

# Land Use in Mesoamerica from 1950 to the Present

## Environmental Violence and Land Appropriation

---

*Wilson Picado-Umaña, Pedro Urquijo Torres and Diana Alejandra Méndez Rojas*

Since the 1950s, the objectives of public policy and the basic vocabulary of governments and economists have been defined by notions of economic growth, technological modernization, improvement of the standard of living, and social inclusion. There has been no other national project stronger than that of turning every country into a prosperous and democratic society. The aim of this chapter is to show, through the analysis of land appropriation in Mexico and Central America, that the strength of the “developmentalist conviction” has historically been contradicted by reality: rather than development, these regions have experienced “maldevelopment” (Amin 1990; Tortosa 2009). This text is divided into five sections. First, it provides a theoretical introduction using the concepts of Plantationocene and environmental violence as tools to address the issue in question. Second, it examines the differences between Mexico and Central America in terms of the weight of the state in the rural sector. Third, it describes the main transformations in land use that occurred in the region between 1950 and 1980. Fourth, it points out the most important changes that have taken place since the 1980s, in the context of the rise of neoliberal policies. Fifth, it considers the role of social and community resistance to the advance of new forms of mining and agrarian extractivism in the region. Brief conclusions at the end of the text discuss the importance of these tendencies for the understanding of the Anthropocene and its impacts on land-use in the region.

### **Plantationocene and Environmental Violence**

This chapter replaces the concept of land use with that of land appropriation to refer to the changes that have occurred in the territories of Mexico and Central America since the post-war period. The category land use, although obviously functional to describe this process, carries the risk of making invisible the power relations that at different scales have been behind the territorial transformations experienced in this region since 1950. Rather than the result of a territorial lottery, the spatial dominance of monoculture in the countries under study – to cite just one example –

should be understood as a dynamic of land, technology, and resource appropriation by elites and other social actors. The action of these groups, through the market, state policies, repression, or assassination, has led to the marginalization of the poorest populations, their labor exploitation, their displacement to other regions and countries, as well as their condemnation to marginal lands.

The concept of land appropriation places our analysis in the context of the current debate on the so-called Plantationocene. As is well known, the discussion around the Anthropocene has opened the door to the creation of alternative notions and narratives that adjust, as well as broaden, the semantic scope of the term. The most well-known has emerged around the Capitalocene, which defines modern times as an era dominated by the market, industry, and the pursuit of profit through the exploitation of human labor as well as the extraction of natural resources (Moore 2017; Moore 2018). Recently, the concept of Plantationocene has been proposed, understood as the transformation of agricultural areas, pastures and forests into monoculture and extractive plantations, using slave or controlled labor under some kind of coercion that uproots individuals from their places of origin (Haraway 2015: 162). According to Haraway, there is some consensus in understanding that the colonial plantation system has been one of the foundations of the modern, mechanized, energy-hungry industrial system. As Wolford suggests, the plantation, that is, large-scale, export-oriented agriculture dependent on forced labor, has played a determinant role in the formation of modernity through the expansion of Western power in the Americas, Asia, and Africa. The concept of Plantationocene pinpoints the racialized component behind the systems of production and social relations that marked the origin of capitalism in the modern world, further describing its effects on the simplification of landscapes, as well as on the transcontinental movement of people, plants, and species (Wolford 2021: 1622–23).

Although the original term refers, strictly speaking, to the slave (and post-slave) plantation economy, some authors have reinterpreted the plantation in light of the contemporary monoculture boom in the tropics. Thus, for example, for Wang and Xu, in their study of sugarcane production in Guangxi province, southern China, the Plantationocene refers to the existence of plantations as a predominant form of production, characterized by large-scale monoculture under the control of corporations through intensive exploitation of labor. According to these authors, these are vast tracts of land dispossessed from peasants and local communities by transnational corporations and large landowners, where local inhabitants are displaced or become wage laborers. Plantations represent simplified landscapes, established through the alienation of land and labor (Wang and Xu 2022: 2).

Although it is not a specific tool for our analysis, the modern meaning of Plantationocene frames, in the planetary context, the changes that have occurred in the landscapes of Mexico and Central America since 1950, in five aspects in particular. First, in the sense that the great devices behind land appropriation and use in the re-

gion have been linked to the control of land and productive resources, exercised by the elites, corporate agriculture, and the state. Second, this control has meant the displacement, expropriation and territorial dispossession of peasant, Indigenous, and Afro-descendant communities. Third, these processes have led to the formation of masses of wage-laborers responsible for cultivating and harvesting the production on entrepreneurial farms. Fourth, in addition to the above social consequences, it has meant a homogenization of agrarian landscapes due to the extension of monoculture associated with Green Revolution technology, contributing to deforestation as well as the loss of biodiversity. Fifth, in the same way, such simplification has led to the formation of territorial units dependent on a fossil-based energy matrix, with high consumption levels of chemical inputs that for decades have altered soils and waters, as well as environmental and human health. In this last sense in particular, the expressions of the Plantacionocene in the study area have also been linked to the development of the Toxiconocene, a productive growth sustained by the introduction of toxic substances to the agricultural activity. In the words of Jason W. Moore (2016), this is a type of negative value accumulation that not only generates impacts on the landscape and bodies, but also calls into question the viability of industrial agriculture in the future.

These processes have occurred, for the most part, upon a framework of violence, which will be referred to as environmental violence. In recent years, new interpretations have been made of the relationship between environmental alterations and violence. This is expressed in notions such as “violent environments,” “environmental violence,” “slow violence,” and “violence of development”, among others (Peluso and Watts 2001; Nixon 2011; Mowforth 2014; White 2018; Marcantonio 2022). Although written with different objectives, these approaches coincide in identifying the existence of a specifically environmental violence, derived from the various forms of exploitation of natural resources predominant in capitalism. Environmental violence can be understood as a set of practices and processes of appropriation of natural resources that affect the human condition, preventing the satisfaction of the vital needs of the entire population, hindering the right of access to nature for the poorest populations, and in general, affecting the common good through the aggressive alteration of landscapes. Environmental violence comprises a set of socially constructed devices that facilitate the exploitation of resources in favor of a particular elite or social group. These devices, such as agricultural technology, allow the accumulation and reproduction of capital, while at the same time having narratives that legitimize their development through the externalization and invisibilization of environmental consequences.

Environmental violence is not exceptional in that it occurs within a specific framework of social and power relations, as is the case with other types of violence. In this sense, environmental violence is part of structural violence. It is distinguished by the fact that it arises in the process of the social appropriation of nature,

expressing itself through critical factors such as resource scarcity, environmental degradation, inequality, social conflict, environmental injustice and ecological vulnerability, among others. This is why its marginal impact is greater for the most disadvantaged groups in society. In summary, the dynamics of land appropriation in Mexico and Central America since 1950 have been, essentially, a process mediated by environmental violence.

It is worthwhile to make an observation regarding the exercise of power, state building, and sovereignty. Despite the similarities in the historical-environmental processes of Mexico and Central America, it is important to consider the contrast in the shaping of state policies. While in the case of Central American nations, since the mid-nineteenth century and throughout the last century, the state had been characterized by systematic subordination to transnational markets; in Mexico it was consolidated by a persistent regulatory presence between the 1920s and 1980s. In general, according to a definition that holds a certain consensus, this chapter understands the state as the material condensation of power relations, which are expressed in the capacity for autonomous action of the institutional players (Poulantzas 1978).

### **The State as a Major Catalyst of Development Violence (1950–1980)**

In Central America, the state was constituted in a subordinate manner to the agro-export model dependent on the international market, characterized by a concentration of capital and credit (Pérez-Brignoli 1988; Fonseca Corrales 2013). In the early twentieth century, the agro-export model shifted from the hegemony of the nineteenth-century coffee oligarchies to the expansive presence of transnational companies, a pattern of mono-export and land grabbing whose most visible representation was the United Fruit Company. Between the 1960s and 1970s, the vulnerability of the regional economies subjected to the agro-export model became particularly evident with the crises in international markets and the absence of strong national states that could provide alternative mechanisms of containment to the exertion of power from abroad. It was precisely in this decade when the first attempts at productive articulation based on the common market were glimpsed (Bulmer-Thomas 1989; Guerra-Borges 1993), although the fragmentation and weakness of the states in the region has prevailed.

Overall, the state was an architect of territorial transformation in Central America throughout the period under study. Even in agrarian-based economies, the state acted as a catalyst for the expansion of capital in the rural world, consistently sponsoring agricultural modernization (Guerra-Borges 1993). To this end, it was essential to direct investment and credit to the most thriving productive sectors, expanding the territorial coverage of banking agencies and other state, parastatal or private

credit systems. Access to this financial capital was necessary to promote the adoption of new cultivation, harvesting, and processing technologies required for monoculture production. Due to the growth in the level of investment in this industry, it was also necessary to create crop insurance systems to protect capital against the impact of extreme hydro-meteorological events, such as floods and droughts. Such insurance was backed by public funds and, in general, constituted a hidden subsidy to the richest producers such as rice growers.

In post-revolutionary Mexico, the new state was constituted through the creation and unification of diverse institutions, strengthening of the political bureaucracy, and establishment of protectionist administrative, legal, and fiscal apparatuses. The official discourse legitimized social demands and sovereignty, supported by visible public investment in hydraulic and road infrastructure and the exploitation of subsoil resources. The process of nationalization and state domination was particularly important in a society whose social pact rested on loopholes that escaped the control and influence of the market and capital, exemplified by the *ejido*, a form of collective land ownership, constitutionally recognized since 1917 (Roux 2005). At different times, either by strengthening the collective ownership of ejidos and communities – as occurred in the economic cycles of 1934–1940 and 1970–1976 – or by limiting it in favor of individual ownership, as occurred between 1940 and 1970, the Mexican state wielded direct power in a manner that defined the development process.

From the 1930s until 1980, the state was reorganized from a complex state apparatus and an agrarian regime founded on the patronage of the one-party government of the Institutional Revolutionary Party (PRI) – from the perspective of peasants and rural peoples – to large agro-industrial regions with transnational interests (Urquijo Torres 2017). To this end, it made use of different corporate organizations, which incorporated the great masses of producers and workers whose subordination was decisive in the design of an authoritarian-corporate model that offered rights in exchange for political loyalty. This formula of construction and representation of the Mexican state began its decline in the early 1980s, when it gave up its hegemonic and sovereign role, in compliance with the structural adjustment and economic stabilization programs demanded by the International Monetary Fund and the World Bank.

## Transformations in Land Use (1950– 1980)

### The Agroexport Boom and Developmental Capitalism in Central America

The second half of the twentieth century in Central America saw the rise of export agriculture (Pérez-Brignoli and Samper 1994), a process that shaped the social dy-

namics and the regional landscape. The bonanza was common in coffee and bananas between the post-war period and the 1970s. Grain production increased even in countries with a weaker agrarian tradition, such as Honduras and Nicaragua. This expansion, especially in Costa Rica and El Salvador, occurred thanks to the adoption of chemical fertilizers and the introduction of high-yield, low-input varieties that proved to be very productive. The old polyculture coffee plantation gradually gave way to full sun coffee with controlled shade (Samper 1993). In the case of bananas, the transportation crisis during World War II and the impact of diseases such as the Panama Disease, impeded production of the fruit in the region, but it managed to revitalize itself by the 1950s. Although the Panama Disease led to the relocation of the crop from the Caribbean to the Pacific, as was the case in Costa Rica, renewed varieties made it possible to increase yields per hectare by replacing the Gros Michel variety with Cavendish and Giant Cavendish. In addition, there was an increasing presence of national producers in the fruit production and marketing chain (Ellis 1983; López 1986; Viales Hurtado 2001).

Cattle raising was another of the dominant activities in the regional landscape. After the post-war period, Central America became a beef exporting region to the United States, due to the expansion of the fast-food market in that country. As is well known, the foot-and-mouth disease quarantine, established by the United States for South American meat-producing countries, increased the quota for meat exports from Central America. Under these circumstances and thanks to funds linked to the Alliance for Progress, national governments promoted the construction of roads and other public infrastructure works, facilitating the transport of meat to the ports. In Central America, a modern agribusiness made up of dozens of processing plants was built with technology and refrigeration systems that ensured the quality and safety required by the U.S. market. This meant the expansion of pastures at the cost of forest clearing and the displacement of peasant farms. In other words, the export of animal protein to rich countries pivoted on the profligate appropriation of plant tissue by livestock elites (Williams 1985; Edelman 1992; León, Barbosa, and Aguilar 1982; León 2012).

Cotton and sugar cane were other crops characteristic of this agroexport boom. Central America experienced a brief but impressive cotton boom between 1950 and 1970. Although cultivation has been important since the 1930s in El Salvador, Guatemala, and Nicaragua, since 1950, the activity has increased dramatically in agricultural areas, especially in the Pacific. Supported by the government and various World Bank programs, cotton was the first “breakthrough” of Green Revolution technology in the region. In addition to the concentration of production under large-scale landowners, possibly the most distinctive feature of this expansion was its dependence on the use of chemical inputs, specifically for pest and disease control, leading to contamination of water, soil, and human bodies. The expulsion of Cuban sugarcane from the U.S. market after the Revolution in 1959 led to the

expansion of Central America's participation. A higher export quota and rising prices favored the growth of the cultivated area in the region until at least the mid-1970s. Irrigation and the increase in milling capacity favored the increase in production, as well as the introduction of new varieties, especially in the case of Costa Rica. Sugarcane was also favored after the cotton crisis of the 1970s. Declining international prices for this product motivated the substitution of many cotton lands for sugarcane lands, as well as the reuse of mechanical technology in sugar production (Guerra-Borges 1993).

Maize, beans, and rice showed mixed performances across the board. Maize and beans prevailed throughout the period as typical peasant crops, concentrated on hillside lands with degraded soils. Although efforts were made by national and international institutions to improve the technological resources, both crops showed fluctuating trends in production and yields per hectare. An aspect that complicated their situation, especially in the case of maize, was the growing importation of grain from the United States through programs such as PL-480 (Public Law 480), which filled Central American markets with products at subsidized prices, affecting the competitiveness of local production. Rice was one of the crops where the technology of the Green Revolution was fully adopted. Located in the Pacific lands of Panama, Costa Rica, and Nicaragua, it received strong support from the state and international organizations for the promotion of technification, as well as for the establishment of crop insurance systems. This favored the expansion of production from the 1970s, when new crop varieties were adapted from the International Center for Tropical Agriculture in Colombia. Rice, unlike maize and beans, was predominantly produced by agribusinesses, protected by the state and under the control of large landowners (Picado-Umaña 2013).

In social terms, the extension of pastureland displaced the poorest population, a circumstance that coffee, sugar cane, and banana producers took advantage of to employ the masses of landless farmers in harvesting crops and other temporary jobs. The adoption of Green Revolution technology increased social inequality in the countryside and favored the migration of the poorest families to the cities. In the cities, this resulted in the formation of marginal and precarious squatter settlements, lacking public services and located in areas of environmental risk. Industrial growth, especially important between 1960 and 1970, benefited from this labor force, although most of it was incorporated into the informal urban economy. In ecological terms, beyond the productive dimension, technological modernization created an environment of toxicity in agroecosystems due to the intensive and uncontrolled use of agrochemicals; a phenomenon little understood by the agrarian and health authorities of the time, which in many cases affected the bodies of workers, homemakers, and even the mother's milk that nourished infants.

Other processes contributed directly and indirectly to the transformation of the Central American territory and landscape. The first of these was the so-called

agrarian reform. With the exception of the reform promoted by Jacobo Arbenz in Guatemala, as well as that implemented during the Sandinista regime in Nicaragua, the reforms in Honduras, El Salvador and Costa Rica did not lead to a radical and direct transformation of the land tenure structure. In these cases, the reforms were redistributive, as they focused on alleviating the land conflict and its aggravating factors, and not on attacking the structural causes of the conflict: the unequal distribution of land between the agrarian elite and the peasantry. In this context, the creation of colonies and peasant settlements was the predominant policy adopted by the state to avoid expropriation processes that were unacceptable to large landowners. In general, none of these reforms threatened the land dedicated to export (Mora Alfaro 1990; FAO 1990).

The other major process was the creation of protected areas. In the midst of the global debate on tropical deforestation, a hallmark of the 1970s and 1980s, the formation of national parks became increasingly important in the region (Parsons 1976; Evans 1999). Changes in economic policy in the 1980s and the expansion of the tourism economy in the following decade solidified the ecological and economic relevance of these conservation areas (López and Granados 2016; López 2020). It is important to note that, as the case of Costa Rica shows, land policy and conservation policy often came into conflict, with the *precaristas* (squatters or landless peasants) and conservationists as fundamental – and often antagonistic – actors in this drama (Picado-Umaña and Botella-Rodríguez 2022; Picado-Umaña and Botella-Rodríguez 2023).

## The Uneven Development of the Mexican Agricultural Sector

The 1950s marked a boom in Mexico's agricultural sector which, thanks to innovation and government intervention, brought stability to exports and allowed for food self-sufficiency in basic products. To a large extent, this was the result of the investment and planning that structured agriculture in the context of World War II and connected it to the U.S. war economy. On the one hand, protection was provided to producers of raw materials destined for foreign markets – such as rubber, guayule, henequen, ixtle, and cotton – and on the other hand, the intensification of maize and wheat production for domestic consumption was established as a priority (Torres 1979). The “battle for production,” as this intense period is known, led to an unequal development of the rural environment that favored producers dedicated to crops that were highly valued in international trade, or to a growing market of grains for national consumption supported by the incorporation of Green Revolution technology (Fujigaki 2004). The so-called *pequeña propiedad* (small plot) was then placed at the center of economic planning, which caused agrarianism to lose the management of production and the possibility of retaining the political centrality with which it was positioned during Cardenismo (Méndez Rojas and Hernández



2023). In other words, control of production remained mainly in the hands of businessmen rather than of *ejidatarios* (De la Peña and Morales Ibarra 1989).

In line with the incentives conferred by the state, agriculture continued to be a primary factor in the regional formation of the territory (Bassols Batalla 1992). Intensive cotton production can be considered as the monoculture farm that best expresses the terms of this occupation in the northern states, specifically in areas linked to irrigated agriculture such as the Comarca Lagunera, the valleys of Mexicali, Yaqui, Mayo, Culiacán and El Fuerte, as well as in the districts of Delicias and Anáhuac. In the first cycle of expansion, which took place between the 1930s and 1950s, cotton cultivation led to population growth, urbanization, cultural identification and labor organization that was sustained by the economic boom represented by its transfer to the international market. This also increased the number of producers in the form of private companies, partnerships with the state and workers' organizations that managed their occupation from unions and confederations (Aboites Aguilar 2013).

The productive integration of the northern part of the country with the rest of the economy, however, came at the cost of a mercantile dependence on the United States. It was precisely this factor that caused the million hectares devoted to cotton to spiral into a strong crisis, when at the beginning of the 1960s the Mexican product ceased to be competitive due to the granting of economic support to U.S. production and the introduction of dumping. These circumstances were compounded by other factors that, depending on the area in question, were aligned in different orders: the fall in the international price of fiber, substitution by synthetic derivatives, soil salinization, soil erosion, the presence of pests, and the indebtedness of producers (Carrillo Rojas 2013). The result was a 60 percent decrease in total production (Aboites Aguilar 2013). In this scenario, corrective measures were undertaken, such as the promotion of work in the *maquiladoras*, which proved ineffective in containing the pauperization of inadequately planned cities, the spread of a climate of violence encouraged by drug trafficking that occupied key areas and an accentuated migration to the neighboring country (Aboites Aguilar 2018).

The 1970s represented a turning point in agricultural production, as exports lost momentum due to the fluctuation of international commodity prices and the protectionist measures adopted by the United States in relation to Mexican crops, which, in addition to cotton, had an impact on the trade of tomatoes and some fruits. At the same time, and without being sold in the U.S. market due to a quarantine imposed in 1914, avocados were consolidated as a monoculture in the Purépecha plateau in Michoacán, with the planting of the *Hass* variety, which allowed California to emerge as its main producer (Hernández Fernández 2021). The spread of avocado trees led to the replacement of endemic species such as pine and oak, which was not only encouraged by the profitability of their production,

but also as a result of a productive diversification strategy on the part of the state towards coffee-growing areas, such as Apatzingán.

As in the case of cotton, avocado producers made use of the various options that the state opened up for them, from cooperative organization to the creation of transnational companies that gained predominance by mobilizing one-fifth of world production. Despite this, it was the peasants and ejidatarios who were the first to face the effects of environmental degradation, biodiversity loss, and widening technological gaps. In fact, these groups were able to enter avocado production until the 1980s, due to the risky investment involved in starting avocado cultivation and changing the region's former forestry vocation (Hernández Fernández 2021). These transformations implied rearticulations in the exercise of power and the uses of violence that at the local scale determined land management and shaped national politics by transcending agrarian violence for the properly rural (Piccato 2022). It was not until 1997 that Michoacan avocados were able to move seasonally to the United States.

As far as consumer commodities are concerned, it is important to note that the technology of the Green Revolution, together with a strong investment in research and education, access to hydraulic works, and orographic conditions conducive to mechanization allowed the development of specialized wheat agriculture in northern areas of the country, such as Sonora, which enabled the country to achieve self-sufficiency in the mid-1950s and even generate exportable surpluses (Méndez Rojas: in press). Maize production did not demonstrate growth comparable to that of wheat, due to the heterogeneity of its producers, the biology of the grain that was less malleable due to the hybridization technique, and the lack of access to credit for small producers and ejidatarios (Gutiérrez Núñez 2017). In spite of this, the trend of the period shows a transfer of the largest volume of production from rainfed to irrigated land in the Bajío, central Jalisco, and the Mexico-Toluca-Puebla-Tlaxcala valleys. By 1970, both wheat and maize reported a drop in productivity and self-sufficiency was lost.

Within the framework of these transformations, livestock farming was shown to be a stable contributor to the Gross Domestic Product, after overcoming the effects of the foot-and-mouth disease epidemic that broke out in 1946. Its management was linked to political uses that affected small organized producers, such as those in the state of Morelos, more than those linked to national and international supply chains located in Chihuahua, Durango, Coahuila, Nuevo León, and Tamaulipas (Padilla 2015). The extension of fodder crops, such as alfalfa, and the inclusion of varieties that transformed the agricultural landscapes of entire regions also contributed to the strengthening of livestock farming. This was the case with the replacement of maize by sorghum in the Bajío region, which addressed both the need to explore options capable of achieving adequate yields and incorporate crops resistant to drought cycles (Gutiérrez Núñez 2020). The sum of these elements allowed

some sectors to increase their meat and dairy consumption in the following decades, despite the fact that the general panorama in rural areas was one of caloric and protein underconsumption. Because of this, in the 1980s the government-initiated programs such as the Mexican Food System, aimed at achieving food sufficiency and rooting rainfed producers in the cultivation of basic grains (Pedroza Ortega 2018).

## **The Neoliberal Shift: The Appropriation of Globalized Land (1980-present)**

At the end of the 20th century, Latin America experienced a series of structural changes through national policies that, linked to globalized capital, altered the forms of land access and use (Offner 2019). The adoption of the neoliberal model projected that the countries of the region, being developing economies, required the support of large international investors in order to articulate capital, markets, and technologies. In general terms, the strategy applied was the same in Mexico and Central America: elimination of state agencies and subsidies for the countryside; cancellation of taxes and withholdings for exports; advantages for competition and the international market; and the signing of free trade agreements, among other aspects. Ultimately, the neoliberal model had a negative impact among small and medium rural producers, who were unable to compete with large agribusiness companies, due to the consequent fall in the prices of their products in local markets (Urquijo 2017).

In Mexico and Central America, the hegemonic neoliberal model was favored by transnational public policies in which the different governments acted jointly. In 2001, the heads of state of Mexico, Guatemala, Belize, Honduras, Nicaragua, El Salvador, Costa Rica, Panama, and Colombia launched Plan Puebla Panama (PPP) with the aim of providing solutions to social marginalization and poverty. The agreement contemplated eight strategies for the exploitation of natural resources, the promotion of tourism, the facilitation of trade, road integration, energy interconnection, and the linking of telecommunications services (Cedeño 2002). In 2008, the agreement was restructured as the Mesoamerican Integration and Development Project. In reality, the initiative strengthened the conditions of dependence of the countries in the area on large corporations and governments in the United States, Europe, and Asia (Capdepont Ballina 2011). With the terrain marked since the late 1980s, the first decades of the new millennium were marked by an unprecedented strategy of regional unity aimed at facilitating the free intervention of transnational markets, especially in the areas of agriculture and access to natural, mineral, and energy resources.

In Mexico, the 1990s opened with an economic reform that allowed the commercialization of agricultural land by encouraging the disintegration of the ejido. This

accelerated a process of transnationalization of nature, with the consequent loss of the state's management capacity, which resorted to new intermediaries following the crisis of the organizations in charge of the agricultural sector. It was in 1992 that constitutional reform to Article 27 and the issuance of a new Agrarian Law established the idea of the predominance of private property over social property. However, in contrast to what was anticipated by the promoters and critics of the constitutional modification, the ejido was not completely privatized. The transformation of the property regime took place in areas oriented to tourism development and urban growth. To date, about 50% of the rural area is still under the social property regime (Torres-Mazuera 2020: 50). The dynamics of land use concessions in recent decades contrasts with the post-revolutionary history, which was marked by political arrangements that granted certain social protection to the groups that inhabited and sustained themselves from these territories.

At the height of neoliberalism, activities such as mining returned to a privatized status for both national and international capital (Garibay and Balzaretto 2009; Garibay et al. 2014). Likewise, legal modifications favored the promotion of tourism, which resorted to plundering the Caribbean and Pacific coasts through the construction of large hotel consortiums (Cañada 2015). New markets, such as water, were opened to speculation as they became necessary inputs for neo-extractivist activities. Today even the deep ocean is a source of finance for minerals (Núñez Rodríguez 2020).

In Central America, the oligarchic model and massive foreign investment placed the forces of capital at the center. The displacement of community or collective land management forms increased during the most violent periods in the region. As indicated above, except in the case of the reformist attempt in Guatemala in the 1950s and the Sandinista experience in Nicaragua, most countries experienced late and partial agrarian reforms (Pino and Thorpe 1992). The common denominator of the situation in Central America is the weakness of the sovereignty of the state. With the nuance of Costa Rica, all the states of the isthmus operate as mediators of the great global capitals and the territories in dispute. This situation leaves governments as the architects of land management in favor of companies seeking to promote electricity or mining projects. A telling example happened in Honduras when concessions were granted to the Inversiones los Pinares mining project in a protected area that includes tributaries of the San Pedro and Guapinol rivers. To this must be added the fragility of the economies that are exposed to the vagaries of the world market, which, in times of falling prices, generate migratory exoduses.

The long-standing neoliberal policies in Central America did not affect the evolution of agricultural production for export the same way as in Mexico. Crops such as sugar cane, coffee, and bananas have maintained their territorial weight since the 1990s, although with moderate growth compared to what occurred between 1960 and 1970. Maize and beans, still associated with family farming, are barely withstanding

the onslaught of the food import market, while rice remains strong, especially in the south of the region. Cattle ranching, once dominant in the flats and lowlands, went into crisis starting in the 1980s, freeing up pastures that would later be reforested or used to grow crops such as pineapple and oil palm. Indeed, the great territorial change that has taken place since the 1980 crisis and trade liberalization has been the emergence of non-traditional activities; in addition to oil palm and pineapple, these include melons and forestry plantations. These crops put increasing pressure on land dedicated to basic grains and intensively consume resources such as water and nutrients, under a new form of agrarian extractivism. Oil palm in Honduras and pineapple in Costa Rica are evidence of this new extractivism, which in addition to degrading soils and polluting aquifers with agrochemicals, favors the exploitation of the labor force of poor peasants and immigrants and is the cause of violent social conflict that is made invisible by the states. The greatest poverty in the countries is concentrated in these growing areas, clearly defined as female and indigenous, which also affects millions of children (State of the Nation 2021 Program).

### **Resistance and Conflict (1980-present)**

In both Mexico and Central America, the persistence of forms of plundering of labor and nature has led to the emergence of antagonisms anchored in the struggle for access to land and other natural resources, which have resulted in mobilizations in the defense of territory and the construction of autonomy. The region as a whole has been affected by forms of violence – including environmental violence – associated with the new criminal economies that have escalated their volume of production and circulation. In Mexico, this process was supported by the practices of selective repression applied to armed groups in the 1970s (Aviña 2018). This environment corresponded with a growing corruption of the state framework that led to an escalation in territorial defense that gained visibility in the community police in Guerrero and the self-defense groups in Michoacán (Castro Soto 2005; Hernández Navarro 2014). Meanwhile, in Central America, open conflict settled after the desolate panorama at the end of the cycle of civil wars in the 1990s, which were particularly intense in Guatemala, El Salvador, and Nicaragua.

After the climate of mobilization associated with agrarianism and with the advent of neoliberalism, one of the most persistent social responses to the irruption of the North American Free Trade Agreement was the uprising of the Ejército Zapatista de Liberación Nacional (Zapatista Army of National Liberation, EZLN) in 1994. Its appearance in the state of Chiapas marked the radicalization of the autonomist option. In its formation, it abandoned the theoretical moorings of the left and immersed itself in the indigenous world, which provided it with the necessary referents for a radical critique of capitalist modernity and the homogeneous nation. In addi-

tion, it incorporated women as a fundamental subject in the defense of the territory (Millán 2014). Rebellious social organization was also encouraged by the emergence of megaprojects with local impacts. Examples of these are the construction of the thermoelectric plant in Huesca, Morelos, the International Airport in Texcoco, State of Mexico, the dam in La Parota, Guerrero, and the settlement of Canadian mining companies in San Luis Potosí (Boni, Garibay, and McCall 2015). Along with the defense of the territory, the rural movement acquired another route of articulation around resistance to the cultivation of transgenic crops in the country, which added the defense of biodiversity (Boege 2008; De la Torre 2019).

In Central America, resistance has taken on more dramatic tones. Societies exhausted by civil wars and processes of repression paved the way for a less conflictive consolidation of neoliberalism, to which was added the defeat of the only triumphant revolution in the region in Nicaragua in 1990. However, with the new century, rearticulations took place that gave impetus to mobilization around the territory and its defense. New coalitions have positioned themselves against extractivist megaprojects, while disputing the management of natural resources. In Costa Rica, in 2011, several organizations demonstrated from San José, the capital, to Miramar, in the province of Puntarenas, in opposition to the Bella Vista-Miramar mining project. The same was done in 2010 by a social front united against gold mining in Crucitas, bordering Nicaragua. In 2014, different groups protested from the municipality of La Libertad, Chontales, Nicaragua, to Managua against the Libertad mine; in Guatemala, coalitions in defense of territory carried out the *Marcha Indígena, Campesina y Popular* (Indigenous, Peasant and Popular March) in 2012 and the *Marcha por el Agua* (March for Water) in 2016 (Bran-Guzmán 2017). Some of these actions find their organizational antecedents in experiences linked to the democratic management of production, as was the Salvadoran case in which the cooperative organization in places such as Chimaltenango favored peasant politicization and empowerment to confront hydraulic projects (Chávez 2017; State of the Nation Program 2021).

In Mexico, the electoral triumph of Andrés Manuel López Obrador in 2018 opened a new juncture in which the anti-corruption discourse took an ascending course that became a questioning of the political and economic model (Concheiro Bórquez 2022). The policy towards the agricultural sector chose to break the cycle of corporativism, which has generated a schism among the peasant groups that encountered limits to their role as intermediaries in the representation and management of resources. The new government has assumed the direct and individualized distribution of incentives as part of a plan that contemplates the transit from intermediation to peasant self-management, without this implying the ejido and its communities as a territorial base (García Jiménez 2019; Hernández García 2022). The principles of the *Sembrando Vida* (Sowing Life) program, which aims to

combat rural poverty and environmental degradation through the implementation of agroforestry production systems, are an example of this shift.

The Fourth Transformation, as the self-named process opened by *obradorismo* maintains broad links with the agrarian world from where it assumes practices pointed out by its critics as evidence of the persistence of a neo-developmental model. Autonomist leftists, for example, denounce the construction of the Mayan train in the Yucatan Peninsula as a reiteration of projects based on territorial dispossession and the commodification of nature. Despite this political shift, the lack of state protection for environmental leaders, who are targets of persecution, and assassination in Mexico is condemned. In Central America, the same has occurred to the detriment of leaders such as Berta Cáceres in Honduras, who have succumbed to violence, which is one of the contemporary expressions of land appropriation. These episodes evoke the worst moments of past repression, under the auspices of territorial and environmental disputes.

## Conclusions

Since 1950, the lands of Mexico and Central America have shown the characteristics of violent development. On the one hand, territorial transformation in these environments has occurred at the same time that various processes of insurgency, civil war, and political protest in general have taken place in their societies (Torres-Rivas 2013). In this sense, development as a political aspiration has coexisted with violence as a social reality and practice. War and insurgency were variables that undoubtedly altered spatial dynamics, especially among the most marginalized populations in each country. This meant not only impacts on agricultural production but, above all, the mobilization and forced displacement of thousands of families to other regions and countries (Morales 2007; Vargas et al. 1995). But this is not a simple relationship of parallelism or simultaneity. Development has been one of the causes of the social and environmental violence that has marked the history of these territories since World War II. The developmentalist policy in the rural sector, obsessed with increasing productivity through the Green Revolution, widened social inequality, favoring support for the richest producers, exploiting peasant labor, and expelling thousands of landless families to the city. Recent development, disguised under the banner of sustainability, has been dedicated to the abuse of land and natural resources, promoting the expansion of crops such as avocado, oil palm, and pineapple at the cost of the exploitation of migrant labor, as well as the degradation and chemical contamination of commons such as soil and water.

Despite the modernization of economies, which are increasingly focused on the service and technology sectors, the countryside is still a space of power and conflict in Mexico and Central America. The assassinations of the women and men who lead

environmental causes, or of Indigenous people defending their lands, call into question the role that states play as protectors of the rights and living conditions of the most vulnerable populations. Rather, they highlight a function that this institution has had as a priority since 1950: to favor the expansion of capital in the countryside, ensuring its reproduction and viability. In this context, a phenomenon has emerged in recent decades that, without calling into question the capitalist structure in our countries, is certainly changing the territorial dynamics in many ways, integrating land, land use, poverty, police repression, violence, and social armament in a single transnational space, even on a global scale: namely, drug trafficking. Drug trafficking causes the forced displacement of populations just as it did during the civil war between the 1970s and 1980s, while taking advantage of protected areas and seas for unimpeded transit. This is, however, a territorial variable of violent and virtual land appropriation that is still under study.

In Mexico and Central America, land appropriation has been a dramatic indication that, rather than development, this region has experienced maldevelopment. Despite the wealth generated by agro-exports since the 1950s – now expanded by new crops such as avocado, pineapple, and oil palm – social inequality prevails in the territories under study. Poverty is often rural, Indigenous, and Afro-descendant, and particularly affects women and children. Moreover, increases in food production occurred at the same time that malnutrition dominated the Mexican and Central American countryside, affecting children, especially between the 1960s and 1990s. Finally, the uncontrolled use of agrochemicals for decades has caused persistent contamination of soils, water, and human bodies. There can be little doubt that the dynamics of land use in Mexico and Central America over the last three quarters of a century show a representative and well-defined trace of the impact of the Anthropocene on the Earth system.

In Mexico and Central America, land appropriation has been a dramatic indication that, rather than development, this region has experienced maldevelopment. Despite the wealth generated by agro-exports since the 1950s – now expanded by new crops such as avocado, pineapple, and oil palm – social inequality prevails in the territories under study. Poverty is often rural, Indigenous, and Afro-descendant, and particularly affects women and children. Moreover, increases in food production occurred at the same time that malnutrition dominated the Mexican and Central American countryside, affecting children, especially between the 1960s and 1990s. Finally, the uncontrolled use of agrochemicals for decades has caused persistent contamination of soils, water, and human bodies. There can be little doubt that the dynamics of land use in Mexico and Central America over the last three quarters of a century show a representative and well-defined trace of the impact of the Anthropocene on the Earth system.

*Translated by Eric Rummelhoff and revised by Luisa Raquel Ellermeier.*



## References

- Aboites Aguilar, Luis. 2013. *El norte entre algodones: población, trabajo agrícola y optimismo en México, 1930–1970*. Mexico City: El Colegio de México.
- . 2018. *El norte mexicano sin algodones, 1970–2010. Estancamiento, inconformidad y el violento adiós al optimismo*. Mexico City: El Colegio de México.
- Amin, Samir. 1990. *Maldevelopment. Anatomy of a Global Failure*. London: The United Nations University.
- Aviña, Alexander. 2018. “A War Against Our People: Dirty Wars and Drugs Wars in 1970s Mexico”. In *Mexico Beyond 1968*, ed. Jaime Pensado and Enrique Ochoa, 134–152. Tucson: University of Arizona Press.
- Bassols Batalla, Ángel. 1992. *México: formación de regiones económicas: influencias, factores y sistemas*. Mexico City: National Autonomous University of Mexico.
- Boege, Eckart. 2008. *El patrimonio biocultural de los pueblos indígenas de México. Hacia la conservación in situ de la biodiversidad y agrobiodiversidad en los territorios indígenas*. Mexico City: National Institute of Anthropology and History.
- Boni, Andrew, Claudio Garibay, and Michael McCall. 2015. “Sustainable Mining, Indigenous Rights, and Conservation: Conflict and Discourse in Wirikuta/Catorce, San Luis Potosi, Mexico”. *Geojournal* 80: 759–780.
- Bran-Guzmán, Emanuel. 2017. “Conflictividad sociambiental en Centroamérica. Una década de rearticulación y movilización social y política.” *Argumentos* 30, no. 83: 43–68.
- Bulmer-Thomas, Victor. 1989. *La economía política de Centroamérica desde 1920*. San Jose: CABI / EDUCA.
- Cañada, Ernest. 2015. “El turismo en las disputas por el territorio.” In *La configuración capitalista de paisajes turísticos*, ed. Lilia Zizumbo and Neptalí Monterroso, 13–20. Toluca: Autonomous University of the State of Mexico.
- Capdepon Ballina, Jorge Luis. 2011. “Mesoamérica o el Proyecto Mesoamérica: La historia como pretexto.” *LiminaR. Estudios sociales y humanísticos* 9, no. 1: 132–152.
- Carrillo Rojas, Arturo. 2013. “Estudio introductorio.” In *Algodón en el norte de México (1920–1970). Impactos regionales de un cultivo estratégico*, ed. Mario Cerutti and Araceli Almaraz, 11–36. Tijuana: El Colegio de la Frontera Norte.
- Castro Soto, Gustavo. 2005. “El movimiento social en Mesoamérica por la defensa de los recursos naturales.” *OSAL. Revista del Observatorio Social de América Latina* 17: 41–51.
- Cedeño, Manuel. 2002. *Participación social y gobernabilidad en Tabasco en el marco del Plan Puebla Panamá*. Mexico City: Universidad Juárez Autónoma de Tabasco.
- Chávez, Joaquín. 2017. *Poets & Prophets of the Resistance. Intellectuals & the Origins of El Salvador Civil War*. New York: Oxford University Press.
- Concheiro Bórquez, Elvira. 2022. “La 4T: Combate a la corrupción y ampliación de lo público, alternativas en busca del bienestar.” Paper presented at the Ninth Latin

- American and Caribbean Conference on Social Sciences, Universidad Nacional Autónoma de México, Mexico City, June 7–10.
- De la Peña, Sergio and Marcel Morales Ibarra. 1989. *Historia de la cuestión agraria mexicana*. Vol. 6, *El agrarismo y la industrialización de México, 1940–1950*. Mexico City: Siglo Veintiuno Editores.
- De la Torre, Oscar. 2019. *Maíz, autonomía y territorio. Dimensión constituyente de Derechos Humanos en México*. Mexico City: Akal.
- Edelman, Marc. 1992. *The Logic of the Latifundio: The Large Estates of Northwestern Costa Rica Since the Late Nineteenth Century*. Redwood: Stanford University Press.
- Ellis, Frank. 1983. *Las transnacionales del banano en Centroamérica*. San Jose: EDUCA.
- Evans, Sterling. 1999. *The Green Republic: A Conservation History of Costa Rica*. Austin: The University of Texas Press.
- FAO. 1990. *Centroamérica y los problemas del desarrollo en el campo*. Santiago de Chile: FAO.
- Fonseca Corrales, Elizabeth. 2013. *Centroamérica: su historia*. San Jose: Editorial de la Universidad de Costa Rica.
- Fujigaki, Esperanza. 2004. *La agricultura siglos XVI al XX*. Mexico City: National Autonomous University of Mexico/Oceano.
- García Jiménez, Carlos. 2019. “En la era de la 4T: Zapata vive, la lucha sigue... Propuestas y desafíos campesinos para el rescate del campo en Guerrero.” *El Cotidiano* 216: 107–117.
- Garibay, Claudio and Alejandra Balzarette. 2009. “Goldcorp y la reciprocidad negativa en el paisaje minero de Mezcala, Guerrero.” *Desacatos. Revista de Antropología Social* 30: 91–110.
- Garibay, Claudio, Andrew Boni, Francesco Pánico, and Pedro S. Urquijo. 2014. “Corporación minera, colusión gubernamental y desposesión campesina. El caso de Goldcorp Inc en Mazapil, Zacatecas.” *Desacatos. Revista de Antropología Social* 44: 113–142.
- Guerra-Borges, Alfredo. 1993. “El desarrollo económico.” In *Historia General de América Central. De la posguerra a la crisis (1945–1979)*, ed. Héctor Pérez-Brignoli, 13–83. Madrid: FLACSO.
- Gutiérrez Núñez, Netzahualcóyotl Luis. 2017. “Cambio agrario y Revolución Verde: Dilemas científicos, políticos y agrarios en la agricultura mexicana del maíz, 1920–1970.” Ph.D. diss, El Colegio de Mexico.
- . 2020. “Entre lo inesperado y lo imprevisto: la sequía y los proyectos de mejoramiento de maíz y sorgo en El Bajío, 1943–1970.” *Historia Mexicana* 70, num. 1: 207–258.
- Haraway, Donna. 2015. “Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin.” *Environmental Humanities* 6, no. 1: 159–165.

- Hernández Fernández, Viridiana. 2021. "Guacamole Ecosystems: Agriculture, Migration and Deforestation in Twentieth-Century Mexico." PhD diss., University of California, Davis.
- Hernández García, Milton Gabriel. 2022. *Vientos de cambio en la Cuarta Transformación. Logros y avances históricos en el gobierno de AMLO*. Mexico City: Ce-Acatl.
- Hernández Navarro, Luis. 2014. *Hermanos en armas. Policías comunitarias y autodefensas*. Mexico City: Brigada para leer en libertad.
- Leon, Jorge, Carlos Barbosa and Justo Aguilar. 1982. *Desarrollo tecnológico en la ganadería de carne*. San Jose: National Council for Scientific and Technological Research.
- León, Jorge. 2012. *Historia Económica de Costa Rica en el siglo XX*. Vol. 2, *La economía rural*. San Jose: IICE-CIHAC/Universidad de Costa Rica.
- López, José Roberto. 1986. *La economía del banano en Centroamérica*. San Jose: DEI.
- López, Maximiliano and Roberto Granados. 2016. "Desnudando el mito: Un balance sobre las tensiones del modelo de conservación en Costa Rica (1970–2015)." *Historia Ambiental Latinoamericana y Caribeña* 6, no. 6. 1: 61–85.
- López, Maximiliano. 2020. "Conservación y dinámica territorial en Costa Rica, de 1950 al presente." In *Cruce de caminos. Lecturas disciplinarias del territorio*, ed. Raúl Fonseca, Wilson Picado, Abelardo Morales, and Maximiliano López, 43–68. San Jose: FLACSO/Universidad Nacional de Costa Rica.
- Marcantonio, Richard A. 2022. *Environmental Violence: In the Earth System and the Human Niche*. Cambridge: Cambridge University Press.
- Méndez Rojas, Diana Alejandra and Juan de la Fuente Hernández. 2023. *Haciendas sin hacendados. Ideario y acción de la Liga de Agrónomos Socialistas, 1935–1949*. Mexico City: Centro de Estudios del Movimiento Obrero y Socialista/Consejo Nacional de Humanidades, Ciencias y Tecnologías.
- Méndez Rojas, Diana Alejandra. in press. *Modernización nacional, experticia transnacional: itinerarios de los becarios en ciencias agrícolas de la Fundación Rockefeller en México, 1940–1980*. Mexico City: Instituto de Investigaciones Dr. José María Luis Mora/Instituto Nacional de Estudios Históricos de las Revoluciones de México.
- Millán, Margara. 2014. *Des-ordenando el género/¿Des-centrando la nación? El zapatismo de las mujeres indígenas y sus consecuencias*. Mexico City: Universidad Nacional Autónoma de México/Benemérita Universidad Autónoma de Puebla / Ediciones del Livro.
- Moore, Jason W. 2017. "The Capitalocene, Part I: On the Nature and Origins of Our Ecological Crisis." *The Journal of Peasant Studies* 44, no. 3: 594–630.
- . 2018. "The Capitalocene Part II: Accumulation by Appropriation and the Centrality of Unpaid Work/energy." *The Journal of Peasant Studies* 45, no. 2: 237–43.
- . ed. 2016. *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*. Oakland: PM Press.

- Mora Alfaro, J. 1990. "La distribución de la tierra y los asentamientos humanos en Costa Rica". In *Centroamérica y los problemas del desarrollo en el campo*, Organización de las Naciones Unidas para la Agricultura y la Alimentación (ed.), 61–107. Santiago de Chile: FAO.
- Morales, Abelardo. 2007. *La diáspora de la posguerra. Regionalismo de los migrantes y dinámicas territoriales en América Central*. San Jose: FLACSO.
- Mowforth, Martin. 2014. *The Violence of Development. Resource Depletion, Environmental Crises and Human Rights Abuses in Central America*. New York: Pluto Press.
- Nixon, Rob. 2011. *Slow Violence, and the Environmentalism of the Poor*. Massachusetts: Harvard University Press.
- Núñez Rodríguez, Violeta. 2020. *El capital rumbo al mar. Una nueva era minera: minería marina*. Mexico City: Ithaca.
- Offner, Amy. 2019. *Sorting out the Mixed Economy. The Rise and Fall of Welfare and Developmental States in the Americas*. Princeton: Princeton University Press.
- Padilla, Tanalís. 2015. *Después de Zapata. El movimiento jaramillista y los orígenes de la guerrilla en México (1940–1962)*. Mexico City: Akal.
- Parsons, J. 1976. "Forest to Pasture: Development or Destruction?" *Revista de Biología Tropical* 24: 121–138.
- Pedroza Ortega, Luis Ozmar. 2018. "El Sistema Alimentario Mexicano: su acción en el campo y en la alimentación, 1980–1982." *Revista de Historia y Geografía* 39: 21–48.
- Peluso, Nancy Lee and Michael Watts. 2001. *Violent Environments*. Ithaca: Cornell University Press.
- Pérez-Brignoli, Héctor and Mario Samper. 1994. *Tierra, café y sociedad: ensayos sobre la historia agraria centroamericana*. San Jose: Costa Rica / FLACSO Program.
- Pérez-Brignoli, Héctor. 1988. *Breve historia de Centroamérica*. Madrid: Alianza Editorial.
- Picado-Umaña, Wilson and Elisa Botella-Rodríguez. 2022. "Campesinos antiecológicos. Política de tierras y conservación de bosques en Costa Rica Contemporánea." *Studia Histórica. Historia Contemporánea* 40: 63–87.
- Picado-Umaña, Wilson and Elisa Botella-Rodríguez. 2023. "From Grassland to Forest: The Puzzle of Land Tenure and Forest Conservation in Costa Rica (1962–2014)." *Rural History* 34, no. 1: 115–136.
- Picado Umaña, Wilson. 2013. "Las buenas semillas. Plantas, capital genético y Revolución Verde en Costa Rica." *Historia Ambiental Latinoamericana y Caribeña* 2, no. 2: 308–337.
- Piccato, Pablo A. 2022. *Historia mínima de la violencia en México*. Mexico City: El Colegio de México.
- Pino, Hugo and Andrew Thorpe. 1992. *Honduras: el ajuste estructural y la reforma agraria*. Tegucigalpa: Guaymuras.
- Poulantzas, Nicos. 1978. *Estado, poder y socialismo*. Mexico City: Siglo Veintiuno Editores.

- Programa Estado de la Nación. 2021. *Sexto Estado de la Región 2021*. San José: CONARE-PEN.
- Roux, Rhina. 2005. *El príncipe mexicano: subalternidad, historia y Estado*. Mexico City: Era.
- Samper, Mario. 1993. "Policultivo modernización y crisis: paradojas del cambio técnico-social en la caficultura centroamericana." *Revista de Historia*, (36), pp. 27: 111–145.
- Torres, Blanca. 1979. *Historia de la Revolución mexicana, 1940–1952. México en la Segunda Guerra Mundial*. Mexico City: El Colegio de México.
- Torres-Mazuera, Gabriela. 2020. "Introducción. La regulación imposible." In *La regulación imposible: (i)legalidad e (i)legitimidad en los mercados de tierra en México al inicio del siglo XXI*, ed. Gabriela Torres-Mazuera and Kirsten Appendini, 29–67. Mexico City: El Colegio de México.
- Torres-Rivas, Edelberto. 2013. *Revoluciones sin cambios revolucionarios. Ensayos sobre la crisis en Centroamérica*. Guatemala: F&G Editores.
- Tortosa Blasco, José María. 2009. "El futuro del Maldesarrollo." *Revista Obets*, no. 4: 67–83.
- Urquijo Torres, Pedro Sergio. 2017. *Pequeñas localidades rurales. Reapropiación territorial en Argentina y México*. Morelia: Centro de Investigaciones en Geografía Ambiental UNAM.
- Vargas, Juan Rafael, Segundo Montes, Alberto Arente, Jorge Buenrostro and Dolores Nieto. 1995. "El impacto económico y social de las migraciones en Centroamérica (1980–1989)." *Anuario de Estudios Centroamericanos* 21, no. 1–2: 39–81.
- Viales Hurtado, Ronny. 2001. "La coyuntura bananera, los productos "complementarios" y la dinámica productiva empresarial para la exportación de la United Fruit Company en el Caribe costarricense. 1883–1934." *Revista de Historia*, (36), pp. 44: 69–119.
- Wang, Chunyu and Yunan Xu. 2022. "Reflecting on the Plantationocene: the Political Economy of Sugarcane Plantations in Guangxi, China." *The Journal of Peasant Studies*.
- White, Rob. 2018. "Theoretical Perspectives on Environmental Violence." In *The Routledge International Handbook of Violence Studies*, ed. Walter S. DeKeseredy, Callie Marie Rennison, and Amanda K. Hall-Sanchez, 121–134. London: Routledge.
- Williams, Robert G. 1985. *Export Agriculture and the Crisis in Central America*. Chapel Hill: The University of North Carolina Press.
- Wolford, Wendy. 2021. "The Plantationocene: A Lusotropical Contribution to the Theory." *Annals of the American Association of Geographers* 111, no. 6: 1622–1639.

