership. These two problems were not present in Sierra Sur or La Victoria because their forestry services were integrated into the FA, which guaranteed these

associations a recurring income source. The work groups promoted under the 1992 Agrarian Law exacerbated financial problems for El Salto, as they made collecting membership dues even more difficult, since the community’s resources were now fractured between those groups. Finally, the Mexican peso crash in 1994 greatly increased loan interest rates, leading to large debts, and, in El Salto, precipitating the loss of capital, such as its collective sawmill and processing equipment. Sierra Sur faced a similar problem, almost but not quite losing its first motor grader.

In La Victoria, the Forest Law’s elimination of regional concessions led to a loss of some members to smaller, less expensive forestry services that catered to the specific needs of particular communities. However, while in other parts of the country this caused the dissolution of FAs (Antinori and García-López 2008; Bray and Merino 2004), La Victoria has been able to maintain its stability and financial strength.

Top-down FAs under ‘decentralised authoritarianism’ (2000s-present)

Context

The election of Vicente Fox (2000-2006) from the conservative PAN party represented the end of 70 years of uninterrupted PRI rule, and, to many, authoritarian corporatism. However, political changes have since been slow, uneven and contradictory (Durand Ponte 2009) — a ‘decentralised authoritarianism’ (Doane 2014). At the beginning of this century, Mexico faced substantial problems related to continued deforestation and declining timber production, while community agriculture and forestry faced increasing difficulties under market liberalisation.

In this context, social mobilisation again challenged state policies. A coalition of peasant and forestry organisations⁷ in 2003 demanded increased state support for rural communities and inter-community associations and a reversal of neoliberal policies (Bartra and Otero 2005; Shapiro-Garza 2013). A direct outcome was the 2004 program *Programa de Ordenamiento y Fortalecimiento de la Autogestión Silvícola* (PROFAS), meant to support FAs (Merino et al. 2008). Yet, PROFAS funded mostly new associations instead of existing associations (Merino et al. 2008), arguably, to marginalise existing *ejido* unions, historically associated to PRI, and build a new corporatist structure that rivaled the CNC (various interviews, 2010). New FAs under PROFAS were required to adopt a specific legal structure (regional association of forest-users, ARS), with a bylaw, provided by the government, which enumerated the list of activities, mostly focused on technical forestry activities. ARS had to include small private landowners; hence, *ejido* unions such as El Salto and Sierra Sur were not recognised as PROFAS-eligible associations. By 2007, the national forestry agency (CONAFOR) declared it would fund only one ‘official’ association per forest administrative region (UMAFORs)⁸, recalling the UCODEFO model of the 1986 law. Other FAs within a UMAFOR were labelled ‘local’ associations and

excluded from funding and decision-making bodies (Merino et al. 2008; various interviews, 2010). Our 2007 survey data confirm this trend of super-imposed hierarchy. Sample communities self-identified almost all post-2002 associations as top-down and focusing on technical forestry services, environmental protection and tree cultivation as opposed to marketing, production, and political representation, a focus of the older FAs (Antinori and García-López 2008).

Durango was chosen as a pilot area to implement PROFAS. Many new associations emerged, some completely new and others existing associations with changed names and structure. Foresters again had a key role, strongly promoting and oftentimes directly creating associations based on the communities they serviced (various interviews, 2010). In the majority of cases, these were the same foresters who had controlled *permisionario* unions after the 1986 law. Many people referred to various new associations as ‘x forester’s association’, while CONAFOR officials, who had heavily promoted the ARS, argued that ‘they’ had created the associations (various interviews, 2010). As in other parts of the country (Merino et al. 2008), most of these associations dissolved quickly (various interviews, 2010).

Case Study 4: Region Norte

Region Norte, created in 2003, was the first of these ARS associations in Mexico, forming before the PROFAS program, without CONAFOR support. The leading figure in this process was the forestry director of the region’s still-existing *permisionario* union (formed after the 1986 law), who drafted bylaws and mobilised his association’s communities to join as a means to pool resources to improve the region’s roads and the infrastructure to combat forest fires which were major problems at the time. In an emerging pattern, the technical forester was able to manipulate the institutional gap between state and local to personal advantage in shaping FAs. As with the creation of La Victoria under the 1986 Forest Law, the forester argued that the 2003 Forest Law gave a mandate to create such associations. Some community representatives concurred, saying that they joined because of an ‘imposition’ and a ‘requirement’ to obtain government funds. Other communities, however, saw Region Norte as a continuation of their collective (though forester-directed) work in the *permisionario* union and in a previous *ejido* union created in the 1990s in an attempt to regulate timber prices and develop a regional enterprise.

In 2006, the right-hand man of Region Norte’s founding forester obtained PROFAS funds to form a new forestry services association, taking with him almost half of Region Norte’s membership and creating a difficult financial situation for Region Norte and its forester. The personal *compadrazgo* relationship of this other forester with a key official in CONAFOR helped secure funds. However, Region Norte has weathered this impact and continues to focus on resource channelling from CONAFOR programs, while the other association has disappeared. More recently, Region Norte has also confronted a change in internal governance. There was

consensus that at least the first two directive boards, while elected by communities, responded directly to the founding forester, who in the organisation’s bylaws was an ‘advisor’. In response to this lack of community control, the new FA president shifted control away from the forester by a change in leadership, as had occurred in Sierra Sur in the 1990s.

Meanwhile, the El Salto, La Victoria and Sierra Sur associations engaged—to the extent they could—in diverse forms of ‘creative accommodations’ to the PROFAS program, driven primarily by the need to avoid losing government funds given the program’s restrictions. El Salto decided, after strong internal debates and divisions and government threats to exclude them and their communities from all forestry programs, to adopt the structure of the new state-sanctioned ARS. This required including private landowners, a controversial move in what had been a traditionally *ejido*-based union. It also facilitated an increased influence by the region’s main forester. As observed also in Sierra Sur and Region Norte, these changes have generated strong resentment among many members, who continually talk about reactivating their *ejido* unions when PRI returns to the presidency.

In Sierra Sur’s region, PROFAS financed a new ARS association led by the region’s main timber corporation and other private landowners. After being threatened, as El Salto, with loss of funds, Sierra Sur members joined the new association, a strategic but somewhat forced adaptation. As explained by Sierra Sur’s president, ‘we dance to the tune we are played’ (interview, 2010). This integration into the new association was indeed crucial to assure Sierra Sur’s communities of continued representation in the new political landscape. For its part, La Victoria did not have to make any changes to its organisational structure because it already incorporated both *ejidos* and private landowners.

These FA forms of multi-level governance are situated vis-a-vis two important political-economic changes. First, the waning political power of *ejido* unions, related to the shift towards a more pro-business governance that sees communities and their unions as obstacles to modernisation (Rodríguez Araujo, 2009). Second, the continued weakening of community forestry in the context of market liberalisation, conservation policies which discourage timber exploitation, and tepid government support. Today, the vast majority of CONAFOR funds go to payment for environmental services, reforestation and restoration, and commercial plantations, while community forestry receives little support and faces regulations which impose high costs and procedural difficulties for communities (Zúñiga and Deschamps 2013). Policies have been marked by a view of social property as an impediment to conservation (Doane 2014) and to productivity (Zúñiga and Deschamps 2013). Forest governance outcomes are framed as determined by ‘entrepreneurship’ and ‘efficiency’, rather than land reform, grassroots struggles and government support. Furthermore, increasing timber imports (the trade deficit in timber has doubled in the last decade) and illegal logging have led to declining or stagnated timber prices, while operational costs have increased substantially. These

conditions produce an uncertain future for FAs. In all four FAs, price lists are non-existent, many member communities have sold their sawmills, and new ecotourism ventures have faltered under drug-related insecurity. These problems have affected communities' ability to pay membership dues and invest in large regional projects, an issue recurrently lamented in all four of the associations studied. The leader of Region Norte lamented that 'nothing has improved and the little that has changed has been for the worst', and, despite electoral changes, there are no signs of any proactive actions to alter this (FA president, Region Norte, interview, 2017).

DISCUSSION

Understanding the emergence and functioning of multi-level collective action as a 'process' remains an important task for addressing today's pressing forest governance challenges. The historical process-tracing of four FAs in Durango provides insights into the myriad grassroots and top-down forces creating them. Rather than purely self-organised or entirely state-led, the multi-level forest commons discussed here have emerged out of hybrid and evolving combinations, structural conditions and creative collective agency, merging conflict and cooperation (see Table 1). Grassroots FAs, such as El Salto and Sierra Sur, drew on the anti-concession movement and previous FAs, as well as government initiatives such as the forest administration units and forester-controlled *permisionario* unions. Meanwhile, grassroots initiatives accompanied or preceded top-down organisations, such as La Victoria and Region Norte. This combination of forces generates an 'institutional bricolage' (Cleaver and De Koning 2015), which goes beyond dominant accounts of collective action and institution-building in the commons focused almost exclusively on local-level characteristics. Simultaneously, contradictions and fractures within the state, combined state roll-back and roll-out/expansion of reforms, technocratic meritocracy and persistent clientelism (Haenn et al. 2014), suggest that the effects of political-economic changes are never universal or uniform. Rather, multi-level forest governance is somewhat 'incoherent and unstable', inherently contested, and continually changing (Wollenberg et al. 2006; Poteete and Ribot 2011). To paraphrase Haenn et al. (2014), it operates in a constant flux between grassroots, state and market.

Our historicising shows that in all four cases, FAs were indeed grassroots collective actions to meet community needs that could not be addressed by each community on its own, beginning with the desire to end timber concessions to improve local livelihoods, followed by attempts to strengthen community timber processing and commercialisation (in El Salto), reduce technical forestry services costs and improve road infrastructure (in La Victoria and Sierra Sur), and, lastly, improve regional responses to resource management challenges of illegal logging, fires and reforestation (in La Victoria, Sierra Sur and Region Norte).

However, our analysis suggests that political dynamics between state, communities and non-state actors also influenced

FAs' form and function. First, social movements served as a basis for FAs' emergence and for creating a more favourable political-economic context. Without the Mexican Revolution, Mexican community forestry (and multi-level institutions) would not exist to the extent it does today. The 1960s struggles for land reform and democracy provided the impetus, and, as in El Salto, strategies for the 1960s-1980s' anti-concession movements. These forest movements were in turn directly responsible for the emergence of the first FA in Mexico, as in El Salto, and indirectly, as historical precedents, in the case of La Victoria. FAs originating from social movements were central to the initial development of community forestry in Mexico, obtaining land grants and providing much-needed political, economic, technical and informational resources, fostering more favourable government policies, and ultimately democratising governance. Other movements in the 1990s and 2000s changed forest and agrarian policies and influenced the case study FAs to different degrees. The importance of these movements focused on rights, justice and autonomy, for multi-level commons institutions coincide with observations from other countries by critical commons scholars (Cronkleton and Taylor 2012; Kaswhan 2015; Schoeltens 2016) and contrast with institutional analyses which highlight the state-led origins of Mexican community forestry (e.g. Bray 2013b) and those which focus on multi-level governance as solving technical resource management problems (e.g. Heikkila et al. 2011).

Secondly, the analysis shows the state's direct influence on local and multi-level commons institutions, not only supportive (Anthony and Campbell 2011, Bray 2013b) but also disruptive (Gatto and Bogataj 2015), with FAs as channel of influence. Government policies and political calculations in different periods played a key role in the creation of new FAs and the modification of existing ones. Pro-peasant policies and a progressive bureaucracy in the 1970s gave strong support for FAs to foster social capital, leadership and political voice to give birth to grassroots organisations (Bray and Merino 2004). As Bray (2013b) noted, community forestry required more than state recognition of 'rights to self-organize', which has been the main focus of commons scholars. It also requires strong state support. At the same time, our research confirms observations of an erratic policy that in recent decades, under the rubric of neoliberalism, has become much less facilitating for community forestry. In the time periods reviewed, administrations promoted different types of FAs, often interfering with existing self-organised efforts. Furthermore, state policies reflected not only conservation and economic development agendas, but also political objectives of corporatist actors. Boyer (2015)'s historical account claims no real will for environmental sustainability in Mexican policy, which served rather to rationalise greater state-level control over people and resources. Government support in the initial anti-concession period simultaneously sought to quell peasant unrest, regain their support and loyalty (e.g. integrating them into the CNC), marginalise non-loyal organisations, and guarantee continued timber supply to national industries. Similarly, neoliberal reforms democratised community

governance but weakened communal production to give way to individual privatisation. Ditto the 2004 PROFAS program which despite arising from a peasant movement, was seen by FAs as an ‘imposition’ to build a corporatist structure for the new ruling party. These findings suggest the need for further research on ambiguous effects of state support on commons governance, such as FAs becoming ‘trampolines’ for political careers (García-López 2017).

Third, historical process-tracing reveals that emergence and evolution of multi-level collective-action institutions are creative responses to adapt and survive changing cross-scalar conditions — ‘dancing to the tune they are played’— while attempting to meet members’ livelihood needs and institutional imperatives of forest management (Bray et al. 2012; Taylor Zabin 2001, Taylor 2012). Not just in a longstanding culture of accommodation, this response is an imposed necessity to survive external and internal challenges. Moreover, the outcomes are unclear. Over time, we observe a progressive weakening of communities’ power and worsening conditions for community forestry and rural livelihoods. Polycentric governance of commons is critical, but in Mexico it remains unstable, with contestations over the scale and function of FAs and the role of the government.

Fourth, the analysis shows that ‘non-community’ actors can significantly shape the emergence and evolution of FAs, a little-researched topic in the commons literature (Barsimantov 2010; Barnes and van Laerhoven 2015). Foresters played a central role in all four case studies, most prominently in the two ‘top-down’ FAs, La Victoria and Region Norte, which foresters directly organised, while timber corporations played an important though somewhat less visible role in La Victoria and Sierra Sur. Such involvement was not unproblematic. Foresters often used FAs for personal gain, an outcome associated with broader techno-bureaucratic regimes (García-López 2017; Chapela 1998). Indeed, the analysis coincides with Barsimantov’s (2010) findings of foresters constraining communities’ collective action, and underscores the challenges that techno-bureaucratic forest management can pose for community forestry (Nightingale and Ojha 2013).

Finally, we find that the multiple forces that shape FAs also influence these organisations’ internal decision-making and activities, thereby affecting commons management. Previously, we documented that top-down and bottom-up organisations have different goals and, therefore, services (Antinori and García-López 2008; García-López 2013). Here, we find these organisational differences to be in flux over time in response to changing political-economic forces, yet each organisation retains distinct foci depending on how, by whom and in which context they were created. The two top-down FAs (La Victoria and Region Norte) are more focused on forestry management and conservation, while the two bottom-up FAs (El Salto and Sierra Sur) are more oriented towards economic and political issues. Simultaneously, the diverse forces that shape these associations lead them to become, quoting Taylor (2012), ‘multi-purpose organizations’.

CONCLUSIONS

In this paper we have developed a historical political economy analysis of the emergence and evolution of multi-level forest governance in Mexico, through the cases of inter-community forest associations in Durango. The results underscore the need for more nuanced analyses of ‘self-organisation’ and more attention to political-economic structures in collective action studies. The analysis leads us to conclude that the problem of achieving sustainable and representative multi-level commons governance cannot be dissociated from problems of democratisation and achieving environmental goals. These research directions should help us better understand inter-community collective action, particularly in forest and agrarian contexts, which in turn would allow policy makers to design better policies to support it.

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NOTES

1. See Antinori and Rausser (2010) for a detailed description.
2. Bottom-up FAs are those where interviewees said were formed by communities while top-down FAs are those they indicated were formed by government and/or foresters (Antinori and García-López 2008, Antinori and Rausser 2010).
3. Complete details on methodology are found in García-López (2012).
4. See García-López (2012), Chapter 2 for a list of concessions identified throughout Mexico.
5. Other organisations also followed the producer-cooperative model and established inter-community sawmills, though as in El Salto, most did not last long (Antinori and García-López 2008; Bray and Merino 2004).
6. *Union de Conservacion y Desarrollo Forestal*.
7. *El Campo No Aguanta Mas*.
8. *Unidad de Manejo Forestal Regional*.

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