

# American Seed Business, the Rockefeller Foundation, and Indian Seed Development in the 1960s

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## Abstract

Many stories about green revolutions in South America and Asia revolve around the Rockefeller Foundation and Ford Foundation and their seed research. The materials of the Rockefeller Archive Center have proven to be a rich source for researchers studying the influence of foreign policy actors on agricultural development policy in the Global South. Yet, this research has not included multinational corporations as potential partners of U.S. foreign policy makers and philanthropic foundations in the dissemination of ideas and practices of ‘modern agriculture’. This is linked to the understanding of the dissemination of Green Revolution seeds as the spread of a public good. My research has revealed that this was not always the case. It shows that ideas of seed accessibility as a public good competed with ideas and ideals of an effective market economy. Following the ideal of the superiority of a free market, some of the staff of the Rockefeller Foundation in India valued highly the participation of private corporations in their projected ability to effectively organize and market goods. In order to drive technological change in Indian agriculture, especially in maize cultivation, the Rockefeller Foundation relied on U.S. seed companies to increase hybrid seed production. In doing so, the Rockefeller Foundation acted similar to a chamber of commerce by establishing contacts for U.S. corporations with government officials in the US and India, and actively recruited and advised companies to enter the Indian market.

# **American Seed Business, the Rockefeller Foundation, and Indian Seed Development in the 1960s**

In November 2018 I listened to a public discussion at a movie theatre in Berlin between Bayer Group representative Norbert Lemken and ecofeminist Vandana Shiva. At this well-attended event, Vandana Shiva, the charismatic winner of the alternative Nobel Prize, met a representative of her favorite enemy, the seed and agrichemical company Monsanto, which Bayer bought up that year. Shiva accused the representative of Bayer of endangering food sovereignty and small farmers' rights in India by spreading monocultures based on hybrid seeds. She quoted one research paper after another, citing evidence of environmental degradation and the deterioration of the financial situation of small-scale farmers in India, apparently caused through the dissemination of Monsanto's and Bayer's products, such as hybrid seed varieties and pesticides. In 2019, Monsanto and Bayer continue to dominate headlines worldwide and are subject to billions of dollars in damages claims for potential health risks posed by their herbicide glyphosate. In these presentations, the image of multinational companies as villains in agricultural developments dominates. However, if one looks back at the roots of their market expansion of the hybrid seed business in the 1960s, multinational corporations had a different image. The spread of their technologies was initially guided with high hopes and supported by a broad range of players, including the Rockefeller Foundation.

In my research, I examine corporate activities in the dissemination of the "Green Revolution package"—high-yielding seed varieties, chemical inputs such as fertilizers, pesticides, and herbicides, irrigation facilities and credit to so-called developing countries in the 1960s and 1970s. During my archival research at the Rockefeller Archive Center, I was looking for background information about the distribution and extension network of these capital-intensive agricultural technologies. Before my research trip to the Rockefeller Archive Center (RAC) in October 2018, I assumed that seeds developed by the Rockefeller Foundation (RF) and the Ford Foundations were disseminated as public goods. I was surprised to find out that the Rockefeller Foundation

actively promoted to establish a private seed industry in India during their early involvement in the Indian Seed Development Program in the late 1950s and early 1960s. I found the RF to play a role similar to the Chamber of Commerce, by providing information about funding opportunities through USAID, and by establishing contacts between government and business actors both in India as in the United States. The Rockefeller Foundation used its reputation as a consultant to the Indian government for agricultural and rural development to promote the commercialization of agriculture and to channel development funds from development agencies to American seed companies to support their expansion to new markets.

At the time when the Rockefeller Foundation became active in stabilizing India's food situation in 1953/1954, interventions in domestic food production had traditionally been a government task. The Rockefeller Foundation, however, considered itself to be better placed to address the problem due to its presumably wider scope for action and its relevant past experience in plant breeding and rural development.<sup>1</sup> While its better-known involvement in the Green Revolution of the late 1960s was concerned with rice and wheat, the early focus of the Rockefeller Foundation was on maize and sorghum.<sup>2</sup> Its ideas to grow maize varieties in India on a commercial basis, in collaboration with the Indian Council of Agricultural Research, an Indian research institution, took several years to become reality. The RF launched the Indian maize program, entering a formal memorandum of understanding with the Government of India on April, 12 1956. As part of the research project, American hybrids were sent to test farms across India, and in 1961, these research efforts resulted in the release of four new hybrid varieties: Ganga 1, Ganga 101, Ranajit, and Deccan. In order to make these new varieties accessible to farmers, a network for the production and distribution of hybrid maize had to be established. From the Rockefeller Foundation's perspective, to make this network efficient, private companies had to carry out the production and distribution activities in a competitive market environment. Since a fully new industry had to be built from scratch, the RF convinced the Indian government to support the commercial approach to seed production and distribution. The government was not disinclined to promote the distribution of hybrid maize in general with its projected potential to raise yields by at least 30 per cent, if an adequate supply of fertilizers was assured. Linked to the potentially rising yields in maize production, it was in the interest of the Indian

government that cultivators had an adequate supply of high quality seed. Cooperation with the Rockefeller Foundation in promoting improved seeds was therefore seen as an opportunity to significantly increase India's agricultural production capacity and to provide a better income for farmers.<sup>3</sup>

Towards the end of the 1950s, the political constellation changed, in which philanthropic actors and multinational corporations operated in India. It altered first, with regard to India's public perception in the United States, second, in its ascribed importance in the Cold War resulting in intensifying relations between the United States and India, and third, in India's difficulties in providing sufficient funds for rural development in the context of a foreign currency crisis. This constellation gave the Rockefeller Foundation the opportunity to expand its scope of action in India and establish itself in seed research and marketing. The investment conditions adapted to the new diplomatic relationship between the United States and India, and offered U.S. companies, in general, and the seed company DeKalb, in particular, the opportunity to expand into a new market. In the context of the Cold War and in cooperation with a philanthropic actor, the company was able to formulate this market expansion along the ideals of spreading a liberal-capitalist world order.

The Rockefeller Foundation tried to establish a seed distribution system that would be based on the principles of a free market economy, believing that private business would always be more efficient than government actors. In order to enforce this idea, the RF acted more like a Chamber of Commerce or a business consultant than like a humanitarian organization. The idea of seed as a private and commercially marketable good went hand in hand with establishing a legal framework of seed certification and regulation. Together with USAID, RF officer Ralph Cummings and his colleague A.A. Johnson, a professor at Cornell University, advised the Indian government in the design of a seed law. This seed law would regulate which seeds were marketed and how they were certified to make the difference between grain as seed visible to the farmer. Although Johnson wrote the first draft and therefore had a direct influence on the content of the law, the Indian administration adapted it to its needs, implementing a strong regulative role for the state.<sup>4</sup>

Based on a trust in the superiority of a competitive market environment with private (especially U.S.) corporations as the most efficient actors in seed

production and marketing, the Rockefeller Foundation actively consulted, promoted, and facilitated the establishment of a private hybrid maize industry in India. It set up contacts between U.S. seed corporations such as DeKalb Agricultural Association, representatives of the United States Agency for International Development (USAID), and the Indian government. Furthermore, it wrote the first draft of the Indian Seed Law adopted in amended form in 1968, tested corporate seed varieties in India, and sent seed samples of their varieties to corporations. Unlike in today's discussions, private seed companies were not understood as a threat to the common good but as change agents with special technological and organizational capabilities in increasing food production—or, more generally, as active actors in a transformation toward a liberal-capitalist order.

The records of the RAC unfolded a story of the early Green Revolution in which the Indian and U.S. government, as well as the Rockefeller Foundation, relied on multinational corporations to assume an important role in food production and provided development funds to secure their investments. Thereby, corporations played an active role in providing a public good: food security. In the provision of the public good, however, conflicts between the pursuit of commercial interests/ profits and the public good/ sufficient hybrid seed to secure India's food security came to light.

After the establishment of a private seed industry in India, the Rockefeller Foundation continued to be an important partner for U.S. American businesses. For example, the RF funded the initiation of the Agribusiness Council founded in 1967. It should “facilitate American agribusiness participation in agricultural trade and development programs with developing countries---and represent private-sector agriculture interests to federal government decision-makers”.<sup>5</sup> The Agribusiness Council was an initiative particularly limited to “strengthen the U.S. agricultural sector’s international outreach through stimulating private enterprise trade and investment solutions in Third World agro-industrial development.” Christian Gerlach stresses that U.S. corporations, in contrast with their European counterparts, preferred to organize in national organizations, instead of cooperating on an international level in initiatives like the United Nation’s Food and Agriculture Organization’s initiative, the Industry Cooperative Programme.<sup>6</sup> The Rockefeller Foundation records include the largest and most detailed records

on these matters that I have found so far, including Minutes of the Executive Meetings discussing agribusiness investment opportunities in so-called developing countries. The involvement of the Rockefeller Foundation in the Agribusiness Council shows the continuity of its support of U.S. agribusiness expansion to the Global South.

I argue that the ideological setting of the Cold War with U.S. actors promoting capitalism and free enterprise in the context of development aid of the 1960s privileged and facilitated the expansion of corporate activities. DeKalb's partners in the business expansion showed many elements that are usually related to the neoliberal turn in development of the 1980s: a pro-business ideology and a political economy fostering competition, the recognition of the market as the most efficient allocator and as a superior provider of public goods—in this case food security. Hence, calls for multinational corporations to lead the fight against poverty were not new in the 1980s but had a longer legacy.

As corporate archival collections are usually very limited, it was very useful to me to use the archival collections of the Rockefeller Archive Center, as third party records to find out more about the corporate involvement in the Green Revolution. During my research, I searched a broad variety of record groups, but due to their scope, I focused on India, and on the specific cases described above, namely the establishment of a private seed industry in India in the early 1960s and the documentation of the activities in of the Agribusiness Council starting in 1967. To me, the following RAC archival collections were the most useful:

- **DeKalb in India (1957-1967):** Rockefeller Foundation, Record Group 6.7 New Delhi Field Office, Subgroup I, Series III Officer diaries, especially of Ralph W. Cummings; Record Group 6.7 New Delhi Field Office, Subgroup I, Series IV, Subseries 3-4 (box 62-65).
- **For background information on Indian agricultural development:** Reports of the Ford Foundation, especially those reports written by Douglas E. Ensminger to track changes in the agricultural development strategies and by Lester Brown to find out more about India's fertilizer strategy.

- **Agribusiness Council (1967- ):** Rockefeller Foundation, Record Group 1.3 (box 65, 80); IBEC – Associations (box 37); J. George Harrar Papers (box 13-14).

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<sup>1</sup> Corinna R. Unger, *Entwicklungspfade in Indien: Eine internationale Geschichte 1947-1980*, (Göttingen: Wallstein Verlag, 2015), 105.

<sup>2</sup> Guy B. Baird to K.C. Sodhia, June 1, Folder 11, Box 2, Series I, RG 6.7, General Administrative Files, Rockefeller Foundation Archives (hereafter RFA), Rockefeller Archive Center (hereafter RAC).

<sup>3</sup> Ministry of Food and Agriculture, "Improved Agricultural Seeds with Emphasis on Hybrid Maize," 1960, Folder 446, Box 67, Subseries 8, Series IV, Subgroup I, RG 6.7 New Delhi Field Office, RFA, RAC; Under Secretary, "Minutes of the Meeting of the Committee of Hybrid Maize Corporation held on Wednesday, the 3rd August 1960", 08.13.1960, Folder 433, Box 65, Subseries 4, Series IV, Subgroup I, RG 6.7 New Delhi Field Office, RFA, RAC.

<sup>4</sup> Harold W. Hannah to Loren Davis, Seed Law, 05.20.1957, Folder 432, Box 65, Record Group 6.7 New Delhi Field Office, Subgroup I, Series IV, Subseries 4, RFA, RAC; Ralph W. Cummings, The Seed Stock Problem, 03.21.1959, Folder 407, Box 62, Series III, Subgroup I, RG 6.7 New Delhi Field Office, RFA, RAC; Ralph W. Cummings to Foil McLaughlin, Letters about Seed Laws in the U.S., 05.25.1959, Folder 432, Box 65, Subseries 4, Series IV, Subgroup I, RG 6.7 New Delhi Field Office, RFA, RAC; A. A. Johnson to Ralph W. Cummings, Seed Certification, 06.03.1959, Folder 432, Box 65, Subseries 4, Series IV, Subgroup I, RG 6.7 New Delhi Field Office, RFA, RAC.

<sup>5</sup> The Agribusiness Council, *History of the Agribusiness Council*, 09.08.2017 (accessed), <http://agribusinesscouncil.org/worddocs/About%20ABC.doc>.

<sup>6</sup> Christian Gerlach, "Illusions of Global Governance: Transnational Agribusiness inside the UN System," in *Food and Globalization: Consumption, Markets and Politics in the Modern World*, ed. Alexander Nützenadel, Engl. ed., Cultures of Consumption series.

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