

The end of the rural/urban divide? Migration, proletarianization, differentiation and peasant production in an *ejido*, Central Mexico

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Abstract

This article explores the relations between agricultural production, international migration, wage labour and processes of differentiation among peasant households. It does so based on the analysis of the *ejido* Jesús María in the northeast of the state of Guanajuato, Central Mexico. The history of this *ejido* and how Mexican neoliberal policies led to increased levels of migration and proletarianization since at least the early 1990s is presented. Then, it presents how in this context the production of asparagus for agro-export developed on the irrigated lands of this *ejido*, showing that this process went hand in hand with social differentiation and important changes in the distribution of land and water. Then, it presents the results of a household and production survey that shows that most peasant households combine agricultural production with local urban and rural wage labour, migration, remittances and/or other economic activities. Households that can live from agriculture alone have had important capital investments in agricultural production coming from international migration and remittances. Based on these results, it argues that, as rural communities become increasingly dependent on external 'urban/global' capital, the rural/urban divide has become increasingly permeable with important consequences for peasant economies and related social differentiation processes.

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KEYWORDS

ejido, Mexico, migration, peasants, social differentiation

1 | INTRODUCTION

Around the world, globalization and neoliberal policies have transformed peasant livelihoods and communities since the 1980s (Akram-Lodhi & Kay, 2010; Kay, 2015). Smallholders have faced increasing difficulties in sustaining rural livelihoods from commodified production in globalized agricultural markets (Patnaik, 2003). In response, smallholders agriculture has, by and large, developed into two directions: the production of outputs for the market (lining up farming to the needs and logic of capital) and the development of production that does not depend on markets for inputs, building mainly on internal resources, while maintaining rural livelihoods through external sources of income (van der Ploeg, 2008, 2010). These agricultural changes, that sometimes run in parallel on one production unit, have gone hand in hand with increased circular and permanent flows of rural–urban (international and national) migration and proletarianization (Gray & Bilsborrow, 2014; Nyantakyi-Frimpong & Bezner Kerr, 2017; Sunam & McCarthy, 2016). These processes have added increased complexity to the multidimensional reality of the peasantry and its development in specific environmental contexts (Bernstein, Friedmann, van der Ploeg, Shanin, & White, 2018). As a result, there is a need to look at the ongoing rural transformation in smallholder communities and how these relate to macroeconomic policy changes, rural–urban (inter)national migration, the environmental context and related changes in peasant production strategies (Mena-Vásquez, Boelens, & Vos, 2016).

In this article, we do so based on the case study of the *ejido*¹ Jesús María situated in the agriculturally vibrant northeast of the state of Guanajuato, Central Mexico. We analyse the history of the *ejido* and present the results of a livelihood survey held among different peasant households of the *ejido*. It is an interesting case study, as in it, a recent shift to market-oriented asparagus production on groundwater-irrigated land, the perpetuation of maize and other traditional rainfed crops, proletarianization and high levels of (inter)national migration intersect and give form to processes of rural transformation in the specific context of Mexico. On the basis of this analysis, we argue that the permeability between the rural/urban and the local/global spheres is reshaping differentiation processes in peasant communities as wealth and status among peasant households are increasingly decoupled from land ownership and become more and more marked by capital flows resulting from cyclical international migration, remittances and rural–urban labour flows.

This paper is based on 4 months of fieldwork by the second author in the *ejido* Jesús María (carried out between July and November 2017) and on the first author's extended field research periods in 2014 (5 months), 2016 (4 months), 2018 and 2020 (2 × 2 months) in the state of Guanajuato. Fieldwork of the authors consisted of mixed methods research. It included interviews with officials of governmental institutions, participant observation in the *ejido* Jesús María, open and semi-structured interviews with members of the *ejido*, and 58 household surveys with heads of peasant households (out of around 200). To get a better sense of how peasant economies are organized, in this survey, we focused on understanding the main sources of income of each household by looking at agricultural production activities, external subsidies, importance of wage labour outside of the production unit and remittances.

In the next section, we present our theoretical departing point from which we approach differentiation and the role of migration within the peasantry. We explore the notion of peasant economies as a lens to better understand how agricultural production, cyclical migration, remittances and increased urban/rural linkages are transforming the peasantry and related processes of differentiation. In Section 3, we give a short review of the most important developments of peasant agriculture and its broader context in Mexico. In Section 4, we present the socio-productive and

¹The *ejido* is a Mexican collective land tenure system established after the Mexican Revolution (1910–17) to redistribute land from large land holdings (*haciendas*) to landless peasants. Section 2 discusses the role of this land tenure system and its institutions in Mexico throughout the 20th century.

environmental context of the state of Guanajuato, where our case study is situated. Then, we turn to the case study of the *ejido* Jesús María in the northeast of the state of Guanajuato in Central Mexico. We analyse the history of this *ejido* since its origins in 1939 to the late 1990s. Then, we show how, in it, commercial agriculture based on the production of asparagus for the export market developed over the last 20 years. A process that has been facilitated and shaped by remittances, newcomers and the emergence of new types of economic relations. The latter have resulted from increased resource flows between rural and urban areas, as peasant livelihood strategies come to depend more and more on nonfarm income. Then, we present the results of the survey we held among peasant households in the *ejido* over 2017. This survey shows how peasant economies are being shaped through the combination of agricultural production (commercial and for consumption) and rural–urban relations through migration and wage labour. In the conclusions, we summarize and reflect on the theoretical implications of our analysis.

2 | DIFFERENTIATION, (NEW) PEASANT ECONOMIES AND MIGRATION

Different theories aim to explain the processes of agrarian change, rural transformation and differentiation. In this article, processes of agrarian change are seen as co-shaped by local actors (farmers, peasants, workers, etc.) and actors at broader (regional, national and international) scales (Long, 2001). This approach is rooted in the work of Chayanov, who focused above all on understanding what happens (empirically) on farms and rural communities (Shanin, 1974). In line, we approach differentiation through the study of peasant economies, production and access to land and water, as it offers a means to better understand the functionality and reproduction of the peasantry in a capitalist context (van der Ploeg, 2018).

It is widely acknowledged that peasant production is not led by a capital profit maximization logic but by a production logic that responds to the particularities and needs of context specific peasant economies (Boelens & Hoogesteger, 2017; Mayer & Glave, 1999). Contrary to capitalist entrepreneurs, peasants see their household as a production unit that is strongly related to the consumption and other needs of it. This means that resources, labour and production do not only have an exchange value but also have a very important use value. The often made distinction between 'domestic/household' and 'productive activities' generally blurs, as they combine and overlap. As a result, households are organized and sustained through a wide diversity of activities both within as well as outside of the production unit (diverse livelihood strategies) (Scoones, 2009). In this sense, peasant households and communities are highly dynamic and integrated into the larger regional, national and transnational economies through their insertion in diverse labour markets, globalized production, trade and cyclical or permanent migration (and related remittances) of household members (Castellanos-Navarrete & Jansen, 2016; del Callejo-Veracc, 2019; Gray, 2009b, 2009a; Radcliffe, 1986).

As the world population keeps urbanizing, the relations between the urban and rural have intensified, playing an important role in agrarian transitions through the diversification of livelihoods, lifestyles and peasant economies in rural settings (Kelly, 2011; Klooster, 2013; Robson, Klooster, Worthen, & Hernández-Díaz, 2018). In the global South, international circular labour migration and remittances have come to play an important role in peasant livelihoods generating processes of both 'deactivation' and 'repeasantization' (Sunam & McCarthy, 2016; Nyantakyi-Frimpong & Bezner Kerr, 2017). While increased migration can be an outcome of agrarian transitions, it is also a driver of transformations in rural areas, influencing changes in terms of access to and use of productive land and water (Kelly, 2011), collective action (Klooster, 2013; Lira, Robson, & Klooster, 2016), territory and culture (Robson, Klooster, Worthen, & Hernández-Díaz, 2018). In economic terms, remittances and other capital surpluses from labour migration can be invested as agricultural capital in the production process and its transformation (Bebbington & Batterbury, 2001; Gray, 2009a; Gray & Bilsborrow, 2014).

Therefore migration plays an important role in reshaping social structures in rural areas. Although the agrarian literature tended to view social differentiation as occurring within an in situ population, migration has come to challenge these notions (Kelly, 2011). Passage to higher earnings, especially through international migration, can lead to

mobility into (or within) the land owning class and can lead to land accumulation, while also changing the relation to the other means of production. This process can lead to a gradual decoupling of local social status and economic well-being from the local relations of production. In the long run, it might render land ownership rather meaningless as a predictor of social status and welfare because control over land and other means of production becomes increasingly fluid and transient through increased migration and wage labour (Gray, 2009a; Jokisch, 2002; Kelly, 2011; León Andrade et al., 2014; Sunam & McCarthy, 2016). The increased reliance on off-farm activities, while agricultural production is maintained in most Mexican rural communities, suggests a hybridization of urban-rural agrarian livelihoods (Appendini & Quijada, 2016; Eakin, Appendini, Sweeney, & Perales, 2015; Robson, Klooster, Worthen, & Hernández-Díaz, 2018). This hybridization creates opportunities for rural economies to escape the 'death knell for the peasantry' and evolve into new modes of agrarian reproduction and transformation as is explored further below.

3 | PEASANT AGRICULTURE AND MIGRATION IN MEXICO

In Mexico, the peasant sector is represented by and large by the *ejido*. The *ejido* is a collective property system in which members can hold land in usufruct (Assies, 2008). The origins of the current *ejido* system stem from the Mexican Revolution, which shook the country between 1910 and 1917, and in which, many revolutionary factions demanded 'land to the tiller' and a restitution of lost village and community lands (Nuijten, 2004). This came as, on the eve of the revolution, 0.2% of the landowners (*hacendados*) occupied 87% of rural land (Assies, 2008). In spite of legal premises since 1917, large-scale redistribution only came about during the government of Lázaro Cárdenas (Wolfe, 2017). During his presidential term, between 1934 and 1940, about 800,000 workers benefitted from the reallocation of more than 20 million ha (Assies, 2008). Between 1940 and 1980, the *ejido* became the most important land ownership form of peasant agriculture. Through land reforms, groups of labourers (composed mainly by workers of *haciendas*) and landless communities could petition for land that was granted as *ejido*.² By 1992, when the land redistribution policies came to an end, about 28,000 *ejidos* existed, occupying about half of the Mexican arable land (Key, Muñoz-Piña, de Janvry, & Sadoulet, 1998). Beside land distribution, between the late 1930s and 1970s, the government created an agrarian support system geared towards making the smallholders sector productive (Perramond, 2008). This modernization aimed to transform not only production but also the whole rural communities through education, medical care and other facilities (Albertus, Diaz-Cayeros, Magaloni, & Weingast, 2016; Nuijten, 2004).

The 'Mexican crisis' that resulted from plummeting world oil prices in the early 1980s, coupled to the subsequent neoliberal Structural Adjustment Policies, meant a dramatic change of the state-based economic model (Yúñez-Naude, 2002). Public spending was drastically reduced, whereas staple crop prices were kept low and production costs increased as Mexico's economy entered the global markets (Navarro-Olmedo, Haenn, Schmook, & Radel, 2016; Robles Berlanga, 2012). Mexican family farms could not compete with grain production in Canada and the United States (Tetreault, 2010). According to Wilder and Whiteford (2006), between 1994 and the mid-2000s, corn and wheat exports from the United States to Mexico increased 240% and 182%, respectively. On the other side, Mexican vegetable exports increased by 80% in this same period (*idem*). Between 1980 and 2014, the area dedicated to the production of fruits and vegetables increased from 1.2 to 2.1 million ha, while production rose from 12.3 to 28.4 million tons (González, 2020).

²Members of an *ejido* (*ejidatarios*) technically neither own nor hold title to land but have usufruct rights. These usufruct rights could be transferred only via inheritance because of its inalienability. *Ejidatarios* are designated an individual/family parcel and have access to communal holdings such as forests and pasture lands (Lewis, 2002). *Ejidados* vary greatly in size and number of members ranging from less than a hundred to more than a thousand families. Each *ejido* has, by law, a *comisariado ejidal* (directive) composed of a president, a treasurer and a vigilance committee. The general assembly, composed by all members (*ejidatarios*), is the main authority within the *ejido*.

To compensate for the negative effects of agricultural liberalization, the government launched a direct income transfer programme named PROCAMPO in 1993 (Appendini, 2014). According to Sadoulet, Janvry, and Davis (2001), the objectives were threefold: “political (to manage the political acceptability of the free trade agreement among farmers), economic (to provide farmers with liquidity to adjust production to the new set of relative prices), and social (to prevent an increase in already extensive levels of poverty among smallholders and a rapid process of outmigration to the cities and the border in the North)” (pp. 1044–1045). Today, this programme works as an instrument that allows farmers to keep working the land, albeit often for household consumption purposes only (Rodriguez, 2011).

The liberalization of land and water tenure systems in the early 1990s, enabled *ejidatarios* to sell their productive resources (Hoogesteger, 2018). Because of the widespread poverty in rural communities (Tetreault, 2006), peasant households increasingly complement income with off-farm local wage labour and (inter)national migration (Fox & Bada, 2008), as well as by renting or selling *ejido* land and water.³ According to estimates, 4.9 million peasants became seasonal or permanent labourers, of which 3 million became active in the expanding agro-export industry (Weisbrot, Merling, Mello, Lefebvre, & Sammut, 2017), while another large portion engaged in international labour migration (Sana, 2008).

Between 1980 and 2000, rural Mexico became the most important source of international migrants through cyclical and (increasingly) established migration across the US border. In 2017, the migrant population of Mexicans that lived abroad reached 13 million, of which 12.68 million in the United States, compared with less than 2.5 million in 1980 (CONAPO-BBVA, 2018). Not surprisingly, international remittances from this group of migrants and second generation Mexicans in foreign countries skyrocketed in the same period. Remittances to Mexico, mostly from the United States, reached a historic high in 2018 with 33.47 billion USD, compared with 6.57 billion USD in 2000 and a mere 699 million USD in 1980 (CONAPO-BBVA, 2019). According to the same source, in 2016, 1.6 million (4.8%) of the total 32.9 million households in Mexico received remittances on a regular basis. The rural areas, where most of the villages have fewer than 2,500 inhabitants, received 44.4% of all remittances sent to Mexico. Of the remittance-receiving households, 66% could not cover food expenditures from remittances alone, while 33% of these households were fully dependent on remittances for their sustenance (*idem*).

Despite these developments, peasant economies have continued to persist 2019. Peasant production of maize has not been abandoned (Eakin, Perales, Appendini, & Sweeney, 2014), and more entrepreneurial peasant households have shifted to the production of nontraditional commercial crops such as chia, avocados, berries and export vegetables.

4 | THE SOCIO-ENVIRONMENTAL CONTEXT OF GUANAJUATO

Guanajuato is one of Mexico's most important groundwater-dependent production and export areas of fresh, canned and frozen fruits and vegetables (Hoogesteger, 2017, 2018) 2006. In 2017, the Coordinator for Export Stimulation of Guanajuato (COFOCE) registered that between January and October, agro-export net value from the 27 most productive municipalities, was over 1,144 million USD (Horticultivos, 2018). Most production of fresh vegetables is done by medium and large commercial farmers who operate as family businesses and supply larger (inter)national agro-export companies. Although vegetable production initially started in the lower lying area of the Bajío, in the last decades, it has expanded to the higher lying northern part of the state where our case study is situated and where commercial farming is booming based on the intensive use of fossil groundwater reserves. According to the Comisión Estatal del Agua de Guanajuato (CEAG) (2016), groundwater extraction in Guanajuato oscillates around 4,000 Mm³/year, whereas recharge is about 3,000 Mm³/year. The overextraction of groundwater results in an average aquifer-level descent of 2 m/year with extremes of above 4 m/year. As aquifers continually drop, wells are now dug down to 250–500 m with extremes of up to 700 m, whereas those whose wells run dry and cannot afford its

³This has resulted in an agrarian system in which commercial producers benefit from cheap and flexible labour from an impoverished rural population.

replacement lose access to groundwater (Hoogesteger & Wester, 2015, 2017). At present, agriculture consumes 76% of the total extracted groundwater, with 21% used for public water supply and 3% for industry (CEAG, 2016). In spite of its booming agro-industrial development, Guanajuato is one of the states of Mexico with the highest levels of international migration to the United States (CONAPO-BBVA, 2019), also among *ejidatarios* (León Andrade et al., 2014).

In Northern Guanajuato, where the case study is located, the Independence aquifer that is officially known as the Alto Río La Laja and Leguna Seca aquifers is the main source of groundwater (Ortega-Guerrero, 2009). This underground water body is overexploited, and aquifer-level declines are steady at between 2 and 3 m/year in most of the aquifer. Levels of fluoride and arsenic in the extracted groundwater are reaching levels that are toxic for direct human consumption in more and more wells (Knappett et al., 2018, 2020). The low profitability of traditional crops such as corn, beans and alfalfa, coupled to increased groundwater pumping costs and/or drying wells that need to be deepened or replaced due to aquifer drawdown, has driven many *ejidatarios* out of production since the mid-1990s in this area. According to the manager of one of the largest Aquifer Management Council of Northern Guanajuato (see Wester, Sandoval-Minero, & Hoogesteger, 2011), at present, only about one fourth of the *ejido*-irrigated land in Northern Guanajuato is tilled by the owners, whereas three quarters has been rented out or sold to commercial producers. Jesús María is one of the few *ejidos* who has engaged in the production of nontraditional agro-export crops (asparagus) sustaining commercial production and making it an interesting lens to look at the interrelations between the recreation of peasant households, international migration, differentiation and access to land, water and the means of production.

5 | THE DEVELOPMENT OF THE *EJIDO* JESÚS MARÍA BETWEEN 1950s AND 2000s

In Jesús María, people started to organize to form an *ejido* in 1939 after a clash between the landless labourers of the *hacienda* and the owners of the estate. Although land was occupied much earlier, it was only in 1955, after long legal procedures, that the *ejido* Jesús María was formally recognised.⁴ The *ejido* consists of four communities (Jesús María, Pozo de Balderas, Loma de Cocina and El Ocote) that collectively own an area of approximately 3,000 ha (see Figure 1). Of this area, 968 ha are for common use, 1860 ha are individually parcelled, and 168 ha are designated as human settlements (communities). At present, according to official data, a little more than 400 households live within the *ejido*, the majority of which reside in the communities of Jesús María and Pozo de Balderas (PHINA, 2019⁵).

Initially, beside the communal grazing lands, 125 *ejidatarios* received 11 ha of arable rainfed land each. At that time, rainfed production consisted primarily of the production of *milpa* (the combined cultivation of maize, beans and squash on the same field) in the summer months June, July, August and September. Between the 1960s and 1970s, the government financed the clearing of part of the communal grazing lands to make these apt for agriculture. Thus, a second wave of land redistribution took place giving existing *ejidatarios* the chance to till an additional 4 ha on top of the 11 ha they already had. Not all of existing *ejidatarios* accepted these extra 4 ha, as many decided to cede their new land rights to their relatives, mainly to their sons. This enlarged the number of *ejidatarios*. From the onset, rainfed agriculture required labour only in the summer months, so most *ejidatarios* combined the production of *milpa* with livestock (goats, sheep and/or cattle) and wage labour on large nearby commercial farms, cities and importantly international migration to the United States.

Financed by the *Plan Nacional de Obras de Pequeña Irrigación* (National Plan of Small Irrigation Works), four wells to develop irrigated agriculture in the *ejido* were installed between the late 1970s and early 1980s. The rationale of the government was to provide access to groundwater-based irrigation to develop commercial—year-round—agricultural production, to support fuller market integration. Distribution of water entitlements of the newly installed

⁴According to the internal regulation received from an *ejidatario*.

⁵National agrarian register: <http://www.ran.gob.mx/ran/index.php/sistemas-de-consulta/phina>

groundwater pumps was done based on the location of the new pumps. Those who had the right to till individual plots closest to the newly installed wells got, after some land redistribution, the right to irrigate 4 ha each. To manage and operate the well and irrigation, four water user groups (of between 10 and 15 users each) were created.

Most *ejidatarios* that accessed groundwater, started to grow 1–2 ha of alfalfa year-round. This provided a steady cash flow as alfalfa is harvested 8–10 times a year in this area. Beside alfalfa, producers irrigated a part of their *milpa* in the spring–summer season to ensure higher yields and as protection against rainfall variability, while cultivating wheat, barley or chickpeas with irrigation in the fall–winter season. This agricultural transition was economically enabled by convenient loans from the governmental National Rural Bank (BANRURAL). With these loans, *ejidatarios* bought tractors, machinery, seeds, fertilizers and other required inputs for their new production systems.

Two more wells that are still in use today—numbered 5 and 8—were installed in the late 1980s. The beneficiaries of these two wells were *ejidatarios* from the communities of Pozo de Balderas and Jesús María (see Figure 1).

The bonanza of groundwater irrigation came to an end for users of two wells that fell dry towards the end of the 1980s. Though today it proved hard to reconstruct the history of the user groups who used and operated these wells, it is clear that these wells were never deepened or repositioned as they ran dry. Interviews with *ejidatarios* point to weak user organizations, dropping aquifer levels, increasing pumping costs and the low profitability of agriculture in a context of increasing production costs, low grain prices, and reduced support programmes. A similar fate is attributed to the two other wells that stopped functioning in 1997. Interviews suggest that this context led some *ejidatarios* to opt for and invest in international migration and wage labour above agricultural production. In the late 1990s and early 2000s, some households with access to irrigated land in the *ejido* started to sell. The reasons given by interviewed *ejidatarios* that had sold their irrigated land are diverse and include outmigration of the younger generations, a lack of profitability of agriculture and elderly producers stopping with no successors from younger generations.

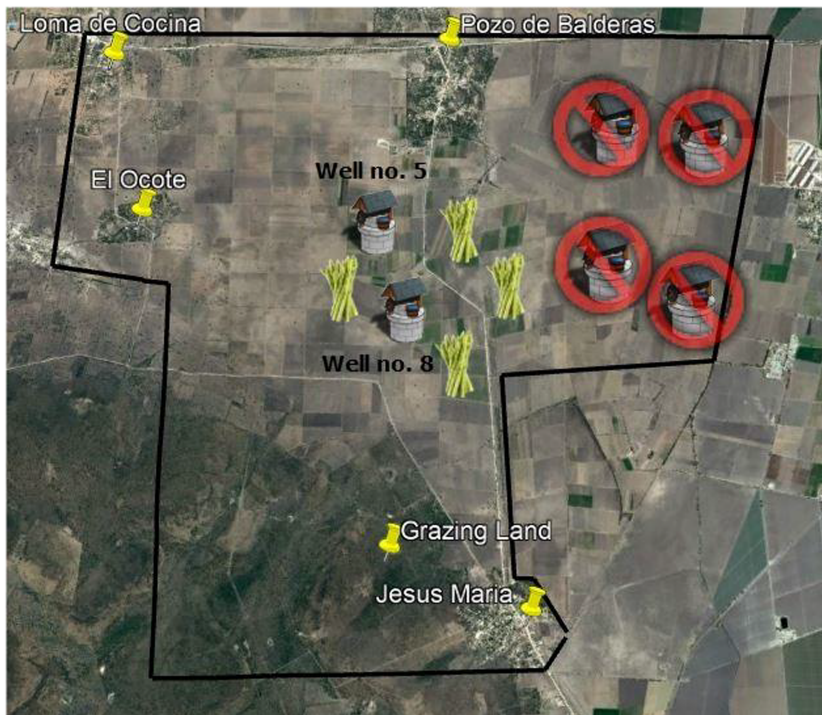


FIGURE 1 Contours of *ejido* Jesús María, location of communities and wells and the irrigated area (own elaboration using Google Maps and PHINA, 2019)

According to anecdotal stories of the interviewed, migration flows from the communities in the *ejido* Jesús María to the United States increased dramatically in the late 1990s,⁶ especially among the youth that saw no future in the peasantry and built new lives as proletarians and sometimes entrepreneurs. These migratory flows were from both landless rural labourers as well as from households that had access to land and in some cases water. Today, the *ejido* has high levels of temporal and permanent labour migration to the United States, with estimates of locals that run up to 50% of the total working age population. This international migration is, however, deeply entwined with the reproduction of agricultural production and is leading to new forms of peasant households reproduction through remittances, cyclical migrants and new patterns in access to land. Beside international migration, many peasant households also combine production with wage labour or trade in the nearby towns of Los Rodríguez and the more distant San Miguel de Allende. Finally, a large part of the labour force is employed on large commercial farms and the agro-industry of the region.

6 | COMMERCIAL PRODUCTION OF ASPARAGUS ON THE IRRIGATED FIELDS OF THE *EJIDO*

In the late 1990s, a person from a neighbouring community outside of the *ejido* bought a few irrigated hectares in the central part of the *ejido* to produce asparagus (becoming a *poseionario*). This person had worked as labourer for large farmers producing asparagus in Guanajuato and later migrated to the United States where he capitalized as a labourer. Making use of his knowledge and networks in the asparagus sector, the *poseionario*, together with two *ejidatarios* (that had the capital to invest, because of remittances from family working in the United States), started producing asparagus on the irrigated lands in the *ejido*. Initially, the *ejidatarios* started with 1–2 ha,⁷ but within a few years expanded their production to fields on which they had previously produced alfalfa. In 2005, two alfalfa growers joined the group with an initial sharecropping deal with the *poseionario*. While they brought land and water to the deal, the *poseionario* made the necessary capital investments, and the profits were shared 50%–50%.

By 2013, the cooperative⁸ of producers had 13 members and two shareholders. Of these producers, three are external *poseionarios* who bought irrigated land in the *ejido*. Five *ejidatarios* who started asparagus production had worked for extended periods of time as wage labourers in the United States. This enabled them to invest in asparagus and return to the *ejido* to live from agriculture. At the time of fieldwork, the total area under asparagus production in the *ejido* was around 100 ha with only a few hectares of irrigated land being devoted to other crops. Many of these hectares are not tilled by the owners but by asparagus producers who rent irrigated land from *ejidatarios* on long-term contracts (the asparagus crop has a productive life span of 8–10 years) or through sharecropping deals. The latter imply a 50%–50% or 40%–60% division of annual revenues whereby the owner of the land puts in the land and water and half of the labour required for harvesting; the sharecropper puts in the rest. Renting agreements are usually for 10 years and imply an annual payment of between US 150/ha (usually first 2 years) to US 250/ha (rest of the years once production is established).

The three initial producers run the cooperative and provide newcomers with know-how and inputs to start asparagus production (Figure 2). They own and rent out the needed machinery, buy the required inputs (fertilizers and pesticides) in bulk, supervise harvest procedures (Figure 3) and the products' quality standards, do the associations' administration and bookkeeping,⁹ arrange transport of the harvest to the agro-export company that buys the products (Figure 4), and organize and chair the cooperative's group meetings. In some cases, they also arrange the

⁶Family networks in some cities in Texas and especially in Salt Lake City, Utah, have enabled and spurred the increased migratory flows out of the *ejido*.

⁷Asparagus needs an initial heavy investment as the crop needs between 1.5 and 2 years to develop before the first harvest.

⁸Though production is arranged individually, the producers cooperate in the marketing of the crop during harvesting time, which is between June and September.

⁹This includes keeping track of the daily production of each of the cooperative's members and paying them out accordingly.



FIGURE 2 A young asparagus plantation in Jesús María



FIGURE 3 Asparagus harvesting in the fields of Jesús María



FIGURE 4 Daily asparagus harvest ready for transport to the packaging company

labour needed for harvesting if the producers do not want to arrange this by themselves. Finally, they negotiate and establish contracts with the buying agro-export company every year.

The asparagus harvest is collected every morning in the months of June, July and August. Labour needs are concentrated during harvest; every morning, the asparagus spears have to be cut, packaged in crates and brought to the collection point. In the peak harvesting season (June–July), around 100 workers cut the asparagus spears.

The production of asparagus has brought higher capital returns from agriculture to the producers. During harvest, the weekly revenues from production are paid to the producers based on the individual harvest of that week (measured in crates of harvested asparagus). When applicable, the input and labour expenditures made in advance by Producers 2 and 3 are deducted from this payment.

Since 2018, the wells have started to give problems because of falling aquifer levels. During the dry winter–spring season, the wells have a reduced discharge, and some producers have complained that their asparagus do not get the required irrigation turns. At the beginning of 2020, discussions have emerged around the need to reposition and/or deepen the wells that would require high investments and subsidies are being sought.

7 | DIFFERENTIATION, MIGRATION AND THE PEASANT ECONOMY IN JESÚS MARÍA: SURVEY RESULTS

To get a more representative picture of how peasant households' economy is organized in the *ejido* Jesús María, we held a survey among 58 randomly chosen peasant households who cultivated irrigated and/or rainfed land. This survey looked at access to land, agricultural production (crop and livestock), means of production, subsidies, remittances, wage labour and the role that migration to the United States played in shaping production in the households for the year 2017. Respondents were explicitly asked about the role of remittances/migration and its relation to agricultural production.

We divided the households in three categories based on land ownership as a proxy indicator of social differentiation within the *ejido*. We identified three groups: (a) peasant households with access to irrigated land¹⁰; (b) peasant households with more than 10 ha of rainfed land; and (c) peasant households with less than 10 ha of rainfed land. Because irrigated agriculture provides by far the highest commercial agricultural output per cultivated hectare in the *ejido* and most rainfed agriculture is produced for household consumption, fodder and collection of PROCAMPO, we made access to irrigated land a separate land category even though it only occupies 108 ha of productive land. The results are presented in Table 1 and discussed below.

In the first group, which comprises those households who have access to irrigated land ($n = 17$), we see that almost all households ($n = 14$) are engaged in the production of asparagus on their irrigated land in 2017.¹¹ Thirteen of the 14 households were able to invest in the production of asparagus through capital that came through migration (directly or through partnerships with other producers with capital generated through migration to the United States). One external producer invested in land and the production of asparagus with capital from nearby urban activities. This is the group who hires the highest number of external labour days per year (mostly for the harvest of asparagus). The ownership of tractors and other agricultural machinery in this group is high. Most households also have rainfed land which they use for the production of (mostly) maize and beans that are used for consumption and as feed for livestock (mostly sheep and cows). Only three households have a regular income from local wage labour. Two *ejidatarios*' main income comes from milk from dairy cattle. This group has four households that do not hold the status of *ejidatario* as these are 'outsiders' that bought land in the last 25 years. Two of these receive remittances on a regular basis that suggests that the households have capitalized mainly from migration. Almost all producers collect PROCAMPO subsidies.

¹⁰Irrigated land is the most productive land as it enables the fairly secure production of high-value commercial crops through year-round irrigation.

¹¹By 2020, all irrigated land in the *ejido* (with the exception of 2 ha of alfalfa) was used for the production of asparagus (fieldnotes first author, 2020).

TABLE 1 Results of household and production survey among peasants in ejido Jesus María

Household head		Access to arable land											
Survey number	Gender	Age	Occupational identity	Household size	Land entitlement	Direct relatives abroad	Cultivated land (ha)	Owned arable land (ha)	Cultivated irrigated land (ha)	Rented/sharecropped land (ha)	Rented out land (ha)	Recently acquired land (ha)	Sold land (ha)
Peasant households with irrigated production													
1	M	60	Farmer	18	Ejidatario	Yes	38	19	22	19		4	
2	M	33	Farmer	4	Son of ejido	Yes	14	10	14	4			
10	F	76	Farmer	2	Poseionario	Yes	6.5	6.5	6.5			6.5	
7	M	48	Farmer	4	Ejidatario	Yes	15	15	6				
3	M	48	Farmer	6	Ejidatario	Yes	14	11	6	3			
6	M	63	Farmer	2	Ejidatario	Yes	7.5	7.5	6				
5	M	39	Farmer	8	Ejidatario	Yes	7	7	4.5				
19	M	45	Farmer	7	Ejidatario	No	15	11	4	4		1	1
8	M	52	Farmer	5	Ejidatario	Yes	11	11	4				
9	M	52	Farmer	5	Ejidatario	No	10	10	3.5				
4	M	72	Farmer	4	Ejidatario	No	9	9	3				
22	M	33	Farmer	7	Ejidatario	No	3	3	3				
11	M	50	Farmer	4	Avecindado	Yes	3	3	3				
14	M	71	Farmer	2	Ejidatario	Yes	30	30	2	3	20	1	1
23	M	70	Farmer	3	Poseionario	Yes	18	18	1		10.5		
24	M	51	Farmer	4	Ejidatario	Yes	9.5	8.5	1	1		1	7.5
20	M	66	Farmer	4	Poseionario	Yes	7.5	7.5	1			1	3
Peasant households with >10-ha rainfed agricultural production													
18	M	62	Farmer	1	Ejidatario	Yes	60	24.5		35.5		10.5	
13	F	63	Farmer	3	Ejidatario	No	24	10		14	3	10	
12	M	58	Farmer	3	Ejidatario	No	12	15			3		
16	M	55	Farmer	4	Ejidatario	Yes	30	10		20			
15	M	68	Farmer	2	Ejidatario	No	7	10			3		3
17	M	72	Farmer	7	Ejidatario	Yes	11	14			3		
54	F	70	Housewife	3	Ejidatario	Yes	11	14			3		
56	M	66	Farmer	6	Ejidatario	Yes	14	14					

TABLE 1 (Continued)

Household head		Access to arable land											
Survey number	Gender	Age	Occupational identity	Household size	Land entitlement	Direct relatives abroad	Cultivated land (ha)	Owned arable land (ha)	Cultivated irrigated land (ha)	Rented/ sharecropped land (ha)	Rented out land (ha)	Recently acquired land (ha)	Sold land (ha)
49	M	56	Farmer	6	Ejidatario	Yes	15	15					
50	F	36	Housewife	2	Daughter of ejido	Yes	10	13			3		
47	M	51	Farmer	5	Ejidatario	Yes	15	15					
53	M	65	Farmer	6	Ejidatario	Yes	11	11					
48	F	57	Housewife	3	Avecindada	Yes	14	14					
30	M	56	AGWL	7	Ejidatario		15	15					
45	M	37	AGWL	6	Son of ejido	Yes	14	14					
37	M	57	Farmer	4	Ejidatario	Yes	12	12					
39	M	46	AGWL	3	Son of ejido	No	11	11					
46	M	44	AGWL	6	Ejidatario	Yes	11	11					4
31	M	86	Retired	2	Ejidatario	Yes	10	10					
26	M	58	Farmer	5	Ejidatario	No	30	12	18			10.5	
34	M	82	Shop keeper	3	Ejidatario	Yes	14	14					
40	M	42	Farmer	4	Son of ejido	Yes	30	15	15			1.5	
25	M	55	Farmer	7	Ejidatario	Yes	11	11					
28	M	75	Retired	5	Ejidatario	No	11	11					
36	M	77	Farmer	5	Ejidatario	Yes	11	11					4
33	F	60	Housewife	8	Ejidatario	No	10	10					
Peasant households with <10-ha rainfed agricultural production													
21	M	40	Farmer	6	Avecindado	No	4	0		4			
55	M	64	Labourer	2	Ejidatario	Yes	8	8					
35	M	61	Bricklayer	6	Ejidatario	Yes							3
58	M	71	Retired	2	Posionario	Yes		3.5			3.5	3.5	
51	M	55	Farmer	4	Ejidatario	Yes	8	8					
42	M	57	Farmer	5	Ejidatario	Yes	7	7					
57	M	72	Retired	3	Ejidatario	Yes							3

TABLE 1 (Continued)

Household head		Access to arable land											
Survey number	Gender	Age	Occupational identity	Household size	Land entitlement	Direct relatives abroad	Cultivated land (ha)	Owned arable land (ha)	Cultivated irrigated land (ha)	Rented/sharecropped land (ha)	Rented out land (ha)	Recently acquired land (ha)	Sold land (ha)
52	M	70	Retired	3	Ejdatario	Yes	4	4					
27	F	57	Housewife	4	Ejdatario	No	8	8					
29	F	29	Housewife	5	Avecindada	No	5	5					
32	M	56	AGWL	5	Avecindado	No	0	0					6
41	M	73	Farmer	6	Ejdatario	Yes	5	5					
43	M	59	Farmer/AGWL	4	Ejdatario	Yes	7	7					
38	M	42	Bricklayer	6	Son of ejido	Yes	5.75	5.75					2.5
44	M	58	Bricklayer	6	Ejdatario	Yes	3.75	3.75					

TABLE 1 Continued

Land cultivation	Animal husbandry						Means of production			
	Other irrigated crops (ha)	Rainfed maize (mostly nonmarket) (ha)	Rainfed beans (ha)	Other rainfed crops (ha)	Number of sheep + goats	Number of meat cows	Number of dairy cows	Number of pigs	Hired labour days/year	Owned tractors + supplements
Peasant households with irrigated production										
20	2	10	6		30				1,000	3
13	1								500	1
6.5									300	1
6		6	3		50				400	1
6		3	3	2	40		1		300	1
4.5	1.5	0.5	1							
3	1.5	2			40				400	1
4		6	1.5	3.5	30	4			100	Shared
4		3	4						250	
3.5		5.5	1							1
2	1	6					10			

TABLE 1 (Continued)

Land cultivation	Animal husbandry					Means of production						
	Irrigated asparagus (ha)	Irrigated alfalfa (ha)	Other irrigated crops (ha)	Rainfed maize (mostly nonmarket) (ha)	Rainfed beans (ha)	Other rainfed crops (ha)	Number of sheep + goats	Number of meat cows	Number of dairy cows	Number of pigs	Hired labour days/year	Owned tractors + supplements
2	1							2			300	
2		1						1			300	
2				20		8		30			365	1
1	1			15	1	1	60					1
1				8.5			5		10			
1				6.5			158	7			<10	Shared
Peasant households with >10-ha rainfed agricultural production												
				40			12			12	60	1
				18	3		80	120			21	1
				6		6	30		30		350	2
				30					23			1
				7			22		12			1
				10		4			10		30	1
				11				5			10	
				14								Shared
				14	1		50					Shared
				5	5		25	15			<10	Shared
				8	4	2	15	2				1
				9	2			9				1
				14			50				<10	Shared
				7.5	7.5		25	10				Shared
				7	7							
				11	1			30				Shared
				4	4	3						Shared
				11			60				<10	Shared
				5	5						<10	Shared

TABLE 1 (Continued)

Land cultivation				Animal husbandry				Means of production			
Irrigated asparagus (ha)	Irrigated alfalfa (ha)	Other irrigated crops (ha)	Rainfed maize (mostly nonmarket) (ha)	Rainfed beans (ha)	Other rainfed crops (ha)	Number of sheep + goats	Number of meat cows	Number of dairy cows	Number of pigs	Hired labour days/year	Owned tractors + supplements
	9		21	15	15	15	15	20	1		
	2	2	10	10	90						
	15	15	15	10	<10						
	6	5	5	40	Shared						
	5.5	5.5	17	Shared	Shared						
	2.5	2.5	11	18	<10						
	5	5			<10						
Peasant households with <10-ha rainfed agricultural production											
	4							10			Shared
	6	2						60	1		
						10					
	4		4								
	3.5	3.5		35							
				30				15			Shared
				3							
	8			5							Shared
	4	1		10							
	2.5	2.5		12							
	4	2.5	0.5	7							
	2.5	3		20							
	2.5	1.25		10				<10			Shared

TABLE 1 Continued

Nonfarm income/subsidies		Family welfare support/month (MXN)	Elderly age support (1,160 MXN/2 months)	External labour income for the household	Relation US migration and production
PROCAMPO/year (MXN)	Remittances/month (MXN)				
Peasant households with irrigated production					
850					Started asparagus production as first partner of external that capitalized in the United States.
6,000				Grocery shop	Started asparagus production as first partner of external that capitalized in the United States.
11,250				Grocery shop	Bought land and started asparagus production with urban capital.
10,500	yes				Capitalized in the United States and invested in asparagus.
5,250					Started asparagus production with the United States capital from migrated sister.
3,000					Capitalized on circular migration to the United States, invested in asparagus.
10,500					Partnered up with other producers that capitalized in the United States.
8,250				AG wage labour	Capitalized on circular migration to the United States until 2007, invested in asparagus.
7,500				AG wage labour	Capitalized on circular migration to the United States and invested in asparagus.
6,000					Worked many years in the United States.
3,000					Partnered up with other producers that capitalized in the United States.
	Yes			Urban wage labour	Capitalized in the United States and came back, invested in livestock and asparagus.
12,500					Capitalized in the United States and invested in asparagus.
7,500	12,000				Capitalized in the United States and invested in production.
6,000					
6,000					
Peasant households with >10-ha rainfed agricultural production					
10,000					Capitalized through circular migration to the United States and invested in land.
7,500					Husband capitalized in the United States and invested in livestock.
8,900					
6,000	Yes				
7,500					
7,000					
10,500	25,500		Yes		
10,500	19,650		Yes		

TABLE 1 (Continued)

Nonfarm income/subsidies						
PROCAMPO/ year (MXN)	Remittances/ month (MXN)	Family welfare support/ month (MXN)	Elderly age support (1,160 MXN/2 months)	External labour income for the household	Relation US migration and production	
6,000	9,800			Grocery shop		
6,750	7,860				Migrated relatives: invested in land that she manages	
11,250	5,900	2,800				
8,250	2,000		Yes	Grocery shop		
10,500	500				Worked many years in the United States.	
11,250		200		AG wage labour		
10,500				AG wage labour		
9,000				AG wage labour	Circular migration to the United States for years.	
8,250			Yes	AG wage labour		
8,250	350			AG wage labour		
7,500			Yes	AG wage labour		
8,500				Grocery shop		
10,500			Yes	Shop		
				Urban wage labour	Circular migration to the United States for years, invested in production.	
8,250		1,650		Urban wage labour		
8,250			Yes	Urban wage labour	Worked many years in the United States.	
8,250			Yes	Urban wage labour		
7,500				Urban wage labour		
Peasant households with <10-ha rainfed agricultural production						
		300			Capitalized in the United States returned to invested in livestock	
	Yes			Circular migration	Comes back from the United States during the harvest period and invested in land.	
	20,000	1,250		AG wage labour		
	16,000				Most working life in the United States; invested in land, but US pension is main income.	
7,000	8,750	200				
5,000	6,000	850		AG wage labour	Circular migration to the United States for years.	
	5,900		Yes			
	500			Wage Labour		

TABLE 1 (Continued)

Nonfarm income/subsidies						
PROCAMPO/ year (MXN)	Remittances/ month (MXN)	Family welfare support/ month (MXN)	Elderly age support (1,160 MXN/2 months)	External labour income for the household	Relation US migration and production	
6,000				AG wage labour		
4,000				AG wage labour AG wage labour		
5,550			Yes	Shop/wage labour Urban wage labour	Worked many years in the United States	
3,500		2,000		Urban wage labour Urban wage labour		

[Correction added on 4 December 2020, after first online publication: For an overview of Table 1, a different format of the table has been added to the Supporting Information.]

The second group that owns more than 10 ha of rainfed agricultural lands is the largest ($n = 26$). Land ownership of all in this group oscillates between 10 and 15 ha with one exception. All (except for one) hold the status of *ejidatario* (son/daughter of), which suggests that most households own their original land allotment. Production concentrates around maize and beans that are used mainly for consumption and as livestock feed. Most households ($n = 19$) also keep sheep/goats and cows. Only six households in this group indicated to depend primarily on agriculture at present; one of these cultivated 60 ha and capitalized through labour migration to the United States for many years, one had income from meat cows ($n = 120$) and also capitalized through labour migration to the United States, and four depended on dairy production for their income (most feed is bought) one of which receives remittances on a regular basis (without specifying how much). The other households in this group combine agricultural production with other sources of income. In this group, eight households receive regular monthly remittances, 11 have a regular income from local wage labour, and four own a little shop in their community. Externally hired labour is low in this group and almost all receive PROCAMPO.

Finally, the last group ($n = 15$) are those households who own or cultivate less than 10 ha of rainfed land with as main crop maize and beans for consumption and livestock feed. In this group, only one household depends on dairy production after capitalizing through labour migration to the United States. Seven households receive regular remittances from the United States (one as pension), and 11 households have a regular income from local wage labour (one indicating to also migrate a few months a year to work in the United States). In this group, six households receive PROCAMPO, and one sold its 6 ha in this year. In this group, only four respondents identified as farmers/producers.

From the respondents of our survey, all households that indicated to depend primarily on agricultural production (either dependent on the production of irrigated asparagus, dairy production, or a large herd of cattle) had invested in commercial production with capital resulting from migration. The other households engaged in commercial asparagus production (often with less land) also started production with capital from migration or through sharecropping arrangements. The latter supplemented the household economy with agricultural or urban wage labour. Finally, some land has been bought and brought into commercial production by local urban dwellers with external capital (*posesionarios*) invested in agriculture.

Though we recognize that wealth and social status in rural communities are not necessarily linked to land ownership anymore (Kelly, 2011; Sunam & McCarthy, 2016), we do show that it still is a good proxy to look at how dependent households are of external sources of income. However, to shift to the production of asparagus, external capital from remittances or migration or investments by outsiders (*posesionarios*) proved crucial. After reconversion, some asparagus producers utilized their early starter advantage to increase their landholding buying land with capital from their economically successful agricultural production and/or remittances and through sharecropping arrangements. Though this development tends towards a structural factors explanation, more research is needed to identify how household choices and preferences played a role in shaping the changes that took place and which led to land accumulation in the *ejido*.

Our survey shows that those with access to the largest parcels of irrigated land and to larger extensions of rainfed land are peasant household economies that depend mostly on production and hire external labour. Those with least access to rainfed land have the highest levels of external wage-related incomes and semi-proletarianism or dependence on regular remittances from international migration. Dairy farmers with more than 10 cows are an exception in this case, as some of these households depend on agricultural production while tilling/owning relatively little land.

All households with rainfed land produced maize and many also beans (sometimes produced as traditional *milpa* with squash) for consumption, which confirms the assertion of Eakin, Perales, Appendini, and Sweeney (2014) that maize production is sustained by many households even though it is mostly for consumption and not the market. The production of these crops also serves the purpose of producing fodder for most of the livestock that is used for meat production (sheep, goats and cattle) for consumption and the market. However all households who only produce rainfed crops (up to 30 ha) and keep a few animals (the great exception are the dairy producers) are semi-proletarian, have a shop and/or depend on remittances from migrant relatives in the United States. In traditional differentiation debates, these semi-proletarian households with little or no land would have been classified as relatively poor and low on the

wealth ladder. However, our analysis shows that through remittances some of these households might, in fact, be quite wealthy challenging the traditional notions of class and wealth as discussed below.

8 | THE END OF THE RURAL–URBAN BIAS

In this article, we have studied the relations between (a) the macroeconomic context that was shaped by Mexican neoliberal reforms since the 1980s, (b) international migration to the United States, (c) the composition of peasant household economies today and (d) its relations to social differentiation. We did so through the case study of the *ejido* Jesús María in the state of Guanajuato, Central Mexico. We show how since the 1980s, the peasant sector in Mexico came into crisis in a context of economic liberalization and neoliberal reforms. The gradual reduction of state support, as a consequence of the Mexican debt crisis and the gradual market liberalization forced many peasant households into local wage labour and (inter)national migration to the United States.

Our analysis of the history of the *ejido* Jesús María mirrors these developments; however, in Jesús María, around the 2000s, irrigated agriculture started to shift to the commercial production of asparagus. This nontraditional crop, which is commercialized through a local cooperative, has since then become the most important irrigated crop occupying 105 out of the 108 ha of irrigated land in the *ejido* in 2020. Our analysis shows that this shift was financed by capital resulting from cyclical migration to the United States, remittances and a few local urban petty investors.

Our analysis of the history of the *ejido* and the peasant household survey shows that international migration is reworking social structures and relations in peasant rural communities through the capitalization and subsidization of agricultural production. This takes place through remittances sent by relatives living abroad and importantly through capital that is invested by cyclical migrants who (re)turn to agricultural production in their home community (some after retirement as wage labourers in the United States). These investments enable a transition to commercial production (in this case asparagus) and the accumulation of access to prime-irrigated land through direct investments in land or through the establishment of sharecropping agreements. As a result, new relations of production emerge in the irrigated fields through arrangements between the owners of irrigated land and migrants that return with capital and invest in asparagus production. As such, migration intermingles with local land ownership in reshaping the relations of production and differentiation among peasant households. In parallel, capital from remittances, wage labour and state subsidies (through PROCAMPO) maintain rainfed production for consumption and fodder in most households.

In this sense, migration has become, for some producers, a stepping stone towards increased land ownership and superior wealth (see also Kelly, 2011). The combination of land ownership (either through inheritance or through new acquisitions with capital from migration) and the ability to invest in agricultural production through capital from cyclical rural/urban international migration has marked which peasant households have been able to benefit from the commercial production of asparagus in Jesús María and sustain agriculturally based livelihoods. Those that have not been able to do so because of economic or other productive reasons, or because of different personal aspirations and preferences, sustain their peasant households through a permanent urban–rural link that is based on either the reception of substantial remittances, local wage labour and other economic activities outside of the production unit. These findings suggest that a theorization that recognizes that processes of deagrarianization and reagrarianization can run in parallel and change through time not only in response to structural change but also due to personal preferences and ambitions is best suited to study today's agrarian transformations in rural Mexico and beyond.

This case study shows that peasant households have become dependent in different ways on strong rural–urban relations and related flows of people and capital from both near as well as faraway places. Therefore, the urban–rural divide has become fluid as people and capital constantly cross this divide. Rural communities and peasant households can therefore no longer be seen and conceptualized as separate from the near and, in this case especially, the far away international urban spheres. In this way, the liberalization/globalization of the Mexican economy that spurred the peasant crisis and increased rural migration flows to the United States has led to the gradual end of the rural–urban bias. The farewell to the urban/rural bias in Mexico has not only come, as Nadine Reis (2019) suggests,

through the peripheral financialization of economic activities through cheap labour and debt, but importantly through the increased and now deeply entrenched interrelations of people, capital and peasant agricultural production between the rural/urban and the local/global spheres. These deep interrelations are, as this case study suggests, rooted in widespread cyclical international migration, remittances and the high levels of semi-proletarianization of the Mexican peasantry.

This points to the important role that migration has come to play in the sustenance and (re)creation of peasant households in many Mexican rural communities. Though outmigration is a marked and persistent phenomenon, it has not led to land abandonment or a shortage of labour as León Andrade et al. (2014) suggest. Rather, this case study suggests that migration remittances have become an important source of income that enables the viability of numerous peasant households while financing productive transformations that enable production-based peasant households. It also suggests that increasingly the limits of accumulation based on the production of nontraditional agro-export crops are and will be marked not by a lack of financialization but by environmental limitations such as groundwater overextraction, climate change and soil degradation. These relations and the process that result from them requires more research, especially in the areas of nontraditional crops expansion, high levels of peasant agriculture and international migration. In Mexico, these areas include the avocado and berry-producing centres in Michoacán and Jalisco, and the fresh vegetable producing areas in Baja California, Northern and Central Mexico. This becomes especially pertinent in a context in which the US government is trying to close and more closely regulate the borders, and an economic world crisis caused by the covid-19 pandemic is unfolding.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of this article.

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