Casey Marina Lurtz

Developing the Mexican Countryside: The Department of Fomento’s Social Project of Modernization

From the mid-nineteenth century onward, governments across Latin America founded departments of fomento, or development, to promote economic growth and modernization. This article looks at the evolution of this department in Mexico and the ways in which it integrated infrastructure, migration, land policy, science, and education into a rural economic and social project. For Department of Fomento leaders, agriculture became the connective tissue linking peace to prosperity. Though many failed, initiatives aimed at increasing the diversity of Mexico’s rural production illustrate a concerted effort to avoid top-heavy monoculture and use scientific planning to stabilize and unify the nation.

During the nineteenth century, as governments throughout Latin America emerged from the decades of violence that had followed independence, many founded new departments and ministries dedicated to the promotion of economic growth and modernization. The titles of these departments varied from country to country, as did their corpus of responsibilities, but many included the word fomento in their name and embraced a wide variety of projects. Fomento—translated as development, improvement, or promotion—captured the spirit of the era and the new drive of presidents and congresses to move past the essential work of maintaining peace and into the newly possible work of

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promoting growth. With new technologies easing global communication and trade and new types of demand emerging from industrializing Europe and North America, Latin American politicians and producers saw opportunity in the need for raw material that their countries might provide. The various departments and ministries dedicated to development across the Western Hemisphere became the bodies responsible for exploiting this opportunity and reintegrating their plantations, farms, mines, and forests into the global economy. They sought to make their countries proactive beneficiaries of and participants in the globalization of agricultural commodities, setting their bureaucrats, scientists, and producers on equal footing with the foreign purchasers and investors who had spurred the export boom.

In Mexico, the Ministry of Fomento, Colonization, Industry, and Commerce was founded in 1853.\(^1\) Headed by former presidents and powerful technocrats, it was the first ministry to have a larger budget than the Ministry of War.\(^2\) Its work encompassed any and all initiatives dedicated to improving the country, building up its infrastructure, facilitating trade, promoting emigration, and expanding the economy. It promoted industry and invention; diversification and foreign direct investment; and research, education, and the country’s reputation abroad. It was the epitome of the centralizing and modernizing work for which Mexico’s governments, particularly that of Porfirio Díaz (1876–1911), came to be known. A rich body of historiography has explored its constituent parts—railroads, the surveying and sale of public lands, educational endeavors, the promotion of industry, cartography, and the draining of the Valley of Mexico—but little has been written about the integrative work of the ministry as a whole.\(^3\) Given charge of all the institutional

\(^1\) The ministry, which grew out of the Office of Colonization and Industry, was renamed and reorganized multiple times as its imperatives shifted and, eventually, as commerce spun off into its own department. Founded as a ministry, it later became a department. Its reports were always directed to the Department of State or directly to the Mexican president or emperor, as was the case during the French-sponsored takeover in the mid-1860s. Mexico, Dirección de Colonización e Industria, Memoria 1852 (Mexico City, 1852); Mexico, Secretaría de Fomento, Memoria 1867 (Mexico City, 1868), 6–7.


apparatus of liberal modernization, the ministers and bureaucrats at Fomento viewed their department not as a series of separate initiatives, but as a cohesive project for progress.

In the ministry’s self-presentation and its plans for Mexico’s future, it is clear that exploitation of the Mexican territory itself was a key thread connecting this disparate body of projects. Agricultural development and the future peace and prosperity of the Mexican nation were inextricably interwoven. While it simultaneously promoted and protected nascent industrialization, Fomento sought to unlock the proverbial prosperity of its fields and forests and make them as productive as the mines that had long defined the region’s participation in the global economy. Though agriculture would not have its own section within the ministry until the 1880s, the countryside served as the connective tissue that held together many other initiatives of the department. Cartography and scientific expeditions would study the territory and identify the potential productivity of its variety of ecosystems and landscapes. The survey and sale of public lands would turn those landscapes into property. Colonization would people those properties with agriculturalists and laborers. Industry would process commodities into finished products. Infrastructure would connect agricultural and industrial producers to markets both national and international. Mining and heavy industry would be promoted as well, but it was agriculture that would employ the majority of the country’s land and people. Through that employment and the new sources of revenue that agriculture brought, the Mexican nation would grow peaceful and prosperous.

The tension between intention and capacity for action was a constant source of frustration for those in charge of Fomento. Over more than fifty years, almost continual shortfalls in funding and institutional reach impeded the ability of the ministry to implement its multitude of initiatives. 

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projects. Public-private partnerships through concessions and subsidies became a frequent solution, though they undermined the ability of the department to direct its efforts toward its intended ends. The involvement of foreign capital that these partnerships facilitated was seen as necessary, but hopefully temporary, kickstarting but not precluding the emergence of a strong cohort of Mexican capitalists and producers. As the decades passed, those arenas most heavily funded by foreigners—railroads, mining, and commerce—were spun off into their own administrative units, leading to a further concentration of Fomento’s projects around modernizing agricultural development. In this arena, small producers continually received as much attention as their large-scale counterparts.

Rather than assessing the success of the department’s endeavors, this article seeks to demonstrate the deep roots of state-directed development that is generally discussed in the post–World War II context. Through close readings of Fomento’s reports to Congress and an examination of three of its key policy arenas, I argue that this ministry melded liberal market promotion to state-sponsored modernization in a manner that presaged later efforts. The work of Fomento was thus essentially social as well as economic. Rather than solely undergirding already-existing plantation-based production or approaching development as an essentially economic project, the Department of Fomento saw Mexico’s future in a diversified countryside. The actors in this play of progress were to be a mixed set: campesinos and hacendados, nationals and foreigners, experts and the unschooled. Together, through science,

5 More research needs to be done on the relationships between Fomento and Hacienda. See Zuleta’s analysis of national budgets, in “La Secretaría de Fomento.”

6 Many accounts of government promotion of agriculture in this era and the years that followed argue that technological improvement in cooperation with existing elites, focused on already dominant commodities, was the central concern of ministries like Fomento. Teresa Cribelli’s work has begun to explore how, at least in Brazil, innovation and integration were also at times part of these projects. See also Stuart McCook, “Promoting the ‘Practical’: Science and Agricultural Modernization in Puerto Rico and Colombia, 1920–1940,” Agricultural History 75, no. 1 (2001): 52–82; Andrew Bowman, “Ecology to Technocracy: Scientists, Surveys and Power to the Agricultural Development of Late-Colonial Zambia,” Journal of Southern African Studies 37, no. 1 (2011): 135–53; Warren Dean, “The Green Wave of Coffee: Beginnings of Tropical Agricultural Research in Brazil (1885–1900),” Hispanic American Historical Review 69, no. 1 (1989): 91–115; Germán Pacheco Troconis, “Ciencias agrícolas, modernización e inmigración en Venezuela, 1908–1948,” Revista agroalimentaria 12, no. 23 (2006): 85–100; and Teresa Cribelli, “‘These Industrial Forests’: Economic Nationalism and the Search for Agro-Industrial Commodities in Nineteenth-Century Brazil,” Journal of Latin American Studies 45, no. 3 (2013): 545–79.

7 As Leida Fernández Prieto has argued with regard to scientific knowledge in Latin America in this era, we need to recognize the great diversity of actors and types of knowledge at play in tropical agriculture, as well as the multidirectionality of their learning and knowledge production. Fernández Prieto, “‘Islands of Knowledge: Science and Agriculture in the History of Latin America and the Caribbean,” Isis 104, no. 4 (2013): 788–97.
experimentation, and communication, they would make Mexico prosper. By making Mexico prosperous, they would make it stable and secure. Recognizing the strength of their country and their citizens was in the soil, Mexico’s ministers sought to integrate international and national individuals, ideas, and goods into a prosperous future.

Proverbial Wealth and Actual Chaos

The proverbial wealth of the Mexican countryside has long been a trope among the country’s advocates, both native and foreign. Its territory encompasses arid deserts and torrid jungles, deep canyons and high peaks, all with their own set of possibilities. Alexander von Humboldt was an early proponent of exploiting this immeasurably rich landscape, but he also recognized the challenges the region faced. In the colonial era, mining defined the colony’s engagement with global markets, but its countryside also became home to increasingly varied agricultural endeavors. Huge haciendas and latifundio producing for internal as well as global markets cultivated grains and sugar, cotton, and various native fibers. These were not the feudal, anticapitalist estates that became the stereotype of the Spanish American countryside, but their capacity for innovation and market integration was constrained by colonial rule. At independence, the new Mexican government was right to complain of its lack of institutional and infrastructural capacity, to blame the mercantilism of the Spanish Crown for the insularity and isolation of Mexico’s economy.

The decades after independence offered little chance for progress. Civil and foreign wars wracked the countryside as conservatives and liberals fought over the nature of governance. The development of infrastructure and industry spurring economic growth in Europe and the United States was impossible in Mexico under these circumstances, impeded further by the rugged geography of the country. Having incurred substantial debts in its multitude of wars, Mexico had lost access to international bond markets, severely limiting the resources

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available for development projects.\textsuperscript{11} Though Humboldt was far from the only foreign writer to celebrate the country’s potential, few saw the risk as worthwhile.\textsuperscript{12} This insecurity did not mean a full stop to the country’s rural production, nor to its attempts to begin the process of industrialization, but it did significantly retard growth and the accumulation of capital in anything besides property.\textsuperscript{13}

Thus, even forty years after the merchants and hacendados of New Spain began their fight to throw off Spanish colonialism, the country was still a backwater, disconnected from world markets, awash in debt and violence. It was provincial, its productive regions disconnected from one another, from the national government, and from the rising global demand for the raw materials its ecologically diverse countryside might provide. All agreed that the government needed to encourage capitalist accumulation, agricultural modernization, and industrialization, but the degree to which the state should intervene in the promotion of this development was a continual bone of contention among the country’s intellectual and political elite.\textsuperscript{14} Yet the dream of making good on the endowments granted Mexico by God and nature endured. The Department of Fomento was to be the means to make that dream a reality.

Foundational Frustrations

The Department of Fomento was founded in 1853, part of an institution-building spree taken on by Antonio López de Santa Anna during his eleventh and final stint as the country’s president. Its predecessor, the Office of Colonization and Industry, had been a messy hodgepodge of underfunded projects and public-private initiatives.\textsuperscript{15} With Santa Anna’s return as the symbolic leader of a strong-state movement bent on redeeming Mexico in the wake of its loss to the United States, that type of disorganized, decentralized governance could not stand. A robust


\textsuperscript{12} As Karen Caplan’s most recent work explores, the market potential of Mexico was seen as both a boon and a threat to emergent U.S. political and economic hegemony in the Western Hemisphere. Karen Caplan, “The Latin American Trade, the United States, and the Origins of Development, 1808–1830” (paper, Latin American History Workshop, University of Chicago, 26 Feb. 2015).


\textsuperscript{14} García Vázquez, “La configuración de la Escuela Nacional de Agronomía,” 4.

\textsuperscript{15} Mexico, Dirección de Colonización e Industria, \textit{Memoria 1852}.
executive, supported by a powerful set of ministries, embraced the positivist ideal of “plenty of administration, no politics.” From its foundation, Fomento’s ministers worked to articulate a clearer vision of how progress could be achieved, long before they had the resources necessary to act on those aims. Across these first decades, the department’s rhetoric and policy coalesced around a more interventionist state ever more focused on the integration of the countryside into the nation, both economically and socially.

Despite the revolution that overthrew Santa Anna in 1854, bringing with it the symbolic annulment of his authoritarian policies, much of the state apparatus he had instituted was soon enshrined in the Constitution of 1857. That constitution, despite turmoil and bureaucratic reform, would itself survive until 1917. This apparatus signified the embrace of a state directly responsible for the promotion of national progress through the application of scientific knowledge to understanding and managing the world. Or, as the second secretary of Fomento wrote, his ministry’s work was directed toward “the happiness of those peoples who want to advance, marching forward with civilization and taking advantage of the triumphs of science and industry.” Later ministers of Fomento would look back at this foundational moment as a vital articulation of the integrated project of promoting economic and social progress. The naming of the department and its diverse portfolio of activities signaled that Fomento was intended to be “a harmonious conjunction of all the public services that relate to the material progress of the country.” In Mexico, the work of development would be a coordinated endeavor.

Fomento’s early years were marked by a lack of funding and a disorganized but ambitious project of experimentation and opportunism. The early 1860s saw new laws regarding the privatization of public, Church, and communally held lands, but most went unenforced. Communications—trains, roads, bridges, telegraphs, and ports—were heavily emphasized. President Benito Juárez, the liberal hero, oversaw a flurry of railroad concessions, but most expired unfulfilled. The gathering of

16 Will Fowler, Santa Anna of Mexico (Lincoln, Neb., 2007), 302.
17 The conclusion to Secretary Manuel Siliceo’s first report to Congress reiterated that despite the lack of funds allocated, Fomento had taken major steps toward saving the country from its reputation as "unhappy Mexico." Mexico, Secretaría de Fomento, Memoria 1857 (Mexico City, 1857), 128–29.
18 García Vázquez, “La configuración de la Escuela Nacional de Agricultura,” 5.
19 Mexico, Secretaría de Fomento, Memoria 1857, 5.
20 Mexico, Secretaría de Fomento, Memoria 1892–1896 (Mexico City, 1897).
21 See, for example, Mexico, Secretaría de Fomento, Memoria 1865 (Mexico City, 1866).
22 Mexico, Legislación de terrenos baldíos (Mexico City, 1885), 3–9.
23 The first concessions for railroads were granted under Santa Anna and upheld by those who overthrew him, but no ties were laid until the 1860s. Fowler, Santa Anna of Mexico, 302;
information was also made a priority, as its paucity made investment inefficient and unattractive. Of primary importance was the completion of an accurate map of the entire Mexican territory, the lack of which was an embarrassment in an era ever more scientifically and statistically oriented. In line with this, Antonio García Cubas, the gifted and prolific cartographer charged with leading the mapping project, was also made responsible for the collection of whatever related data he and his team could measure. In fits and starts, this work continued across the French-funded and conservative-backed imperial regime of Maximilian and through Juárez’s triumphal return in 1867. The positivist-inflected centralist liberalism that has long defined Porfirio Díaz had its origins here, with Juárez’s reorganization of education and a further enabling of public-private concessionary partnerships.

Porfirio Díaz’s seizure of the presidency in 1876 brought with it continued frustration regarding the state’s lack of capacity. Unable to do much else, his first minister of Fomento, Vicente Riva Palacio, further refined the responsibilities of the department. Melding the positivism of Herbert Spencer and Auguste Comte with the classic liberal ideal of a secular state that protected individual economic liberties, Riva Palacio wrote of a coordinated program of scientific development as a means to fulfill the government’s obligation to help Mexican society evolve and achieve membership in international scientific and commercial communities. The country would participate in those communities as both producer and consumer, with the government protecting nascent industries in both agriculture and manufacturing, through a delayed embracing of the liberal doctrine of free trade. The focus was placed


26 Most histories of Fomento begin in the 1880s, but the ministry was an important component of Díaz’s plans from the moment he took power, appointing one of his key rivals—Riva Palacio—as its head. For more on the liberalism of the era, see Charles A. Hale, The Transformation of Liberalism in Late Nineteenth-Century Mexico (Princeton, N.J., 1989); and Mexico, Secretaría de Fomento, Memoria 1876 (Mexico City, 1877), 252, 487, 529.

27 Mexico, Secretaría de Fomento, Memoria 1876, 529–30.
entirely on material improvements to the country; democracy and individual liberties could come later.28

Still, though, the government lacked the capacity to act on these aspirations and ideologies. The rhetoric of reports to Congress in these first decades was one of lost opportunities, ongoing crises, and unexploited potential.29 As it had done since the beginning with regard to infrastructure, the department’s leadership promoted the foundation and strengthening of public-private initiatives, both within the national government and independent of it. It worked to facilitate concessions for colonization companies who might bring in capital and immigrants to jumpstart Mexico’s economic future. It shared information with the Mexican Agricultural Society, founded in 1879 by a group of enterprising hacendados, bureaucrats, and merchants and modeled on similar improving societies across Europe, the United States, and increasingly Latin America as well.30 With the Minister of Finance Matías Romero as its honorary head, the society soon had branches in states across the union and published monthly bulletins containing information on livestock, crops, and pests as well as commodity prices at home and abroad.31 The ministry also began recruiting regional government into the development game. It sent around the first of a series of surveys to governors and municipal presidents requesting information on local agricultural conditions, production, and potential in order to further promote the exploitation of the land.32 Further, it expanded the accessibility of the National School of Agriculture (the Escuela Nacional de Agricultura or ENA), and began working with state governments to found branch schools in the provinces, where students would be exposed to a positivist-oriented education that melded the scientific process with bureaucratic altruism in service of social and economic progress.33

Writing in 1879, the Díaz government called agriculture “perhaps the
most important field in the Republic and that which can advance the greatest number” and, to this end, further expanded scholarships and eased entrance exams to increase accessibility to those beyond the usual elite corpus of students.34

When, following his revolutionary creed of no reelection, Díaz handed the presidency to Manuel González in 1880, he briefly took up the mantle of minister of Fomento himself—a testament to the importance of the department. Díaz soon stepped aside, though, handing over the reins to Carlos Pacheco, who would lead the department until his death in 1891. Pacheco’s appointment coincided with the relative consolidation of peace in the country and a gradual strengthening of the economy. As relations with foreign governments were normalized, the national debt renegotiated, and access to international capital through bond markets reopened, Pacheco became the first minister with seemingly sufficient resources to enact Fomento’s ambitious program.35 The social project of rural development became a means for Pacheco and his successors to chase the ideal of capitalizing on peace to bring prosperity.

A Social Project of Experimentation

Historians have pointed to a bifurcation of audiences and aims for Mexico’s nineteenth-century rural development projects that maps well onto similar movements across the Americas. On one side was support for small farmers through the provision of credit, fertilizers, seeds, and improved methods. On the other was the promotion of rapid modernization through foreign investment and the introduction of new equipment, transportation, and commercial facilities.36 The first meant investment in education and knowledge creation with agronomists as the central actors, the second investment in infrastructure and the cultivation of foreign interest with businessmen at the heart of the project.37 The first was a Latin American project, the second a foreign one. Writ large, the first required a reorganization of the social order, the second a reinforcement of the status quo. In Mexico, this differentiation has been mapped onto a periodization that moves from

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34 Periódico quincenal de la Sociedad de Artes y Oficios, Jan. 1, 1879, 107, quoted in Tortolero Villaseñor, De la coa a la máquina de vapor, 60.
35 Marcello Carmagnani, Estado y mercado: la economía pública del liberalismo mexicano, 1850–1911 (Mexico City, 1994); Salvucci, Politics, Markets, and Mexico’s “London Debt.”
36 Tortolero Villaseñor, De la coa a la máquina de vapor, 48; García Vázquez, “La configuración de la Escuela Nacional de Agricultura,” 9–10.
experimentation to consolidation across the export boom, with resources increasingly directed toward large-scale plantation agriculture until revolutionary violence brought Fomento’s work to a screeching, if temporary, halt.

Looking closely at the department’s work, it is clear that the two projects overlapped and required many of the same ground-level improvements and investments. The Porfirian government was nothing if not pragmatic. Focusing on one road to progress at the cost of an equally viable alternative was a poor bet. Different ministers and different moments brought different emphases, but order and progress persisted as the regime’s mantra, dictating constant attention to the social work done by development projects. The dangers of concentrating land and productivity in the hands of a few, particularly if those few were foreigners, were always apparent. Yet some commodities required large-scale agriculture, and foreign capital and markets were vital to growth. The Department of Fomento seemed best situated to promote an integrated and coordinated program to ensure both progress and security, even as its technocrats increasingly recognized the difficulty of doing so.

This commitment to a social program of development helps explain the diversity of responsibilities entrusted to Fomento. Seen this way, the lack of administrative specificity and the multiplicity of projects undertaken were not due to a failure to effectively commit to agricultural modernization, as some historians have argued. Rather, they represented a commitment to a broadly understood program of rural progress integrating diverse actors and forces. Mexico had no specialized department of agriculture, nor any division dedicated to rural and agrarian life, until 1909. Instead, it had Fomento, a department that recognized the interconnectedness of economic and social life and worked to coordinate improvements across the countryside.

Three aspects of development that remained within Fomento across the decades—land policy, migration and colonization, and research and education—best illustrate the ongoing social project undertaken by the department. Pacheco may have been the first to have the resources to pursue direct action and the first to articulate a truly coordinated social project, but those who succeeded him as minister continued his work, remodeling and reemphasizing particular projects as necessary or expedient. The rest of this article will work through how Fomento’s approach to each of these aspects evolved during the later decades of the Porfiriato.

38 From its earliest days, the shadow of the loss of Texas to government-sanctioned North American colonists loomed over Fomento’s work, a vivid example of the dangers of introducing too many foreign actors onto the scene. Mexico, Secretaría de Fomento, Memoria 1857, 38–42.
Private property was central to the liberal project in Mexico from mid-century onward. While leaders’ embrace of positivism was used to justify a strong central state, the absolute right to property remained key to the Mexican liberal modernization project. As technocrats at Fomento wrote, most of Mexico’s wealth was tied up in land, “dead capital” useless for promoting growth. Only by rejuvenating that capital, opening markets, and further exploring and exploiting the territory could the country alleviate its ills, aiding indigenous villagers and urban merchants alike.\(^{40}\) The push for private property was multifaceted and targeted the largest institutional holders of land in the country—villages, the Church, and the state itself. Fomento was responsible for the last of these holdings, namely, the nation’s vast public lands. Mostly unsurveyed, they represented a huge swath of dead capital in need of liberalization.

Between 1867 and 1908, 45.7 million hectares of public lands—about a third of the nation’s territory—were sold or given away by the national government, the vast majority between the early 1880s and the mid-1890s.\(^{41}\) In transferring these lands, Fomento aimed to drive economic growth both through direct contributions to the government’s coffers and through the transformation of unproductive public lands into a resource for individual investors large and small. Efforts had been made to privatize these lands since independence, with both state and national governments renting, selling, and granting concessions to sell their property.\(^{42}\) In 1863, Juárez passed a law meant to standardize the process, but this new policy still required an official survey, the authorization of a federal judge, and approval from Fomento itself. Each step required institutions located far from much of the land in question, and titling could take years and cost much more than most small and mid-sized aspirants could afford.\(^{43}\)

Pacheco, writing in 1882 in his first report to Congress, harped on the need to simplify this process. It was not just the paperwork and time that he saw as a challenge, but the lack of knowledge as well. Property relations in the countryside were a mess and no one knew quite where privately and corporately held lands ended and publicly held lands began.\(^{44}\) Surveying was necessary. Recognizing that the

\(^{40}\) Mexico, Secretaría de Fomento, Memoria 1883–1885, vol. 1, (Mexico City, 1887), vi–xii.

\(^{41}\) Holden, Mexico and the Survey of Public Lands, 9.

\(^{42}\) Mexico, Secretaría de Fomento, Memoria 1857, 37–51.

\(^{43}\) For a prime example, see the experience of Minister of Finance Matías Romero in southern Mexico as described in Casey Lurtz, “Exporting from Eden: Coffee, Migration, and the Development of the Soconusco, 1867–1920” (PhD diss., University of Chicago, 2014), chap. 1.

\(^{44}\) This had been a complaint for decades, with the earliest ministers promoting a national property registry to establish, by default, what still belonged to the nation. Mexico, Secretaría de Fomento, Memoria 1857, 59; Holden, Mexico and the Survey of Public Lands, 11.
government still lacked the capacity to pursue this project, Pacheco pushed for the further involvement of private parties in public business. The resultant 1883 colonization and surveying law eased the government’s burden by standardizing the procedures by which companies became intermediaries between the state and individuals. These companies, paid with one third of the land they surveyed, were supposed to become the great facilitators of rural property development in the Porfiriato.46 As well, by serving as intermediate actors, these companies buffered the Porfirián state from the politically dangerous work of meddling in the affairs of rural elites and villages.47

From the start, bureaucrats worried about whether these companies would serve Fomento’s social program. While historians have shown that land companies, interested in profits and expediency, tended to avoid zones of contention and leave confusing village holdings alone, Pacheco and his successors also established norms to protect against exploitation.48 Private buyers were limited to purchasing 2,500 hectares; bounds were placed on where foreigners could purchase property; and strictures were enacted governing interactions between surveyors and villagers and other property holders. The process by which land companies completed surveys included regularized means of challenging their results, and when individuals and communities made use of these avenues, Fomento officials generally ruled against the land companies.49

Here again, the social project of development was made clear. Writing with regard to the very busy period from 1883 to 1885, Pacheco and his undersecretaries celebrated the 1883 law and the involvement of good, scientific, law-abiding companies in the country’s progress. These companies, the authors were careful to note, had avoided bothering property holders and brought those who had been exploiting huge swaths of public lands without title into compliance.50 By the mid-1890s, the difficulties faced by both the companies and the government in selling surveyed lands spurred a new law. Recognizing that much of the remaining public land was better suited to ranching and

45 For examples of Pacheco’s negotiation of the 1863 law, see Mexico, Legislación de terrenos baldíos.
46 Holden also points out that the contracting of private companies freed the government from the “politically explosive” work of verifying landholders’ rights. Holden, Mexico and the Survey of Public Lands, 15.
50 Holden’s research supports this claim. Mexico, Secretaría de Fomento, Memoria 1883–1885, vol. 1, 3; Holden, Mexico and the Survey of Public Lands, 56.
other plantation-style undertakings, the 1894 law increased the amount of land an individual could purchase. Further government oversight, spurred by worries about speculation and inaccurate surveying, soon followed. As well, the authors of the report covering Fomento’s activities from 1892 to 1896 emphasized new land grants to Indians and other smallholders who had cultivated their lands in peace without the protection of title. While contemporaneous with the process of privatizing communally held land, this Fomento-sponsored project aimed to donate public lands directly to the poor in order to put them on the same footing as those of higher economic classes. Ideally, if not always actually, by sponsoring private property holding at this level Fomento would curtail dangerous speculation in large properties and find a foothold for its push for new agricultural outputs.

In 1902, with the majority of public lands surveyed, the concession system was abolished, though sales by both the government and land companies continued. While the promotion of market-oriented agriculture and clear property title had strengthened smallholders’ defenses against land grabbing in some places, elsewhere the integration of the two projects had led to exactly the type of massive holdings Fomento explicitly decried. When Olegario Molina Solís began his tenure as minister in 1907, he set to work pulling apart the two avenues of reform, partly in response to internal critiques of the consolidation of landholding that liberal policies had facilitated. Though the minister—the former governor of Yucatán and a key figure in the development of that state’s enormous henequen fiber industry—had himself become the owner of enormous swaths of property, he had also leveraged the

51 Mexico, Secretaría de Fomento, Memoria 1892–1896, 3.
52 Holden, Mexico and the Survey of Public Lands, 67–70; Mexico, Secretaría de Fomento, Memoria 1897–1900 (Mexico City, 1908), 8, 12–13.
54 Holden, “Priorities of the State,” 607.
55 While histories of Mexico have long pointed to the concentration of landholding as a key motivation behind the Mexican Revolution, no good data exists on the matter. In certain regions, like Chiapas, small and mid-sized holdings remained the norm, while in others, like the far north, massive haciendas dominated. For contrasting experiences of market-led agricultural development, see the cases of vanilla in Papantla and sugar in Morelos. Emilio H. Kourí, A Pueblo Divided: Business, Property, and Community in Papantla, Mexico (Stanford, Calif., 2004); John Womack, Zapata and the Mexican Revolution (New York, 1970).
56 The most famous of these critiques was Andrés Molina Enríquez’s Los grandes problemas nacionales (Mexico City, 1909); Emilio H. Kourí, “Interpreting the Expropriation of Indian Pueblo Lands in Porfirián Mexico: The Unexamined Legacies of Andrés Molina Enríquez,” Hispanic American Historical Review 82, no. 1 (2002): 69–117; García Vázquez, “La configuración de la Escuela Nacional de Agricultura,” 16–17.
income generated from exports to modernize his state.\textsuperscript{57} A consummate científico, or technocrat, Molina recognized from experience the need to disentangle the promotion of a booming plantation sector from state-directed efforts to modernize small-time agriculture. The Department of Agriculture and an independent Agrarian Commission, each founded in 1909, were the result.\textsuperscript{58} The first could tend to the needs of producers, the second to those who still needed to be integrated into market-oriented agriculture. Though separate entities, each promised to continue the project of creating prosperity through peace, and peace through prosperity, despite the failure of their predecessor to do so.

\textit{Colonization and migration.} During the late nineteenth century, to populate was to rule, but also to make productive and peaceful. Looking to other countries, particularly the United States, the Mexican government saw the question of land and colonization as intimately connected. Without good land and reliable title, why would migrants choose Mexico instead of Argentina, Brazil, or the United States? Thus the Mexican government, through the auspices of Fomento, set out to create land policy, promotional materials, and migratory regulations and exemptions that would facilitate the improvement of their population, their economy, and their nation. Much as with land surveying and titling, Fomento initially took on the work of colonizing Mexico’s vast territory itself. It set up colonies and reached out directly to potential migrants across Mexico and Europe. Yet, as it had with surveying, the ministry soon contracted out this work. The 1883 law that outsourced land policy also charged companies with colonizing the land they received as payment. Though only minimally successful, colonization projects and the rhetoric surrounding them demonstrate again the multifaceted, omnivorous approach to development taken by Fomento. Migration was always about more than whitening the population; it was about strengthening the countryside through investment and example.

Pacheco’s administration was a watershed when it came to colonization, just as it had been in land policy. As in that arena, Pacheco and his department built upon decades of prior policy, scheming, and unfulfilled hopes. Low population density was seen as a problem of both economic


\textsuperscript{58} Mexico, Secretaría de Fomento, \textit{Memoria 1909–1910} (Mexico City, 1910), v.
underutilization and national security. One of the key aims of coloniza-
tion policy prior to Pacheco was the shoring up of frontiers against in-
vaders from both north and south. There was little interest in “Euro-
peanizing” Mexicans; rather, the focus was on “Mexicanizing” mi-
grants, in order to keep the regions they settled, primarily the border
zones, from following Texas into secession.\textsuperscript{59} Alongside this, though,
was a belief that European and American migrants would deepen eco-
nomic connections between their home markets and their new country
as well as stimulate local competition and growth. While the question
of borders was in large part settled by the time Pacheco took over
Fomento, this latter question still plagued Mexico.

As of 1885, Mexicans made up the majority of colonists in the state-
run colonies scattered across the country. With Fomento donating land,
facilitating relocation, and providing the literal seeds for new agricul-
tural endeavors, these colonies served multiple purposes. In the northern
regions, colonies set up for repatriated Mexicans and citizens from the
interior acted not only as new sites of production but also as barriers
against further loss of territory.\textsuperscript{60} In the country’s interior, state-directed
colonies were to be sites for integrating foreign settlers into Mexican
society and encouraging the spread of their entrepreneurial ways.
Here, too, despite continued hopes for European migration and the pres-
ence of some 150 Italian families, the vast majority of settlers were
Mexican. While the need for more Europeans occupied part of Fomento’s
lengthy reports on these colonies, many more words were dedicated to
agricultural matters.\textsuperscript{61}

With seeds, starts, and expertise provided by the government, colo-
nists experimented with new crops alongside the traditional corn and
beans. Older market crops like tobacco, sugar cane, and coffee all
found a place in these new colonies. So, too, did new potential export
goods like eucalyptus, silkworms and the mulberry bushes they required,
and ramie fiber.\textsuperscript{62} By 1890, twelve government-sponsored colonies had
been established in the country and several more had transformed into
self-governing municipalities, all still discussed with optimism.\textsuperscript{63} By
1900, the tone of reports on the colonizing effort had changed to one
of disappointment, with one minister writing that none of the official col-
onies had any “appreciable degree of prosperity.” Their agricultural

\textsuperscript{59} Hernández, \textit{Mexican American Colonization}, 56.
\textsuperscript{60} Andrés Reséndez, \textit{Changing National Identities at the Frontier: Texas and New Mexico, 1800–1850} (Cambridge, U.K., 2005); Hernández, \textit{Mexican American Colonization}, chapters 2 and 3.
\textsuperscript{61} Mexico, Secretaría de Fomento, \textit{Memoria 1883–1885}, vol. 1, 208–25.
\textsuperscript{62} Ibid., 191–226.
\textsuperscript{63} Mexico, Secretaría de Fomento, \textit{Memoria 1892–1896}, 14–18.
production was still of primary interest, but the author expressed little hope with regard to the future of government-sponsored colonies.\textsuperscript{64}

Parallel to this state-run effort, the survey concessions doled out by Fomento required that land companies also involve themselves in colonization efforts. The 1883 act discussed previously concerned itself at least as much with colonization as with surveying, mandating that land companies settle at least one colonist per two hundred hectares on the lands they claimed. The Mexican government knew that its wages were too low to attract migrant laborers, its prospects for profit too shaky to attract big investors in agriculture, and its migrant networks too urban to draw foreign entrepreneurs to the countryside. Foreign companies offering homesteads to those in their home nations, though, might be better able to convince potential colonists to enter Mexico’s rural spaces as small-time capitalists and businessmen.\textsuperscript{65} Fomento did what it could to aid in the persuasion, offering ten-year exemptions from military service, import duties, some export duties, and all taxes but those due to municipalities. There were also to be special bonuses and rewards for those migrants who introduced new products or industries.\textsuperscript{66} Most of these benefits related to the exploitation of the countryside, strongly favoring the migration of rural agriculturalists. Through both direct investment and the competition they would spur among their Mexican neighbors, these migrants were supposed to help drive progress and economic growth in the countryside.\textsuperscript{67}

It is remarkable how little the question of race comes into the discussion of colonization as presented by Fomento. The idea of “improving the blood” and thus drawing Mexico’s indigenous population further into the modern world through biology was by no means absent from Mexican political thought.\textsuperscript{68} Yet in Fomento’s articulation of immigration policy, race was rarely mentioned. Competition and innovation, rather than whitening, were to be migrants’ primary contribution. From the earliest reports, ministers of Fomento posited that industrious foreign colonists would teach Mexicans to embrace agriculture and other arts and to “detest the pathway of revolution, which has no other origin than antipathy toward work.”\textsuperscript{69} Through example, rather than through intermarriage, migrants would improve Mexicans’ lot. When it was

\begin{footnotes}
\item[64] Mexico, Secretaría de Fomento, \textit{Memoria 1905–1907} (Mexico City, 1909), 14–16.
\item[65] For an articulation of this, see Mexico, Secretaría de Fomento, \textit{Memoria 1897–1900}, 12.
\item[66] Manuel González, \textit{Decreto del Ejecutivo sobre colonización y compañías deslindadoras}, (Mexico City, 1883).
\item[68] For a brief summary of this argument, see Hale, \textit{Transformation of Liberalism}, 237–38; see also the first chapters of Nancy Leys Stepan, \textit{“The Hour of Eugenics”: Race, Gender, and Nation in Latin America} (Ithaca, N.Y., 1992).
\item[69] Mexico, Secretaría de Fomento, \textit{Memoria 1857}, 53.
\end{footnotes}
mentioned, intermarriage was presented as a means of making foreigners Mexican and ensuring against enclaves of foreign influence.\textsuperscript{70} Especially as it became ever clearer that efforts to attract European colonists were failing, the rhetoric of colonization began to shift toward celebrating the successes of using internal agricultural “auto-colonization” to integrate groups long resistant to the national project.\textsuperscript{71} Particularly in the northern frontier with regard to the Yaqui and the Mayo, integration and pacification via agricultural colonization was heralded as a triumph—a remarkable claim considering the ongoing violence that these efforts entailed.\textsuperscript{72}

By the end of the Porfiriato, foreign colonization was readily acknowledged as a flop. In 1900, Fomento published a report pointing to the thirty-two colonies settled by 7,962 colonists as a stark sign of the poor return on investment.\textsuperscript{73} Writing soon after this, Minister of Fomento Manuel Fernández Leal explained, “The government’s role, for now, consists only in removing obstacles and facilitating . . . an easy and comfortable stay among us as a vital factor in our progress.”\textsuperscript{74} This remained Fomento’s attitude going forward, as the government began to focus more on internal development, the strengthening of the country’s ability to feed itself, and production among its own producers. Foreign markets, foreign capital, and foreign technology remained key, but foreign individuals took a lesser role in the imagined Mexican countryside than they had in the early 1880s. Though the ideal social project of development had included a large foreign-born population, by the twentieth century, Mexican agriculturalists were at the fore.

\textit{Research, education, and propaganda.} As with land and colonization policies, Fomento’s approach to research, education, and propaganda was integrative and embraced most comers. The work done by the ENA, commissions established to coordinate Mexico’s presence at various international expositions, statistical and geographic sections, and a prolific publication wing aimed to make the countryside knowable and known. This work was directed toward both external markets and investors and Mexican producers large and small, with the aims of making the countryside as productive as it could be, integrating rural residents into the work of keeping Mexico peaceful, and moving it toward some imagined modernity. Any suggestion was seen as worth

\textsuperscript{70} Mexico, Secretaría de Fomento, \textit{Memoria 1877–1882} (Mexico City, 1885), 5.
\textsuperscript{71} Mexico, Secretaría de Fomento, \textit{Memoria 1905–1907}, 14–17.
\textsuperscript{73} Guillermo Wodón de Sorinne, \textit{La colonización de México}, 2nd ed. (Mexico City, 1902), 17.
\textsuperscript{74} Mexico, Secretaría de Fomento, \textit{Memoria 1897–1900}, 14.
pursuing, any innovation worth supporting. As was the case in much of Latin America in this era, Fomento sought to create a practical science specific to Mexican soil while simultaneously participating in the global exchange of information and goods. To do so, the technocrats at Fomento built a corpus of knowledge and resources that far outstripped any ability they had to make good on it.

Here, too, the ministry partnered with other branches of government and private organizations to overcome its own limitations of funding and reach. The Mexican Agricultural Society established under Riva Palacio was a major player, as were a number of smaller regional organizations and journals. Abroad, Fomento’s agents worked with representatives from the foreign service to gather information about markets, prices, and potential investors, as well as to acquire samples of new cultivars that might be experimented with at home. The ministry reprinted publications from foreign authors, reissued translated versions of articles and scientific reports, and circulated research conducted by its own agronomists. Again, the Ministry of Fomento was voracious and omnivorous, willing to try anything and see what stuck.

Trained scientists and surveyors, both privately and publicly employed, were key actors in the various “expeditions” Fomento dispatched. Despite work by García Cubas and his compatriots, the map of Mexico still contained too many blanks. There simply were not enough scientists in Mexico to complete the work, so local politicians and producers became essential sources of information. Though the Dirección General de Estadística split off from Fomento in 1883 and took over the collection of census and trade data, Fomento maintained control over the collection of production information in the countryside. It sent out surveys to municipal presidents time and again—some general, containing questions that aimed to get at the broad contours of production in a particular area, and some more specific, relating to individual cultivars (coffee, different grains, sugar) or types of production (myriad kinds of alcohol, cattle raising). The surveys attempted to capture a granulated picture of the country’s productivity, one that

would help Fomento orient its developmentalist project in the most productive manner. While the department was interested in large-scale production, these surveys demonstrated a concerted effort to get at small producers. Municipal presidents were relatively responsive, though often confused about products like wine grapes and silkworms. Many surveys were answered with some variation on “this product does not exist here,” or, “this is an indigenous village with no knowledge of what you speak.” Others, though, garnered detailed accountings of the type of land under cultivation, returns on planting, local market prices, wages, and irrigation.79

Fomento, in turn, published these surveys, generally in their entirety, in a monthly bulletin that circulated free of charge to potential foreign investors and consumers as well as local politicians and any farmer who expressed interest. The bulletins, along with the reports to Congress, were a cacophonous amalgamation of unprocessed statistics, idealistic prophesizing, and assorted minutiae. Others have pointed to the pages (and funds) dedicated to attempting to breed a cuino, or pig-sheep hybrid, as an example of Fomento’s overzealous embrace of any and all suggestions.80 That said, to those researching and publishing, the interest in experimentation and promulgation of such diverse information represented a serious attempt to turn information to good use, to give Mexicans the tools to participate in growing global markets.81

The most institutionalized component of Fomento’s information project was the ENA. The school aimed to produce agronomists who would study the Mexican countryside and make it more productive. Its graduates were supposed to be the linchpins in Fomento’s grand schemes of coordinated development, overcoming the provinciality and “primitive empiricism” of Mexico’s farmers, and bringing these ignorant—though not stupid—producers into the modern age.82 The school remained small until the 1870s; it was Pacheco’s leadership in the 1880s that brought real growth and reform, with a new emphasis on practical as well as theoretical knowledge alongside efforts to expand enrollment beyond the traditional Mexico City elite.83 The minister also extended a program of regional agricultural schools he had begun while governor of Morelos, working with state governments to increase access to modern, scientific agricultural practices.84

79 Ramo Fomento: Agricultura, box 7, folder 4, AGN.
81 See, for example, the survey results for coffee, apiculture, and general agriculture in Boletín de Agricultura, Minería, e Industrias 2, no. 7 (1893), 60–113.
82 Mexico, Secretaría de Fomento, Memoria 1892–1896, 102.
83 Tortolero Villaseñor, De la coa a la máquina de vapor, 61–62.
84 See, for example, the schools set up in Colonia Porfirio Díaz and the Distrito Federal. Ramo Fomento: Agricultura, box 12bis, folder 14, 1882 and box 13, folder 12, 1886, AGN.
lost steam after Pacheco’s death, suffering removal to the Ministry of Justice and Public Education and losing students despite attempts to ease entrance requirements and shorten the time to degree. Subject to the critiques of important political thinkers like Francisco Bulnes, the ENA was faulted for costing too much and producing too few practicable outcomes. The vast majority of its graduates worked for the government; very few directly applied their learning to the betterment of Mexico’s countryside.85

Molina, the inveterate reformer, reintegrated the ENA into Fomento in 1908. With a new curriculum based on those of European and North American schools, the ENA reopened with 240 students, its largest enrollment yet. Of those, more than half were scholarship students, funded by both national and state governments.86 It was hoped that this would resolve the challenges faced by Pacheco as well as address the concerns of Bulnes: students from the countryside were more likely to return to the countryside. The inclusiveness at the heart of Molina’s reforms stretched beyond inviting those from the provinces into the capital; he also, like Pacheco before him, worked to expand the capital’s system of schooling into the provinces.

One key arena where graduates of these schools were supposed to provide aid was a seed and seedling circulation program begun in the 1870s. Importing cultivars from abroad as well as encouraging the exchange of native and locally produced commodity crops, Fomento used information gathered in its surveys to direct potential products to potential producers best situated for success, with the seedlings accompanied by an individual trained in their cultivation.87 Wine grapes are a prime example of a case in which this integrative effort worked, at least to a degree. Fomento sent grape vines to a number of individual producers and municipal presidents across the north of the country, along with an agronomist who would instruct new producers in their planting and harvesting. Procured from a number of countries, the varietals were matched up with the climate and soil conditions of their destination.88 Further instructional reports on cultivation and potential markets were published in the department’s monthly bulletin.89 While wine grapes did not take everywhere, and the cultivar did better on large rather than small properties, in some regions—particularly Baja

85 Tortolero Villaseñor, De la coa a la máquina de vapor, 66–68.
88 Ibid., 394–95; Mexico, Secretaría de Fomento, Memoria 1892–1896, 105–107; Mexico, Secretaría de Fomento, Memoria 1897–1900, 141.
89 Boletín de Agricultura, Minería, e Industrias 1, no. 10 (1892): 3–7.
California—the program stuck and provided a new source of income and market integration for the local economy.90

Wine, though, was a rare success story, and when Molina took charge of the ministry he worked to replicate its success through institutional innovation. In 1907, he founded the first experimental station in Mexico at the ENA, reconstituting the defunct hacienda as a working farm. He followed this with experimental stations in the provinces, collaborating with governors to cosponsor new learning spaces. Here, agronomists would study cultivars in their local environments and transfer that knowledge to regional students without the time or resources needed to travel to the ENA. Through short courses scheduled around local farming timetables, Fomento would better disseminate the mass of information it had been gathering. As was often the case with Fomento, the best intentions met with mediocre returns. There were not enough agronomists to staff these stations; the education they had received was still far more theoretical than practical; and in the end, local farmers did not express much interest in attending the offered classes.91

The program of experimental seed and seedling distribution and other research initiatives continued across the Porfiriato, but, as Molina would write in 1910, such initiatives were increasingly directed toward the concrete demands of farmers and markets. Samples of the bananas preferred by U.S. customers were introduced along the Gulf coast, explicitly where the distance to market was shortest.92 Rather than looking for the elusive cuino, researchers affiliated with Fomento and the Ministry of Health—some working at the new experimental stations—looked into the various diseases impacting cattle.93 The global economic crisis of 1907, accompanied in Mexico by drought in many regions and, embarrassingly, a need to import staple goods, led to further emphasis on meeting the internal needs of Mexico’s population.

Experimental stations turned their eye to subsistence crops, and Fomento put in place new measures to study and encourage irrigation works. The department had expressed interest in this field before—in the report to Congress covering 1897 to 1900, the minister wrote that any farming reliant on “capricious rains” did not deserve the name of

90 The story of cotton promotion in the northern borderlands follows a somewhat similar trajectory, again with larger producers rather than smallholders as the eventual beneficiaries. Casey Walsh, Building the Borderlands: A Transnational History of Irrigated Cotton along the Mexico-Texas Border, Environmental History Series 22 (College Station, Tex., 2008).
91 Experimental stations often faced this challenge, as has been well documented in the United States. Tortolero Villaseñor, De la coa a la máquina de vapor, 69, 77–82; Scott, The Reluctant Farmer.
92 Mexico, Secretaría de Fomento, Memoria 1905–1907, 76.
93 Mexico, Secretaría de Fomento, Memoria 1909–1910, xxxiv.
agriculture—but little had been done.⁹⁴ Now, in the wake of droughts and threats of famine, Molina put his full weight behind new irrigation initiatives. Founded in 1908, the Caja de Prestamos para Obras de Irrigación y Fomento de la Agricultura (Lending Office for Irrigation Works and Agricultural Development) was a partnership with the country’s four biggest banks to supply tens of millions of pesos to rapidly develop unirrigated lands.⁹⁵ Plantations, particularly rapidly expanding cotton fields, rather than smallholders were the general beneficiaries, as the paperwork and legal requirements for obtaining such a loan were complex and costly.⁹⁶ While this initiative has been used to emphasize the turn to industrial agriculture under Molina, the minister simultaneously worked to get education, cultivars, and training into the hands of small farmers, increasing the number of scholarships for “demonstrably poor” students at the ENA and founding more regional schools and experimental stations.⁹⁷ Similar emphasis on diversified agriculture was apparent in private organizations like the Sociedad Agrícola and independently published newspapers like El Agricultor Mexicano where leaders pressed their well-educated, generally well-financed readers to support their less privileged counterparts.⁹⁸

At the various international exhibitions in which Mexico took part, the tension between incorporative projects of agricultural development and large-scale plantation agriculture was markedly visible. Catering to foreign audiences while attempting to attract foreign investors and migrants, Fomento invested hugely in the Columbian Exposition in Chicago in 1894 and the Universal Exposition in Paris in 1900, among other, smaller fairs. In halls incorporating elements of pre-Columbian monumental architecture and imported Indian villages, Mexico drew huge crowds with its authentic representations of premodern life. At the same time, organizers tried to present Mexico as a modernizing nation worthy of investment. They displayed the surveys and samples they had gathered, demonstrating the country’s statistical sophistication, and won prizes for their artisanal and agricultural products. These expositions were vital components of the department’s efforts to represent the work it was doing as integrative and successful. Though the Mexican exhibitors showed off their “backward” Indians and ancient artistry, it was with the intention of celebrating the progress

⁹⁴ Mexico, Secretaría de Fomento, Memoria 1897–1900, 124.
⁹⁵ Abdiel Oñate, Banqueros y hacendados: la quimera de la modernización (Mexico City, 1991), 35–36.
⁹⁶ Walsh, Building the Borderlands.
⁹⁷ Mexico, Secretaría de Fomento, Memoria 1909–1910, xxxviii.
⁹⁸ The editors of El Agricultor Mexicano were alumni of the ENA and wrote a great deal about the importance of reaching out to producers on all scales. Hermanos Escobar, “La Escuela de Agricultura,” El Agricultor Mexicano 1, no. 1 (1896): 24–26.
made, of illustrating the right of Mexico to include itself in the modern world. It was also, of course, intended to attract capital, to build markets, and to find producers and consumers who might help smallholders and hacendados turn proverbial prosperity into reality. Thus, these expositions were full of contradictions, lavish displays that highlighted the dissonance within Fomento’s mission—a dissonance its ministers tried to present as multifaceted and integrative development.

Conclusion

Though this article is not intended to evaluate the success of Fomento’s efforts, it is clear that the leaders of this multivalent, at times cacophonous project of rural development were continually disappointed. Yet, examined through Fomento’s own lens of a broad social project of agricultural modernization, triumphs clearly existed alongside the failures. While Mexico’s economy did not grow as quickly as those of Western Europe or the United States, it did experience marked expansion. Exports, particularly agricultural goods, were major drivers of this growth. Prior to 1870, export commodities other than minerals were valued at less than two dollars per capita; by 1920 their value was almost twenty dollars a person. Similarly, while they had represented an insignificant percentage of Mexico’s gross domestic product prior to the 1860s, export commodities accounted for 11 percent of national wealth by 1920. This pattern of growth was repeated across Latin America.

What direct role did Fomento play in this work, and who benefited from its efforts? Globally, farmers were notoriously resistant to extension programs and other educational endeavors like those instituted by the department. That said, the diversification of Mexico’s exports suggests some success. A list of Mexico’s agricultural exports from 1910 includes more than seventy different crops: some were plantation cultivars like sugar, henequen fiber, and cotton, but many could be grown alongside subsistence crops or on smaller farms. More research needs to be

99 Mauricio Tenorio-Trillo, Mexico at the World’s Fairs: Crafting a Modern Nation (Berkeley, Calif., 1996).
102 Mexico, Ministerio de Hacienda y Crédito Público, Boletín de estadística fiscal: Jul 1910–Jun 1911, no. 366 (Mexico, 1912).
done to understand who was contributing to this output. With regard to coffee, Mexico’s third-largest export at the time, most was produced not on large plantations but on small and mid-sized holdings. While Fomento has to share credit for the success of crops like coffee or cotton (another booming export) with the forces and actors of global capitalism, the department facilitated their success through its land titling, colonization, and education endeavors. By its end, Fomento officials rarely celebrated successes, instead pointing toward the endless work to be done in agricultural modernization and rural prosperity. Many were prescient of the social issues caused by the consolidation of large landholdings. If not predicting the Mexican Revolution, these technocrats at least pointed to the potential for violence inherent in the economic disquiet caused by dispossession.

The rhetoric of the revolution and the government that emerged from it dictated the terms in which the previous era’s history of agricultural modernization and export agriculture was told. Oppressive plantation owners, greedy foreigners, and a conniving, corrupt government became the only accepted actors in this new narrative. What I have suggested here is a rethinking of that story. Whether successful or not, the Porfirián government saw in the promotion of export production the means of promoting widespread economic prosperity and peace. Investment in Mexican agriculture was an integrated, multifaceted program wherein the countryside was posited as the nation’s future, a future based on connecting with and contributing to global flows of goods, people, and knowledge.

CASEY MARINA LURTZ is an Academy Scholar at the Harvard Academy for International and Area Studies. She was previously the Harvard-Newcomen Fellow at the Harvard Business School and spent a year as a predoctoral fellow at the University of California San Diego Center for U.S.-Mexican Studies. She is currently writing a history of southern Mexico’s coffee economy that examines how peripheral places grappled with and shaped globalization during Latin America’s export boom.

103 Lurtz, “Exporting from Eden.”
104 Kourí, “Interpreting the Expropriation.”
105 This is starting to be addressed. See, for example, Escobar Ohmstede and Butler, introduction.