# THE IMPACT OF MEXICO'S LAND REFORM ON PERIURBAN HOUSING PRODUCTION: Neoliberal or Neocorporatist?

ANN VARLEY AND CLARA SALAZAR

## Abstract

Changes to Mexico's Constitution in the 1990s marked the end of agrarian reform and the Revolutionary land regime which had allowed beneficiaries to work but not to sell their land. New legislation allowed individual parcels of ejido land to be converted into private property. Many observers link this 'privatization' with a transformation of the periurban landscape resulting from private developers' construction of mass 'social housing' developments: a classic example of neoliberal urbanism. We examine evidence for the Mexico City Metropolitan Area, finding that, although some developments do occupy former ejido land, developers mostly prefer private property. including former haciendas. Private sector interests are wary of the eiido for reasons that stem from its place in the corporatist political system that characterized twentieth-century Mexico, and the patchwork of privatized individual parcels clashes with developers' land acquisition strategies. Ejidatarios often prefer to retain control over their land, selling plots piecemeal. Our findings demonstrate the continuing significance of urban informality—on a scale that exceeds the development of ejido land for formal housing—and the intertwining of formal and informal. We interpret these interrelated processes of housing production as legacies of corporatism, underlining the significance of political influences on Latin American neoliberalism.

## Introduction

In the early 1990s a major change to Mexico's Revolutionary land regime was announced. The agrarian reform initiated during the Revolution and written into Article 27 of the country's 1917 Constitution was to be dismantled in a set of legislative changes collectively known as 'the reforms to Article 27'. A new Agrarian Law (1992) enabled *ejido* communities (those receiving inalienable land grants in the country's agrarian reform) to remove land from the tenure regime which had allowed them to inherit and work but not to sell, mortgage or let it. By adopting 'full dominion' over their own parcels, *ejidatarios* (named rights-holders in an *ejido*) could convert them into individual private property. As Mexico's agrarian communities—some 29,700 ejidos and 2,300 *comunidades*, many of them indigenous—owned over half the national territory, these changes had the potential to produce dramatic changes in the country's urban development (Jones and Ward, 1998; RAN, 2019).<sup>1</sup>

For some observers, that potential became a reality. They connect the reform of Article 27—the 'privatization' of the ejido<sup>2</sup>—with a remarkable transformation of

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<sup>1</sup> We consider only *ejidos*, as communities cannot alienate property. The backlog of petitions for land was such that ejidos and communities are still being created, even in the Mexico City Metropolitan Area.

<sup>2</sup> Despite official rhetoric about 'social property', ejidos are the private property of an agrarian community (Azuela, 1989). The 1992 reforms are more accurately described as allowing formal 'individualization' of ejido property, but we use 'privatization' to acknowledge the widespread use of this term and the link to broader debates.

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Mexico's periurban landscape. This striking change saw sprawling, architecturally homogeneous developments of small one- or two-storey houses appear around and well beyond the edge of the country's cities (Eibenschutz and Goya, 2009). Growth in the built-up area of the major cities has far outstripped their demographic growth in recent decades (SEDESOL, 2012). The instantly recognizable 'social housing' projects driving this expansion are built by private developers and financed through mortgages issued to lower-income purchasers by one of the country's provident funds, especially INFONAVIT, the National Workers' Housing Fund Institute, to which employers make contributions amounting to 5% of formal workers' salaries.<sup>3</sup> They represent a radical departure from the existing model of housing production, which, for the poor, mostly involved self-help construction on illegally purchased land.

When processes such as the 1992 reforms and the radical changes to Mexico's periurban landscape coincide, it is tempting to attribute one to the other: developers' demand for cheap peripheral land *must* have been met by the sale of privatized ejido holdings. Many commentators assert that indeed it was—a textbook example of neoliberal urbanism (Sánchez, 2012; Olivera, 2015b; Boudreau *et al.*, 2016; Pradilla, 2016; Chávez, 2018; Salinas and Prado, 2018; Merchand, 2019; Villaseñor *et al.*, 2019). The urbanization of ejido property has been described as a product of accumulation by dispossession and a *necessary* condition for the new housing model (Salinas, 2009: 25–6; Bojórquez and Ángeles, 2014).

No evidence is generally provided to support these assertions. Authors rarely cite the literature that does record specific instances of new housing developments on ejido land (e.g. Maya, 2004, on the Mexico City Metropolitan Area; Alcántara, 2007, on Colima; Núñez, 2011, on Jalisco; Bojórquez and Ángeles, 2014, on Baja California Sur; Olivera, 2015a, on Morelos; Villaseñor *et al.*, 2019, on Michoacán). To address this omission, we examine the evidence for the Mexico City Metropolitan Area. Our findings reveal that, although some projects occupy former ejido land, developers have mostly targeted private property. Indeed, in some cases housing occupies the remains of an old hacienda that have been left undeveloped, although they are surrounded by ejido land that was taken from the hacienda after the Revolution. We consider why these twenty-first-century housing developments can, in some senses, be called heirs of the hacienda. Our findings shed light on broader debates about neoliberal urbanism and, in particular, the impact of neoliberalization—understood as 'a politically guided intensification of market rule and commodification' (Brenner *et al.*, 2010: 184)—on the relationship between formal modes of production of urban space.

Empirically, we first review the response to opportunities for the urbanization of ejido land presented by the 1992 Agrarian Law. In so doing, we update valuable earlier studies (Jones and Ward, 1998; Procuraduría Agraria, 1999; Cruz, 2001; Maya, 2004). Most of these made no mention of the new housing developments; but, two decades later, it is an apt moment to reassess the reform's impact on urban development. To do so, we created two databases. First, we built a database for all ejidos in the Metropolitan Area of Mexico City [strictly, the Valley of Mexico], with data from PHINA, the Padrón e Historial de Núcleos Agrarios [Census and Record of Agrarian Communities]. PHINA is maintained by the Registro Agrario Nacional [National Agrarian Register, RAN] and catalogues changes to the holdings of each community. It records the area in different categories, including individual parcels, common-use areas and urban zones, mapped in the accompanying Geospatial Information System [RAN-SIG] over base layers from Google Maps.<sup>4</sup> We examined Google satellite imagery to identify the type of development taking place.

<sup>3 &#</sup>x27;Social (interest) housing' costs at most 118 times the monthly minimum salary. Repayments cannot exceed 30% of household income (Janoschka and Salinas, 2017).

<sup>4</sup> RAN-SIG still maps privatized parcels within the ejido boundaries. When distinguishing private from ejido property, we refer to land that has *never* belonged to an ejido.

A second database compiles information from the *Gaceta del Gobierno del Estado de México* [State of Mexico Government Gazette] on all housing projects authorized in the 59 municipalities of the State which, together with 16 in Ciudad de México/CDMX (the former Federal District) and one (Tizayuca) from the State of Hidalgo, constitute the Metropolitan Area (see inset, Figure 1).<sup>5</sup> Entries include all developments dedicated wholly or partially to housing and defined as *conjuntos urbanos* according to the State's 1993 Law of Human Settlements. Including higher-income developments, 401 *conjunto* authorizations had been issued to the end of February 2018. We identified the location of all but two, allowing comparison with RAN-SIG maps. This innovative method enables us to compare the contributions of private and ejido property to Mexico's new housing developments.

Finally, we also draw on an analysis of RAN-SIG ejido landholding categories mapped onto urban enumeration districts (AGEBs) in what we could call the 'periurban fringe' of the Metropolitan Area (the State of Mexico municipalities and Tizayuca).<sup>6</sup>

## Neoliberalism and (in)formality

Scholarship on the restructuring of periurban Mexico has adopted different approaches to understanding neoliberalism. Ethnographic accounts take up the Foucauldian emphasis on governmentality identified by Larner (2003) as one such approach, asking how the new housing model produces subjects as well as spaces (e.g. Inclán, 2013; López, 2016). Those focusing on land and finance take a political economy or (neo)Marxist approach (e.g. Soederberg, 2015; Reyes, 2020).

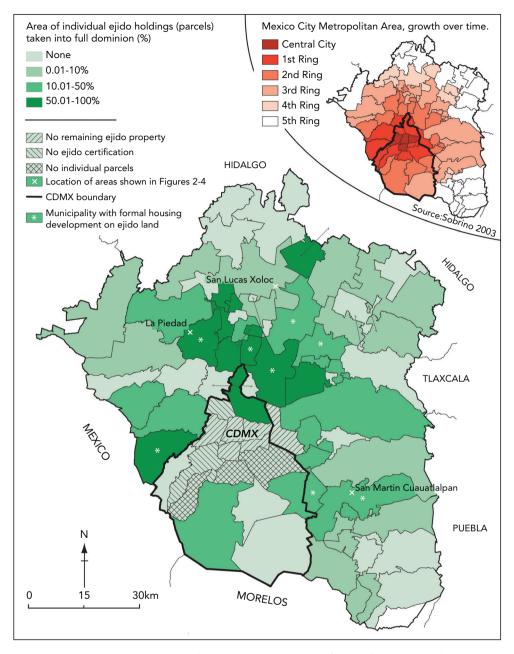
One recent article endorses both neo-Marxist and governmentality approaches, without depicting the latter as the local, poststructural, analytic counterpart to global, structural explanations (Boudreau *et al.*, 2016). The authors also reject the notion of a thorough break with the past, emphasizing the partial nature of change. 'Crisis-driven and continuity-driven explanations' are not related in a linear fashion, the former succeeding the latter, since changes can be reversed (*ibid.*: 2388). Overall, 'persistent practices over time' are highlighted (*ibid.*).

The emphasis on continuity draws on Patricia Martin's (2007: 52–4) criticisms of 'economistic' analyses equating Latin American neoliberalism with the demise of import substitution industrialization (ISI) after the 1982 debt crisis. Such accounts 'cede ... explanatory power to mechanistic workings of the global economy' and overlook how authoritarianism 'provid[ed] a political bridge between ISI and neoliberal economic policies and practices' (*ibid.*: 52, 55). It was, rather, the Pinochet era in Chile that marked the defining moment in the region's neoliberalization. Pinochet's housing policies were the precursor of demand-driven approaches such as those now dominating Mexican housing policy and increasingly depicted as the *only* effective way of dealing with housing shortages in the global South (Soederberg, 2015; Rolnik, 2019).

The call by Boudreau *et al.* (2016) to attend to continuity acknowledges the importance of 'walking a line' between 'overgeneralized accounts of a monolithic and omnipresent neoliberalism' and a readiness to take external drivers too lightly (as discussed by Peck and Tickell, 2002: 382). Even where neoliberalization is understood as a matter of degree, it can still be deemed 'the sole paradigm and trend of macro-change ... able to modify regulatory systems' (Pinson and Morel, 2016: 145). Allusion to paradoxes or hybridity runs the same risk: neoliberalization powers through in the end (*ibid.*: 146). To foreground context, on the other hand, can privilege 'excessively concrete and contingent' specificities at the cost of engaging with connections to elsewhere (Peck and Tickell, 2002: 382; Perreault and Martin, 2005).

<sup>5</sup> Housing development in CDMX has followed a different pattern.

<sup>6</sup> Analysis by Tania Guerrero Ríos (UCL). For a definition of urban enumeration districts, see INEGI (n/d).



**FIGURE 1** Mexico City Metropolitan Area: conversion of individual ejido holdings to full private property (*sources*: authors' calculations, with data from Padrón e Historial de Núcleos Agrarios, Registro Agrario Nacional [to end February 2018]; inset: Sobrino, 2003; map produced by Miles Irving, UCL Geography)

It is also easy to overemphasize change *or* continuity. We suggest that most accounts of the 1992 reforms and the restructuring of housing provision in Mexico are fixated on change, in their post-hoc assumption that the former enabled the latter. It reflects the idea that neoliberal urbanism entails a shift from informal to formal. The association of formalization with neoliberal governance is epitomized by Hernando

de Soto's claim that bringing informal housing into the property market releases 'dead capital' as titles can be used to secure loans (de Soto, 2000). De Soto explicitly presents formalization as enabling the 'Third World' to emulate the capitalist successes of 'the West'. Contesting such essentialization, formal and informal can be better understood as ambiguous, mutually implicated processes, with global relevance (Varley, 2002; 2013; Boudreau and Davis, 2017; Koster and Smart, 2019; Müller, 2019). That said, the 'significance of informality in cities of the Global South is not under debate' (Boudreau and Davis, 2017: 155). We use 'formal' and 'informal' to refer to landscapes resulting from processes that can be summarized as 'obtain planning permission; subdivide land; obtain building licence; put in services; build dwelling – sell or rent – occupy' or as 'occupy first and all the rest later', respectively (Connolly, 2020: 125). We make no assumptions about how far 'formal' production *complies* with planning regulations.

# From corporatism to neoliberalism

One potential reason for jumping to conclusions about the impact of neoliberalism is limited historical understanding. In this section we therefore provide a brief overview of housing production for lower-income groups in urban Mexico.

Changing modes of production and the role of financialization

Perhaps the most remarkable feature of Mexico's new social housing is simply its existence, with scale a close second. Government projects never came near to meeting demand in the twentieth century, leaving renting or self-help construction the only options for most people. The change is extraordinary. INFONAVIT, the largest lender, issued well over eight million mortgages from 1995 to 2018, mostly for the purchase of newly built homes: 'something which, twenty years ago, was unthinkable' (Giglia, 2012: 119; translations ours).<sup>7</sup> The arrival of the twenty-first century saw the number of new houses built as complete units with services exceed the number produced incrementally (Monkkonen, 2011).

Self-help does not mean 'beyond the state'. Informal housing has made significant contributions to the economy (reducing labour costs) and political system (Gilbert and Ward, 1985). The clearest evidence of its political role is the institutionalized nature of informal settlement on ejido land resulting from Mexico's corporatist political system (Azuela, 1989). 'Peasant' organizations constituted one of three sectors of the Institutional Revolutionary Party which ruled Mexico for seven decades until 2000. Ejidatarios have therefore been able to sell land illegally with impunity, offering purchasers, collectively, de facto security of tenure. Systematic 'regularization' of housing on ejido land became federal policy in 1973. Titling buttressed Mexico's authoritarian regime by helping to counter any political threat from informal settlements by undermining independent organizations and redirecting demand-making along clientelist channels (Varley, 1985). Almost 150,000 hectares of ejido land had been expropriated for regularization by the end of 2018.<sup>8</sup>

Corporatism also permeated social housing production. INFONAVIT and agencies for public-sector employees granted mortgages to members of PRI-affiliated unions for homes built by companies associated with those unions, and loan recovery was not prioritized (Connolly, 1998). In the early 1990s, however, their activities were restricted to providing mortgages and facilitating development by private-sector enterprises. These reforms are often interpreted as a turning-point in housing policy: neoliberalism unseating corporatism in a 'commodification of urbanization' (Pírez, 2014: 481). Mexican technocrats supported the market-led approach, but external pressure promoting the North American Free Trade Agreement (NAFTA) also contributed

<sup>7</sup> Data from Salinas (2016: 223) plus, for 2015 to 2018, BBVA (2020: 44).

<sup>8</sup> Figure calculated from a database maintained by Ann Varley.

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(Soederberg, 2015). In 2001, one of the World Bank's largest loans to Mexico was used to create the Sociedad Hipotecaria Federal [Federal Mortgage Company], tasked with establishing a secondary mortgage market and stimulating private investment (Boils, 2004). From 2003, with the SHF providing financial guarantees and absorbing risk, Mexico became the largest issuer of mortgage-backed securities in Latin America, attracting equity and pension funds (Soederberg, 2015: 494–6).

The characterization of Mexico's housing finance system as 'neoliberal', however, requires qualification. INFONAVIT is still the largest lender—the third largest in the world (Reyes, 2020)—and the rest of the market 'is either directly or indirectly run by the government' (Monkkonen, 2011: 681). NAFTA led to the creation of non-bank lenders extending credit for construction and securitizing mortgages, but by 2013 they had collapsed, leaving INFONAVIT the largest issuer of mortgage-backed securities (Soederberg, 2015; Reyes, 2020). Although the reforms were 'neoliberal in ideology', then, INFONAVIT remains a 'command and control system'.<sup>9</sup> Its dominance has had negative consequences for Mexico's new social housing—poor quality, abandonment—as developer incentives have trumped demand (Monkkonen, 2011; 2019; Reyes, 2020).

## The land reform: neoliberalism or neocorporatism?

Given the ejido's status as an emblem of the Mexican Revolution and key to the rural population's place in the corporatist system that subsequently emerged, it is hardly surprising that the Article 27 reforms provoked strong reactions. Assuming that land would be transferred to private ownership on a massive scale, one commentator called it 'the neoliberal destruction of the ejido' (Calva, 1993: 47). Twenty-five years later, however, only 19.8% of ejidos had decided in principle to endorse full dominion, and only 4.3% of their holdings (by area) had been taken into it.<sup>10</sup>

The reforms were shaped by divisions between *campesinistas* wanting to liberate ejidatarios from the worst excesses of state intervention and technocrats hoping to recapitalize the sector and increase productivity by attracting private investment. Although the technocrats promoted market-friendly institutions, the result was a compromise (Cornelius and Myhre, 1998). Reading the reforms from an economistic perspective overlooks the extent to which, rather than seeking to dispense with the ejido, they renewed political control in a neocorporatist move (Jones, 1996). Employing a language of freedom and justice they nonetheless created new government agencies with new ways of intervening in the ejido, and 'allow[ed] the State to circumscribe the autonomy of the *ejido* by a host of rules and regulations which permit intervention' (*ibid.*: 194).

The most salient of those regulations concern privatization via adoption of *dominio pleno*. Only individual parcels—approximately one-third of ejido holdings—are eligible. To endorse full dominion requires a special ejido meeting, with stringent quorum and voting requirements. Individual ejidatarios may then request full dominion over their parcels. If they wish to sell, however, relatives, those who have worked the land, other community members, and the community itself have the right of first refusal, with a formal valuation required. Another meeting approves individual changes of ownership. By late 2017, only 11.6% of the area held as individual parcels had been taken into full dominion.<sup>11</sup>

Dependent on community approval and subject to first-refusal requirements, ejidatarios do not enjoy the same rights as other property owners. Their individual *entitlements* are still effectively limited to usufruct (Méndez, 2016: 196).

- 9 We cite directly one reviewer's insightful observations.
- 10 Authors' calculations from official data (RAN, 2017). Information to 2 August 2017 (most recent data available).
- 11 Source: see note 10.

The Article 27 reforms did not produce massive privatization or recapitalization of the countryside; nor did they counter rural poverty (*ibid*.). Enabling ejidatarios to dispose of their property legally 'essentially ratified a long-standing status quo' (Cornelius and Myhre, 1998: 1). The land reform was neither as neoliberal nor as radical as had been assumed (Jones, 1996). It was certainly not a housing policy: the urban implications were only considered later (Jones and Ward, 1998; Cruz, 2001; Hernández, 2010; *cf*. Boudreau *et al.*, 2016; Salinas, 2016). If there is a link between land privatization and the new housing model, it is not one that was heralded—as it easily could have been—by its advocates.

## The impact of the 1992 reforms on the Mexico City Metropolitan Area

To understand how the 1992 reforms could have made ejido land available for social housing developments, we examine the response to opportunities presented by the new legislation. Although ejidatarios can now alienate their land, further informal development is still a possibility if planning regulations are not observed. In the past, the government has often used expropriation to provide title for residents who purchased land illegally from the ejido and, until the mid-1980s, expropriation was also used for urban projects including university campuses, industrial zones and housing (Varley, 1985). Since then, it has been used far less, partly because of ejidatario opposition, and has not been used for new housing in the Mexico City Metropolitan Area (Azuela and Saavedra, 2017). It is not therefore considered here.

Before any of the new options can be pursued, the community must agree the area, boundaries and categories—individual parcels, common-use land or human settlements— of the land it owns, enabling certificates (only, at this stage) to be issued to rights-holders. As of early 2018, 87% of 377 surviving ejidos in the Mexico City Metropolitan Area had taken up certification (or, excluding CDMX, 92% of 337 surviving ejidos).<sup>12</sup>

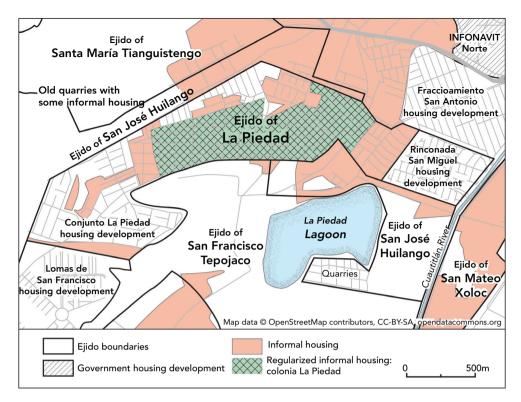
# Joint-venture development companies

If any of the new legal procedures had been intended to promote housing development, it would have been the formation of joint ventures between ejidos (providing land) and developers (providing capital) in a *sociedad mercantil inmobiliaria* [property development company]. When the urban implications of reform were eventually considered, this was the favoured option of both agrarian and urban ministries (Jones and Ward, 1998; Procuraduría Agraria, 1999).

If it worked, this could be an instance of external investment making the periurban ejido profitable, since ejidatarios are unlikely to have the resources needed to develop their land. By and large, it has not worked, at least not to ejidatarios' benefit.<sup>13</sup> In the Metropolitan Area, only a few *ejidos* have contributed common-use land, totalling under 750 hectares, to joint ventures. Between 1994 and 1999, the ejido of San Mateo Tlaltenango created four companies, with different investors, to develop upmarket housing and a golf club in Cuajimalpa (CDMX). In 1997, joint ventures in adjacent ejidos in Cuautitlán Izcalli catered for the other end of the market: Tepojaco and La Piedad worked with the same investor to provide land for 11,301 houses in Lomas de San Francisco (1999) and 2,849 in La Piedad (2001). An unusual feature of the La Piedad conjunto is that it occupies the periphery of the ejido, around a hub of informal settlement—now regularized—with formal and informal housing interspersed in places (see Figure 2).

<sup>12</sup> Authors' calculations, data from PHINA. Most ejidos that did not pursue certification had already lost/sold most of their land; some are in the mountains. Fifty-three ejidos, mostly in CDMX, no longer had any land to certify.

<sup>13</sup> A predecessor of joint ventures, entailing land swaps with developers, was deemed contrary to ejido interests and abandoned in 1971 (Varley, 1985).



**FIGURE 2** Formal and informal housing developments, Cuautitlán Izcalli, Mexico City Metropolitan Area (*source*: authors' analysis of maps from Sistema de Información Geoespacial, Registro Agrario Nacional [RAN-SIG: see text]; map produced by Miles Irving, UCL Geography)

Another 1997 joint venture was to provide industrial land in Texcoco, but the partners argued about the price and eventually a legal case was brought because the investor had refused to pay up (Maya, 2004). This is not the only example of legal conflict or of ejidatarios losing their land. As the land is valued at agricultural rates, the ejidatarios become minority shareholders (Jones and Pisa, 2000)—in the cases cited, with 10 to 48% of the shares (Aguado and Hernández, 1997; Maya, 2004; Salazar, 2014). These low valuations (the cost of which may itself be prohibitive), the unfair distribution of risk and long lead times have sometimes led ejidatarios-including those from Cuajimalpa-to sell their shares to the developer (Jones and Pisa, 2000; Patiño, 2009). Traditional suspicion of dealing with outsiders would be amply confirmed by such experiences, and fewer joint ventures have been created since the 1990s (Méndez, 2016: 85). Only one development company has been recorded more recently. In 2008, La Magdalena Chichicaspa, in the hills west of the city, set up a company to develop 300 hectares occupied in part by sand and gravel quarries. Eight years later, the land was advertised for residential development at US \$13.2 million-as it is close to Bosque Real, the most ambitious development in Mexico (see below) --but legal infighting between different groups of ejidatarios continues to block development.<sup>14</sup>

<sup>14</sup> Propiedades.com (2016) Terreno habitacional en venta: Magdalena Chichicaspa [WWW document]. URL: https:// propiedades.com/inmuebles/terreno-habitacional-en-venta-magdalena-chichicaspa-la-magdalena-chichicaspamexico-3354770 (accessed 18 September 2020: the page now carries a banner declaring that the land is *not* on the market).

### Urban zones

The 1993 Agrarian Law provided for housing development for ejido communities. Creating a new urban zone involves subdividing land and allocating plots to ejidatarios or people who have lived in the ejido for over a year. These plots can then become private property. Land can be set aside for future growth [*reserva de crecimiento*]. However, the law explicitly acknowledges that the urban zone might already be occupied and defines an ejido's 'human settlements' as the urban zone and *fundo legal* [original village]. 'Village'/township expansion is likely to have absorbed ejido land, reinforcing the idea of urban zones as already settled.

Almost half of the Metropolitan Area ejidos (179) have a certified urban zone, with 6,500 hectares subdivided internally, 2,120 hectares awaiting subdivision and 642 hectares reserved for future growth at the time of certification.<sup>15</sup> These distinctions do not appear meaningful on the ground. Some 'reserves' were already occupied (in La Piedad, the 'reserve' is the informal settlement: see Figure 2)—sometimes as densely as adjacent 'village' areas (as in Tlapala, Chalco: see Figure 3).<sup>16</sup> In San Martín Cuautlalpan (Chalco), 193 hectares of informal settlement designated as an internally subdivided urban zone were subsequently 'reserved for future growth' (see Figure 3). By contrast, one 'subdivided settlement' is an uninhabited area in the forested mountains of Santa María Mazatla (Jiltozingo), west of the city. Seemingly fictitious urban zones may anticipate real estate profits: for instance, reserves near expensive 'ranches' or country clubs (Concepción Jolalpan, Tepetlaoxtoc, and San Pablo Tecalco, Tecámac).

Most urban zone certifications have simply acknowledged existing settlements. These include colonial villages where (unusually) the ejido incorporated the *fundo legal*, as in Huexoculco (Chalco; see Figure 3) and cases where the settlement originally accommodated hacienda workers, as in Xala and Tetepantla in the north-eastern municipality of Axapusco. Most are extensions of an old village/township.

Not surprisingly, then, urban zones are often associated with further informal settlement. Self-built housing often spreads out from village-extension urban zones—around Zitlaltepec (Zumpango), San Martín de las Pirámides, or San Bernardino (Texcoco)—or from a separate informal settlement now designated an urban zone (e.g. Nueva Santa Rosa, from where housing has spread westwards within the same ejido, Santa Isabel Ixtapan, Atenco and northwards into Tequisitlán, Tezoyuca). In some cases, fragmented urban zones and other fragments of ejido land form a patchwork, all occupied by informal settlement of varying density, as in La Magdalena Panoaya (Texcoco), for instance.

In theory, plots in any subdivided zone can receive titles. Very few have received them. Those that have include the mysterious 'settlement' in the mountains of Santa María Mazatla and a few others in areas with tourist activity. Overall, the State of Mexico has seen a particularly low number of urban zone titles issued (Méndez, 2016).

The urban zone provisions have both legitimated and perpetuated informality. They follow a pattern set by similar provisions in earlier legislation, which played a key role in twentieth-century urbanization (Varley, 1985).

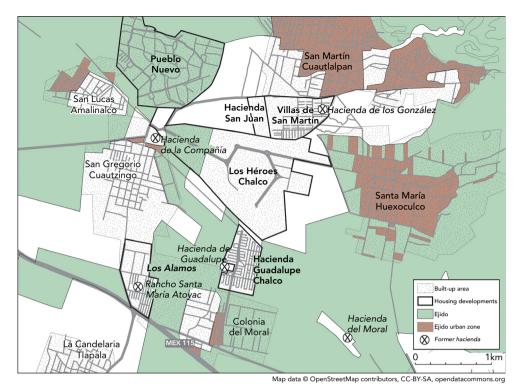
## Full dominion

Adoption of full dominion is the most innovative procedure. Take-up has been limited, but where demand for development land is higher, in periurban areas, it should be higher too (Salazar, 2009).

Table 1 analyses adoption of full dominion in the Mexico City Metropolitan Area, where 22,247 hectares had been privatized by early 2018. Only ejidos with individual

<sup>15</sup> Source: see note 12.

<sup>16</sup> Where two names are given-e.g. Tlapala, Chalco-the first is the ejido, the second, the municipality in which the 'village' is located. Where only one is given-e.g. San Martín de las Pirámides-it refers to both the ejido and the municipality.



**FIGURE 3** Formal housing developments, ejidos and former haciendas around San Martín Cuautlalpan, Chalco, Mexico City Metropolitan Area (*source*: authors' analysis of maps from Sistema de Información Geoespacial Registro Agrario Nacional [RAN-SIG: see text]; map produced by Miles Irving, UCL Geography)

holdings [*parcelas*] can transfer these parcels to private ownership, and not all ejidos have registered individual parcels on certification. However, they can also transfer common-use land to parcels later, and twenty have done so, adding to the area that can be privatized. The results shown in Table 1 and Figure 1 indicate a significant relationship between centrality and full dominion, suggesting that urban demand is indeed crucial.

There is a link, moreover, to urban zones. Of the 314 certified ejidos with individual parcels, 45% of those with an urban zone had adopted full dominion, but only 33% of those without one, and 15,240 hectares had been privatized in the former compared with only 7,007 hectares in the latter.<sup>17</sup>

Many privatized parcels—particularly but not exclusively near an urban zone—are being developed for low-income housing, in a continuation of the familiar process whereby ejidatarios sell their parcels piecemeal without following planning regulations. This can produce a distinctive topography, where individual parcels gradually become city blocks.<sup>18</sup> Further out, parcels are more likely to be occupied by a single house, perhaps belonging to the owner or a relative, before more plots are sold over time.

Tlapala provides a typical example (see Figure 3). Informal settlement spreads out from the village, especially beyond the urban zones (predating certification in 1995)

<sup>17</sup> The number of *ejidos* with or without an urban zone adopting full dominion is significant (chi-square 5.05, p=0.025). One hundred and seventy-three *ejidos* with parcels had an urban zone, as did six without parcels.

<sup>18</sup> Thousands of extremely long and narrow parcels on the former Texcoco lakebed, the result of ploughing with ox teams, are set to become city blocks (Hernández, 2010).

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TABLE 1

	Ejidos with individual	For all ejidos with ii	For all ejidos with individual parcels (N = 314*)		For ejidos that have endors	For ejidos that have endorsed full dominion (N = 124*)
Centrality	parcels as % of all certified ejidos (N = 329)	% endorsing full dominion	% endorsing full Area taken into full dominion % of area in parcels taken % of area in parcels taken Median % of area in parcels dominion (nearest hectare) into full dominion taken into full dominion	% of area in parcels taken into full dominion	% of area in parcels taken into full dominion	Median % of area in parcels taken into full dominion
City centre & 1 <sup>st</sup> ring (15)	55	55	1,282	47	59	63
2 <sup>nd</sup> ring (14)	87	67	7,511	45	53	61
3 <sup>rd</sup> ring (20)	100	47	7,971	17	35	49
4 <sup>th</sup> ring (9)	100	35	4,226	21	46	27
5 <sup>th</sup> ring (18)	66	18	1,258	2	7	9
(92) ALL (76)	95	40	22,247	14	33	46
NOTES: Data only for eiidos t	NOTES: Data only for eijdos taking up certification (329 of 377; see note 12).	(77: see note 12).				

Nortes: Data only for ejidos taking up certification (329 of 377; see note 12). Neudes Coacaly to faidos le Ecatepec, which had no parcels on certification but subsequently converted common-use land to parcels. Areas incorporate conversions from common use to parcels in these and eighteen other ejidos.

Centrality definitions from Sobrino (2003), on basis of municipal population size and growth, economic activities, location and functional integration (journey to work). Number of municipalities in parenthesis. Ejido property may cross municipal boundaries but for this analysis is assigned to the municipality where the fundo legal (see text) is officially located. Centrality and (a) number of ejidos adopting full dominion (b) percentage of parcelled land taken into full dominion in ejidos endorsing full dominion statistically significant (chi-square 38.5 and Kruskal-Wallis H 23.83; p = 0.01 in both cases).

sources: Authors' calculations, data from PHINA to end of February 2018 (see text)

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to the south and east. Housing is now strewn over most of the ejido, alongside cultivated parcels. Six per cent of the area in parcels has been privatized, and most is already at least partly occupied, suggesting that the intention was to sell, but *both* privatized and non-privatized parcels are being developed.

It is not, then, only privatized parcels that are being sold, nor only those near an urban zone. Housing is scattered across parcels in San Martín de las Pirámides and Zitlaltepec, both of which have an urban zone but no *privatized* parcels. Zapotlán (Atenco) has no urban zone, but three-fifths of the area in parcels has been privatized, and informal settlement occupies both privatized and other parcels. Nearby La Resurrección has neither urban zone nor privatized parcels, but housing is nonetheless appearing on the parcels. Overall, however, the combination of an urban zone, individual parcels and full dominion seems to typify ejidos currently undergoing informal development.

Mapping ejido contributions to urban enumeration districts in the Metropolitan Area outside CDMX shows that 58% of former agrarian property now incorporated into the built-up area in this periurban fringe was once parcels, but only 26% was certified urban zones.<sup>19</sup> If, for argument's sake, the urban zones are regarded as predating certification, and parcel development as post-certification, the area of informal settlement would have more than doubled since certification (from less than 7,200 to almost 15,800 hectares). However, that suggestion overlooks not only the possibility that not all precertification informal settlement was classified as urban zones, but also the extent to which privatization has supported *formal* development, the topic to which we now turn.<sup>20</sup>

## Ejido contributions to formal housing development

In this section we examine the location of the new housing developments in Mexico City's periurban fringe and seek to explain our finding that they are more likely to be found on private than on ejido land.

## Occupation of ejido land

Social housing has indeed been developed on ejido land in the Metropolitan Area since 1992, as have middle-class and even luxury developments. Authorizations have been issued for 3,425 hectares of ejido land and over 233,000 houses (see Table 2); 83% of the houses, occupying 73% of the land, are in the 'social' category, with higher densities than more upmarket developments.

In the late 1990s, authorizations started to appear for what has become 1,600 hectares of social housing projects in five ejidos in the north-east (Tecámac and Ecatepec municipalities). Construction of almost 130,000 units by some of Mexico's largest developers (SADASI, Urbi, ARA and GEO) has been authorized and development is still ongoing. Another 588 hectares of housing on ejido land has been authorized elsewhere in this sector (see 'starred' municipalities, Figure 1).

A smaller group of social housing projects can be found in five ejidos in Chalco: almost 15,000 houses on 222 hectares. Each ejido houses a single development (sometimes built in stages—for example, the three sections of Pueblo Nuevo developed by GEO on San Martín Cuautlalpan land; see Figure 3).

The north-west provides further examples, including two contrasting pairs of adjacent ejidos: the already decaying social housing developed as joint ventures on Tepojaco and La Piedad land (see above) and, further south, upmarket housing in San Bartolomé Coatepec and San Cristóbal Texcalucan (Huixquilucan), where the Bosque Real development offers its residents a welcome 'to the First World' (Müller and Segura, 2017: 158). Now occupying over 690 hectares of land from the two ejidos, Bosque

<sup>19</sup> The rest is in common use (7%) or not identified (10%). See note 6.

<sup>20</sup> Some land in the north-west has been developed as warehouse/distribution centres in industrial parks, e.g., in San Martín Obispo (Maya, 2004; David, 2012).

	Housing deve	Housing developments on ejido land	land	Housing deve	Housing developments on private land	ate land	All housing d	All housing developments	
	Social	Other	Total	Social	Other	Total	Social	Other	Total
Authorizations (N)	65	18	83	269	47	316	334	65	399
Houses	193,976	39,264	233,240	594,122	54,602	648,724	788,098	93,866	881,964
Area (hectares)	2,503	923	3,425	8,195	1,240	9,435	10,698	2,163	12,860
Authorizations (%)	16	5	21	67	12	79	84	16	100
Houses	22	5	26	67	6	74	89	11	100
Area	20	7	27	64	10	73	83	17	100
For AREA only:									
(a) Centrality									
1ª ring % (1,077 ha)	0	66	66	5	30	35	IJ	95	100
2 <sup>nd</sup> ring % (3,249 ha)	18	1	18	55	27	82	73	27	100
3 <sup>rd</sup> ring % (5,767 ha)	34	ε	37	62	1	63	96	4	100
4 <sup>th</sup> ring % (2,640 ha)	0	0	0	100	0	100	100	0	100
5 <sup>th</sup> ring % (127 ha)	0	0	0	100	0	100	100	0	100
(b) % of each housing type on ejido/private land	23	42		77	57		100	100	

Contribution of ejido and private land to housing developments in State of Mexico municipalities, Mexico City Metropolitan Area **TABLE 2** 

and 'other' housing are allocated to whichever category includes most houses. Percentages to nearest integer. Centrality: see Table 1. Some conjuntos are developed in stages. Where additional houses are subsequently authorized in an area covered (in outline) in an earlier authorization, only that first authorization is

counted. Authorizations are only counted separately if they relate to a different, albeit adjacent, area of land. sources: Gaceta del Gobierno del Estado de México–conjunto urbano authorizations, cross-checked with other sources, and RAN-SIG, 1993 to end of February 2018 (see text).

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Real brought together 50 developers to build detached houses and tower blocks around a dozen kilometres of internal roads, two golf courses, a club house, lakes and fountains. In the 1990s, investors reportedly paid ejidatarios over a million [old] pesos each for privatized parcels, before selling to developers for over five times as much (Aguilar, 2010). When they ran out of money, Mexico's richest man, Carlos Slim, rescued the project, and new sections have since been authorized. Other developments, such as middle-class highrises in Paseos del Bosque ('with golf course views'), also occupy Coatepec land, squeezed in at the other end of an informal settlement resulting from earlier sales by ejidatarios.

Land has mostly been acquired by purchasing privatized parcels. When ARA developed 60 hectares from two neighbouring ejidos inside a volcanic crater, the land for the ex-Hacienda de Xico conjunto came from seven parcels of Villa de Chalco ejido, as recorded in the authorization. Similarly, the authorization for 95 hectares of Bosque Real refers to purchase of over one hundred parcels. *Most* parcels in areas developed for housing have been privatized, suggesting that the community (or at least those holding parcels in that area) reached a collective deal with the developers. Such a process presumably accounts for the large contiguous areas of land developed in neighbouring ejidos in Tecámac.

That purchase of privatized parcels is preferred to joint ventures is demonstrated by its scale and timing: the joint ventures were earlier experiments (Aguado and Hernández, 1997). In La Piedad another project, Rinconada San Miguel, was authorized in 2005, with better quality social housing, built entirely on privatized parcels (see Figure 2). Where there were no parcels at certification, common-use land could be converted later. To the north of the Metropolitan Area, Coacalco converted 212 hectares to parcels in 1998; two years later, SADASI obtained authorization to build social housing on this land. Only one of 20 Metropolitan Area ejidos that have contributed land to conjuntos—Tepojaco—has not endorsed full dominion.

Not *all* parcels in the housing developments have, however, been privatized. Vacant blocks can be found, in a seemingly random pattern: for example, in the Tecámac developments. Some could be reserved for amenities, but others—for example, adjacent to peripheral highways—may have been retained by owners looking for higher returns from a supermarket chain or other corporate interest. Some ejidatarios may simply refuse to sell. Satellite imagery shows a few parcels in cultivation in the middle of building operations, or even the odd building that still exists, in Pueblo Nuevo for instance (see Figure 3).

These observations challenge claims about 'dispossession'. Community protest has occasionally been recorded: in San Gregorio Cuautzingo, 'there are people who love their land ... one *señor* ... threw himself down ... they'd have to kill him if they wanted his land' (Salinas, 2009: 31; and see Figure 3). Ejidatarios complained that 'there are people who don't want to sell, but [ejido authorities] have put pressure on them' (*ibid*.). Whether out of love for the land or in anticipation of a better deal, some ejidatarios do, apparently, resist. If all were merely victims, it would be difficult to account for the micro-geographies of Mexico's new periurban landscapes.

# – Heirs of the hacienda?

With thousands of hectares of social housing and the most ambitious luxury development in Mexico occupying former ejido property, the evidence for Article 27 reforms having a dramatic impact on the Mexico City Metropolitan Area looks strong at first sight. Our data show, however, that developers build on existing private property rather than privatized ejido land. Ejidos account for only 27% of the 12,860 hectares of housing developments authorized by State of Mexico authorities (see Table 2).<sup>21</sup>

<sup>21</sup> Availability could explain contribution to housing development. A correlation exercise for the 59 State of Mexico municipalities in the Metropolitan Area of Mexico City showed that municipal size is related to the area developed (Pearson 0.249; p = 0.06), but there are weak and insignificant relationships between the area in ejidos and ejidobased housing development, in both absolute and relative terms.

Only eight out of 59 State of Mexico municipalities in the Metropolitan Area have any conjuntos on former ejido land: Acolman, Coacalco, Chalco, Cuautitlán Izcalli, Ecatepec, Huixquilucan, Tecámac and Valle de Chalco Solidaridad (see Figure 1).<sup>22</sup>

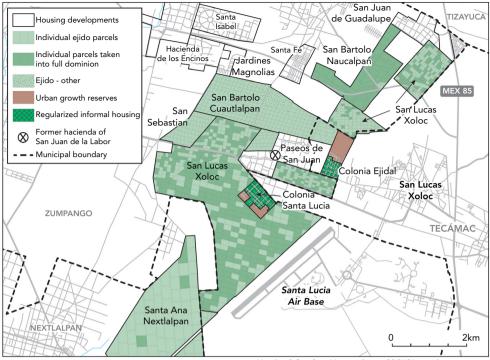
Social housing is even *less* likely than middle/higher-income developments to occupy ejido land: 23% and 43%, respectively (see Table 2). Developers have been roundly criticized for their readiness to relegate lower-income groups to the middle of nowhere, and developments on private land can be found in all of the 'rings' of metropolitan expansion, but there are no higher-income conjuntos and no developments on ejido land in the two outermost rings (see Table 2). If higher-income groups constitute a more attractive market, but one that is averse to remote locations, developers may find it worthwhile buying ejido property only in better-located areas, and only/primarily for middle-class developments. In the first ring there are no lower-income conjuntos on ejido land, and only here does the area of middle/upper-income developments far outstrip that occupied by social housing.

Geography provides another pointer to developer preference for private land: housing developments often occupy private property immediately adjacent to vacant ejido land. In the east of Chicoloapan municipality, for example, five projects by some of the biggest developers, including ARA, GEO and Casa Beta, are almost surrounded by land from two ejidos, much of it still cultivated. Further south, Ciudad Cuatro Vientos is entirely surrounded by ejido land that was still in cultivation when development was approved. A little further south again, several developments appear to be squashed in between ejidos in Chalco (see Figure 3, especially Los Álamos and Hacienda Guadalupe Chalco). In Tecámac, Rancho la Capilla sits between four ejidos, in the middle of large areas in cultivation. Not far to the west, GEO's Paseos de San Juan is almost isolated in a hook-shaped 'promontory' of private land between ejidos (see Figure 4).

The land on which these 'island' developments are built often has a particular history, suggested by their names. Developers prefer names evoking a desirable environment—*bosques* [woods], *lomas* [hills] or *jardines* [gardens]—or social status: *villas, hacienda* or, on a more 'homely', scale, *rancho*. Invocations of pre-Revolutionary landed estates can be found everywhere. Most refer to specific haciendas, sometimes underlining the point by adding 'Ex': e.g. Ex-Hacienda de Xico (once owned by Hernán Cortés). In some cases, such as Xico, the hacienda buildings [*casco*] or their ruins are still standing. The Chalco region had a particularly dense concentration of haciendas, and some hacienda buildings can still be found surrounded by social housing (see Figure 3). In Zumpango, a small chapel from the hacienda of San Juan de la Labor is now part of the Paseos de San Juan neighbourhood centre (see Figure 4).

The land on which many developments were built, then, is former hacienda land that has never been part of an ejido. This is true of the earliest conjuntos, in Ixtapaluca, including Cuatro Vientos. A little further north, the Chicoloapan developments occupy part of the Tlalmimilolpan hacienda. Landowners whose property was taken in the agrarian reform could keep up to 50 hectares; most kept land around the *casco*, which remained in or out of cultivation until housing development presented new economic opportunities. In Chalco, Villas de San Martín occupies the 47.5 hectares of Hacienda de los González left after 4,748 hectares were restored to San Martín Cuautlalpan in 1930; the *casco* ruins were demolished during development (Pérez, 2010; see Figure 3). Other landowners evaded reform by selling off 'fractions' of their property, some of which are now being developed. In the north-east, Paseos de Tecámac and Hacienda del Bosque occupy fractions of San Nicolás la Redonda, which contributed land to neighbouring, still cultivated, ejidos; the nearby *casco* is now (like others) a wedding venue. Paseos de San Juan was created from three 'fractions' of San Juan de la Labor (see Figure 4).

<sup>22</sup> Tizayuca has conjuntos on ejido land, but as authorizations are not published in the state gazette, they are excluded from our analysis.



Map data © OpenStreetMap contributors, CC-BY-SA, opendatacommons.org

**FIGURE 4** A preference for private land? New housing developments, Zumpango and Tecámac, Mexico City Metropolitan Area (*source*: authors' analysis of maps from Sistema de Información Geoespacial, Registro Agrario Nacional [RAN-SIG: see text]; map produced by Miles Irving, UCL Geography)

Another strategy to escape reform after the Revolution involved the creation of *urban* subdivisions: south of the city centre, the Portales and Nativitas neighbourhoods were developed to frustrate attempts to claim the land as ejidos (Varley, 1989). Similarly, many of today's housing developments mark the imprint of the landed estate on the contemporary city.

'A property which is and which is not': developers and the ejido

Asked his opinion of Mexico's social housing, architect Carlos García Vélez, former GEO vice-president, responded, somewhat cryptically, that the 'limiting factor' was the way the ejido— 'a property which is and which is not and which takes different forms'—shapes private land. When a developer buys a property, 'the form of the ejido sets the pattern for growth and everything has to be planned around that'. The 'labyrinth' of different types of property frustrates efforts to interconnect different housing developments (quoted in Sánchez, 2012: 302).

These comments from one of those most closely identified with Mexico's new housing model reflect both private sector mistrust of the ejido and the spatial logic driving its land acquisition strategies.

Business interests have long been wary of the ejido because of its reputation for internal and external conflict. Fractionalization and the frequent election of new ejido authorities hinder consistent decision-making (Aguado and Hernández, 1997; Jones and Ward, 1998; David, 2012; Herbert *et al.*, 2012). Ejidatarios are notoriously litigious, using opportunities afforded by corporatism to bring actions (e.g. against expropriation:

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Varley, 1985; see also cases quoted above). Until 2013 there was no time limit on their ability to contest the price paid for newly privatized land (Méndez, 2016: 5, 88). Even the executive has been reluctant to confront them. A federal programme creating urban land reserves on ejido property in the 1980s was so plagued by opposition that the president refused to pursue expropriations that had not first been negotiated with the ejidatarios (for additional compensation); his successor simply cancelled the programme (Azuela and Saavedra, 2017).

The ability to acquire land cheaply—given ejidatarios' lack of business acumen (Salazar, 2014)—is one reason why critics regard conjunto development as 'dispossession' (Salinas, 2009). Low costs are essential, but interviews with social housing developers indicate that they are offset by higher infrastructure costs in remote locations: 'economies of scale and weak regulations' are therefore crucial (Libertun, 2018: 418). This is particularly true of the larger, highly capitalized developers dominating production in peripheral locations, with industrialized building techniques and prefabricated components that require expensive equipment and better-qualified workers but significantly reduce labour costs. Large expanses of land accommodate equipment and onsite production of materials, reducing production costs as well as the impact of fixed costs such as legal or administrative fees. As remote locations are unattractive to higher-income households, who demand better amenities, there are fewer competitors in the market, placing developers in a strong position when negotiating authorizations with local authorities; speedier turn-around again reduces costs (*ibid.*; Castro *et al.*, 2006: 454–5).

In this context, the ejido is less attractive than private land because of the number of potential vendors, with different views on whether, when and how to sell. Ejido holdings are fragmented: since agrarian reform was intended to ensure political stability, the largest possible number of beneficiaries were included. No parcel can occupy more than 5% of the total area (Méndez, 2016: 74). Consequently, developers may have to deal with hundreds of individual holdings in a chequerboard pattern of privatized and non-privatized parcels (see San Lucas Xoloc, Tecámac, Figure 4). The individual nature of ejido privatization is 'dysfunctional' from an urban perspective (Hernández, 2010: 620). Small wonder, then, that, apart from developers who manage to sign up an entire community, the private sector shuns the ejido.<sup>23</sup>

# Interconnected processes

Recent theorizations view formal/informal 'as a duality of modes of interaction ... each is entangled with, and inseparable from, the other and invariably invokes the other' (Koster and Smart, 2016: 21). Informal development still takes place under the 'banner' of legal procedures such as urban zone creation or adoption of full dominion. Ejidatarios' wariness of both commercial interests and internal authorities means they often prefer individual sale, following a 'bird in the hand' logic. Not understanding the law leads many to believe they can *freely* sell privatized land, ignoring planning requirements (Cruz, 2001). Full dominion promises higher prices (Maya, 2004); but the appearance of informal housing on adjacent privatized *and* non-privatized parcels in many ejidos suggests there may be little difference overall.

The intertwining of formal and informal goes beyond use of the law to provide a veneer of legitimacy. An expansion of informal settlement in ejidos has been observed in areas with large amounts of new social housing (Connolly, 2020: 134). Our evidence suggests that conjuntos on ejido land, in particular, may also promote *informal* development. In the Metropolitan Area, a similar proportion of parcelled land has been

<sup>23</sup> Specialist developers focusing on land acquisition and planning approval reduce risk in relation to ejido land developed for commercial uses (David, 2012). Whether the same applies to residential development is not yet known.

fully privatized in State of Mexico municipalities with no conjuntos (6%) or conjuntos on private land only (9%). In municipalities with conjuntos on ejido land, the proportion rises to 27% (*excluding* the twenty ejidos already housing conjuntos, where higher figures might be expected). Considering only ejidos endorsing full dominion in principle, the figures are 22%, for municipalities with no conjuntos; 21% for those with conjuntos on private land only; and 49% for those with conjuntos on ejido land (excluding ejidos already housing conjuntos).<sup>24</sup> Centrality may be part of the explanation, as none of these municipalities are in the outermost 'rings' of metropolitan expansion, so relative proximity to CDMX could explain both formal and (existing/anticipated) informal housing development. The same should, however, then be true of less remote municipalities with only private conjuntos. Only fieldwork could resolve the question of causality.

What is clear, however, is the extraordinary spatial intermingling of different types of periurban development (see Figures 2–4). In the eastern part of Chalco, for instance, informal settlement was already expanding on ejido land around each village before the first conjunto, Villas de San Martín, was authorized in 2004. Another five conjuntos have now been developed, including Pueblo Nuevo, on privatized parcels belonging to Cuautlalpan ejidatarios, and new sections of Héroes de Chalco, on privatized parcels of San Gregorio Cuautzingo; the others are all on private land, closely associated, as noted above, with former haciendas. There has also been an impressive expansion of informal housing on both privatized and non-privatized parcels, especially south of Huexoculco and around Tlapala, and also on private land, to the east of Cuautzingo for instance.

## Conclusion

The lure of the new is perhaps partly responsible for the current preoccupation with housing financialization in the global South. Mexico's monotonous new periurban landscapes, with their massive expanses of formal housing and the story they often tell of contempt for the needs of residents, are unforgettable. But we should not overlook the continuing scale of urban informality. For Mexico City Metropolitan Area the figure of 22,247 hectares of ejido land privatized between 1992 and early 2018 (mostly in the periurban fringe) was almost identical to the area expropriated from agrarian communities for regularization of informal settlement developed since the 1940s (21,452 hectares).<sup>25</sup> Conjuntos occupy about 4,000 hectares, but subtracting this from the area of parcels in urban enumeration districts in the periurban fringe (approaching 16,000 hectares) suggests that there is about three times as much informal as formal urbanization of ejido land.<sup>26</sup> The incremental nature of informal development implies lower and variable population densities, but these broad-brush figures nonetheless suggest that excitement about neoliberal urbanization of the ejido misses the bigger picture of continuing informality.

The Article 27 reforms were not intended to address housing problems; their urban implications were addressed only as an afterthought. Our evidence from the Mexico City Metropolitan Area shows that the ejido did not become the key source of land for the new housing developments: only one-quarter of the area authorized for such developments in the State of Mexico is former ejido property. We argue, then, that the widespread interpretation of Mexico's latest land reform as handmaiden of the new housing model is mistaken. Although economically neoliberal in intent, the reform was so hedged about with restrictions that it could aptly be described as renewing state control: 'the convergence of political and economic ideology and practice ... remain[ed] incomplete' (Jones, 1996: 193). These restrictions have perpetuated private sector

<sup>24</sup> Authors' calculations; data from PHINA and State of Mexico Government Gazette, to end of February 2018.

<sup>25</sup> As note 8, but also including non-federal expropriations.

<sup>26</sup> In addition to 7,200 hectares of certified urban zones developed before certification, plus informal development of other categories of ejido land (note 19). The figure for formal development comes from Table 1 plus an estimate for Tizayuca.

mistrust of the ejido resulting from its place in the corporatist political system, which also allowed ejidatarios to sell land illegally with impunity. The enduring legacies of corporatism largely explain both developers' preference for private property and the continuing expansion of informal housing through individual plot sales ignoring planning regulations.

Neoliberal policies should undermine corporatism, for instance, by restricting opportunities to disburse benefits to supporters. It is argued, however, that Mexico's authoritarian corporatism has been succeeded by a 'corporatism lite' associated with *city* governance.<sup>27</sup> Current President (and former PRIísta) Andrés Manuel López Obrador developed 'his own corporatism style' as Mexico City mayor: for example, through unofficial pacts with informal taxi drivers and street traders (Gravson, 2007: 292). Rather than traditional state corporatism involving federal government and organized groups affiliated with the ruling party, the 'corporatism of informality' centres on relationships between local government and organizations that may not belong to any political party (de la Garza *et al.*, 2017: 220). Access to public space is key to the demands of such groups (*ibid*.). Informal settlement also raises issues about the control and use of space. but eijdatarios might be thought a less significant group, politically, for city governments. They may be so, for *city* governments, but over half the municipalities in the periurban fringe had a population of less than 50,000 at the last census; half a dozen, less than 10,000. Urbanization and ejidatarios' involvement in the provision and management of urban services have converted the ejido into a 'a form of local government' (Azuela, 1995: 486), and their municipal links have been reinforced by Article 27 reforms allowing them direct involvement in regularization-with negative consequences for residents (Jones and Ward, 1998; Salazar, 2020). The ejido's contribution to urban governance may, then, be understood as another aspect of neocorporatism, perpetuating informality.

We agree, then, with Boudreau *et al.* (2016: 2388) about the significance of 'persistent practices over time', although their explanation for the emergence of the periurban housing developments itself falls victim to the rhetoric of change insofar as it ascribes a key role to the 1992 reforms. We also endorse Martin's (2007) rebuttal of economistic interpretations that overlook how authoritarianism has fostered neoliberalism in Latin America: in this case, via the legacies of corporatism shaping the location of formal housing and contributing to the continued vitality of informal settlement. The result is an example of the "hybrid" institutional landscapes' identified by Brenner *et al.* (2010: 189), 'in which commodifying *and* market-constraining logics commingle and co-evolve'.

**Ann Varley**, Department of Geography, UCL (University College London), North-West Wing, Gower Street, London, WC1E 6BT, UK, a.varley@ucl.ac.uk

**Clara Salazar**, Centro de Estudios Demográficos, Urbanos y Ambientales, El Colegio de México, Carretera Picacho Ajusco 20, Colonia Ampliación Fuentes del Pedregal, 14110 Tlalpan, Ciudad de México, Mexico, c.salazar@colmex.mx

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