

*Apuntes sobre irrigación: notas sobre su organización económica en el extranjero y en el país.* By JOSÉ HERRERA Y LASSO. Mexico City: CIESAS-IMTA, 1994. Figures. Tables. Appendixes. Bibliographies. Index. xvii, 242 pp. Paper.

*Dos problemas de vital importancia para México: la colonización y el desarrollo de la irrigación.* By ROBERTO GAYOL. Mexico City: CIESAS, 1994. Tables. Index. 114 pp. Paper.

*El problema de la irrigación.* By LEOPOLDO PALACIOS. Mexico City: CIESAS, 1994. Illustrations. Maps. Tables. Index. 94 pp. Paper.

“Closely associated with the agrarian and agricultural problems of Mexico,” wrote a student of the country in the 1920s, “is that of irrigation; it is impossible for a dweller in a land where water is plentiful and taken for granted much as air and sunlight to grasp the full significance of Mexican waterlessness.” Climatologists calculated then that only 13 percent of Mexico’s land received sufficient humidity for growing crops year-round, and fully 50 percent could not sustain agriculture in any given season. After seven decades of federal irrigation works, this dismal picture has improved appreciably, yet harvests in much of Mexico’s cropland—particularly the portion in the hands of the vast majority of its *ejidatarios* and *campesinos*—remain largely at the capricious mercy of Tlaloc. Today, as always, most Mexican cultivators rely exclusively on the summer rains, and the notorious inconstancy of this water supply is still the bane of agricultural production and rural life.

It is no secret that land-redistribution and irrigation policies in postrevolutionary Mexico were never well integrated, but the origins and effects of this disjuncture have yet to be explored in depth. The problem is partly a severe dearth of studies on the economic, social, and political history of modern irrigation policy and projects. The new Biblioteca del agua, a joint publication and research project of CIESAS and the Instituto Mexicano de Tecnología del Agua, is designed to begin redressing this neglect. The first three books in this series are reprints of influential treatises on irrigation originally published between 1900 and 1920, when water use and rights in agriculture became the subject of policy debates among engineers, lawyers, politicians, and businessmen. Together, these texts show clearly the strong Porfirian roots of the principles that were to guide the subsequent development of a national irrigation program. The books thereby help to explain the lack of concert between irrigation policy and the land reforms inspired by the Revolution.

In the early 1900s, an assortment of politicians, entrepreneurs, and hacendados finally faced up to the failure of Mexico’s erratic foreign colonization and public land policies to spur the business of agriculture. To them, immigration was still desirable for many reasons, and colonization—they now argued—would succeed only with the aid of irrigation. Roberto Gayol’s 1906 essay expresses this sentiment most forcefully. A railroad engineer and distinguished professor turned politician,

Gayol stresses the continued importance of colonization for progress and business, because “más del setenta porciento de nuestra población no usa pantalones ni zapatos y le tiene horror al agua y jabón” (p. 42). Large-scale irrigation works were thus essential. After examining water legislation and projects in several countries, Gayol concludes that these must be undertaken directly by the federal government, and he holds up the U.S. Reclamation Act of 1902 as a model.

Other writers, like Gayol’s student Leopoldo Palacios, argued that private initiatives were also important and defended the virtues of Porfirian policies granting exclusive rights, subsidies, and tax exemptions to entrepreneurs, which Gayol rejected as inadequate and pernicious. Palacios’ 1909 tract, published by Fomento, aimed primarily to sell mistrustful hacendados on the financial wisdom of supporting and investing in waterworks of various kinds.

A decade later, José Herrera y Lasso produced a detailed review of the laws and economic organization of irrigation in seven countries and Mexico, in order to show the wide variety of policy options available to the new government. The scholarly *Apuntes* (1919) are fairly comprehensive and transcribe many documents, so students of these questions will find them especially useful. The Potosino engineer roundly condemned Porfirian concessions and subsidies to capitalist interests as ineffective and immoral; the Revolution, he thought, would tie irrigation policy to the resolution of the agrarian problem. Wary of the effects of direct government control, however, he advocated waterworks management through cooperatives or users’ associations, where government would function as financial catalyst and regulator, not overlord: “el gobierno no debe ser empresario,” he warned.

In the end, despite the political and agrarian upheavals of the 1910s, President Calles’ 1926 Irrigation Law—closely modeled after the U.S. Reclamation Act—was remarkably faithful to the rationale Gayol had stated 20 years earlier: the link between centrally managed irrigation projects and colonization. In this new political climate, foreign settlements were no longer workable, so the law proposed to sell reclaimed lands to a new class of “farmers”—instead of devoting it to *ejidos*—in accordance with a new colonization law. Large-scale irrigation and land reform would go their separate ways, and in spite of President Cárdenas’ later efforts (for example, the Laguna and Bajío regions), the geographies of irrigation districts and *ejido* grants would not be designed to coincide. By the late 1940s, massive public investments were underwriting the emergence of disguised latifundia and of *agricultores naylor* in the newly irrigated areas of north and northwestern Mexico, while elsewhere most of the country’s *ejidatarios* were left to pray for good rains.

In sum, these three works are important sources for understanding the divergent histories of irrigation policy and land reform in modern Mexico. The decision to re-edit them is commendable. Let us hope that the Biblioteca del agua continues to expand.

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