

Conclusion

Experiences with agrarian development began in a range of contexts in Republican-era China, from social reform and infrastructure engineering to agricultural science. The numerous debates and different approaches suggested a number of possibilities for agrarian development. In missionary communities, famine relief took priority, and eventually, many missionaries believed that relief was an insufficient approach in the long term. Reactive efforts transitioned to proactive prevention of famine, which in turn evolved into development. Institutions like the National Agricultural Research Bureau integrated several of these approaches, notably a network of agricultural research stations combined with agricultural extension. The United Nations Relief and Rehabilitation Administration and the Chinese National Relief and Rehabilitation Administration demonstrated some of the difficulties in attempting national-scale development in the face of political obstacles. Many of the approaches became integrated toward the end of the Republican-era within the Joint Commission on Rural Reconstruction.

The JCRR attained long-term gains in agricultural productivity and rural reform after its move to Taiwan in 1949. It oversaw land reform, tasked with turning the traditional landlord and tenant farmer classes into modern industrial and petty capitalists, respectively. Land reform was portrayed by the GMD government as simultaneously capitalist and for social welfare, utilizing the language of legal and financial modernity along with the GMD ideology of *Minsheng zhuyi*. The JCRR took over former Japanese colonial era research institutions, such as experiment stations and centers of agricultural research, continuing plant breeding and intensive cultivation methods associated with scientific and industrialized agriculture. It integrated the system of farmers' associations established under Japanese colonial rule into an agricultural extension system that

allowed for rapid dissemination of practices and knowledge from research centers to rural villages, while also enabling the newly established state to exercise greater control and state capacity in the countryside. This included the use of print media such as *Harvest*, a periodical that utilized cultural forms, such as morality tales, to enact the modern and hygienic standards that the JCRR idealized. The JCRR implemented 4-H clubs, modeled after those in the United States, to organize village youth around principles of community involvement, democracy, and modern scientific practices. These pathways allowed the JCRR to push for a specific modern vision of development that entailed market-based capitalist approaches and community-organized middlemen while still exercising significant centralized control.

Elements of Taiwan's approach to modern science and technology, land reform, and social improvement were represented abroad as part of Taiwan's international development missions during the Cold War. First in Vietnam, Taiwanese technicians were recruited for their experience and knowledge in establishing farmers' associations. Then in Africa, the ROC Ministry of Foreign Affairs sent agricultural technical teams to over a dozen nations in agricultural extension, demonstration, and crop improvement. These missions represented Taiwanese agrarian experiences as particularly relevant for other developing nations like Taiwan. Taiwan occupied a similar tropical climate, possessed few natural resources or capital reserves, and most importantly, had been able to demonstrate sustained success operating under their model. Moreover, Taiwanese experts often drew parallels between the cultural characteristics of Taiwan and recipient nations of their missions—shared ethics of pragmatism, hard work, and rurality—to position Taiwan within the Global South. The purpose of these missions was driven by Cold War geopolitics. Taiwan leveraged its development expertise to seek diplomatic favors from other developing nations, especially African nations that could vote in the United Nations. These missions also served a more subtle purpose, to magnify the technical and political prowess of the Republic of China regime at home and abroad. Through international development, the GMD state was constructing a sociotechnical imaginary of Taiwan as leading a vanguard of the developing world.

Cold War development politics was especially evident in the dissemination of Taiwanese land reform. Sustained by a series of measures limiting tenant rents and capped with a forced land redistribution program, Taiwanese experts advertised Taiwanese land reform as a moderate, capitalist-friendly version of land reform that contrasted with the violence of Communist revolution. Joining with the foundation established by American philanthropic John C. Lincoln to proselytize the teachings of nineteenth-century economic thinker Henry George, the Taiwan-based Land Reform Training Institute hosted training sessions and conferences for dozens of developing nation bureaucrats interested in Taiwanese land reform model. Yet land reform was a highly selective aspect of the Taiwan model. It was

proudly touted, but in practice, forced redistribution was rarely carried out due to its political infeasibility, a reality common in the history of development.

By the 1970s, Taiwanese international development emphasized its achievements in agricultural sciences as a result of the Green Revolution. Advances in vegetables, food production, and fertilizer attracted international attention. The Taiwanese attempted to capitalize on their scientific experience by establishing multinational scientific research institutes like the Asian Vegetable Research and Development Center. While the Green Revolution moment offered an opportunity for Taiwan's efforts to once again lead a vanguard of international scientific networks and institutes focused on global environments, it was thwarted by international geopolitics. The ouster of the ROC from the United Nations spelled disaster for Taiwan's hopes as the AVRDC and other Taiwan-based institutions were left out of the prestigious Consultative Group of International Agricultural Research (CGIAR) and funding from UN affiliated funding agencies. Other CGIAR institutions gained greater prominence, and Taiwan struggled to as its geopolitical isolation and the rise of neoliberalism led to a shift away from state-led development.

The rise and fall of Taiwanese development enable us to understand a broader history of development. Taiwanese development follows a familiar narrative in critical studies of development. Successes of development at home encouraged technocratic elites to aid others. Ostensibly superior foreign technologies, whether farmers' associations or high-yielding rice, were sometimes indeed more productive or more suitable than local practices. But they were flawed, difficult to scale and sustain, unsuited for local communities in unexpected ways, and came at costs to environments. Teams sent to Africa could bring higher-yielding rice that in demonstration farms outperformed native varieties, but the infrastructures of chemical and seed supplies and knowledge expertise did not persist after Taiwanese teams departed. Unforeseen by Taiwanese experts, Taiwanese rice did not necessarily sell well in African markets due to different taste preferences. Taiwanese farmers association experts, desired by the South Vietnam regime for counterinsurgency, could not "save" Vietnam from a nationalist revolution in the form of Communism. Development was a narrow, apolitical solution in a complex, political world.

Like American, Soviet, or PRC development in the Global South, this motivation was also political and not quite selfless or humanitarian. GMD state planners co-opted development to expand an anti-Communist alliance in Southeast Asia, and in Africa to prevent losing its valued position in the United Nations. Yet Taiwanese development was fundamentally shaped by postcolonial politics circulating within the Global South. Taiwanese technicians and scientists proudly modeled a pragmatic, learning-by-doing ethos. It was modern, but not because it flowed from a position of economic wealth. Taiwan touted its willingness to work hard under difficult conditions where capital was scarce. Though this was often performative and ironic given Taiwan's extractive and authoritarian policies

at home, GMD planners placed value on farmer welfare in land reform and social improvement.

Finally, the Guomindang used agrarian development to construct a new sociotechnical imaginary centered on science, modernity, and economic success. Taiwan's technical capabilities in agriculture and international demand for that expertise allowed for the GMD regime to portray itself as leading a global vanguard of states. Development buttressed and in some cases surpassed GMD claims of legitimacy based on ethnic nationalism and anti-Communism. Since its arrival on Taiwan, the GMD staked its legitimacy on being the more "Chinese" regime of the two Chinese nation-states. But by the 1960s and 70s, it was apparent that the GMD would not retake the mainland, and prior assertions of legitimacy seemed increasingly problematic. With development success, Taiwan pointed to wealth and modernity, especially in contrast to the PRC across the strait. Going abroad and teaching Taiwanese techniques to Africa, Southeast Asia, and the rest of the developing world demonstrated that the ROC was indeed the "superior" regime. These representations, reinforced through propaganda and in official discourse, allowed the GMD to continue its authoritarian grip and martial law on Taiwanese society.

Today, Taiwan continues its international development missions, known as overseas development assistance, in places like the Marshall Islands and Central America. Taiwanese methods have adapted to new changing circumstances of global development. Instead of focusing on rice or vegetables, Taiwanese now offer medical assistance in preventing the spread of diabetes among Pacific Island populations and infrastructure projects such as building bridges in Costa Rica.¹ Nonetheless, these missions continue to operate for political objectives. Taiwanese missions are provided to the few dozen nations that continue to recognize the Republic of China diplomatically over the People's Republic of China. And these nations dwindle in number as the PRC offers increasingly larger capital packages and investments than the ROC can.²

Ironically, it is the PRC today that has become the leading consumer of the Taiwan economic model.³ The PRC's ongoing transformation from rural to urban economy poses some of the largest governance challenges for the Chinese Communist Party. Some of these include the strains that rural to urban migration have created on social services, real estate, and urban development amid rising inequality and concerns over environmental degradation.⁴ Thus, PRC bureaucrats continue to look to how Taiwan managed its urban development. Land reform, previously an arena where the ROC vehemently objected to PRC methods, is now reimagined as land policy management, a field that attracted PRC local government officials to visit and undertake formal learning tours in Taipei in the 2010s when I was doing my fieldwork for this book.

As Taiwan's agricultural sector today represents just 1.8 percent of its GDP, this history might appear irrelevant. But most Taiwanese of a certain generation today

will remember newspaper reports of Taiwan's *nongjituan* (農技團, agricultural technical teams) abroad. Few will proactively associate them with the Cold War, with a critical reexamination of the faith in science and technology, or with the Guomindang effort to consolidate its authoritarian regime. Even fewer outside that generation are aware of these missions unless they had a personal connection within their family or extended family to the development enterprise.

As a whole, development today remains a remarkably ahistorical discipline, in which many development economists have turned to increasingly quantitative and "scientific" means of analysis to accomplish their goals.⁵ The turn to science is not new; it is only that scientific rigor is now used as a litmus test to determine whether a development initiative is considered productive. What seems to have been lost is the recognition that development is itself not a science in the sense that there is one objective truth that would unlock its secrets. It, too, is subject to the context in which it is constructed and practiced and is defined and ultimately restrained by the politics, culture, and society under which it is formed. Development is as much about the developer as it is about the developed. The Taiwanese, among most successful students of development in the past century, have learned this lesson well.