

# **Methods and Motivations: Philanthropic Science in Decolonization-Era India, 1919-1964**

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## Abstract

How did the Rockefeller and Ford Foundations and the Population Council work with independent India to undertake unprecedented interventions in the agricultural and nutritional sciences in the context of decolonization? Contrasting with recent historical scholarship on the changes that swept the world food economy in the mid-twentieth century, this research centers on the connections between late colonial and post-independence understandings of famine, population growth, and development in South Asia. Contributing to a doctoral dissertation, this work also sheds light upon the link between the concerns of colonial-era eugenics and the debate between population regulation advocates and agricultural and nutritional scientists that would unfold over how to best address independent India's development priorities.

Pursuing a broader framing of the Green Revolution of the 1960s, this project tracks the influence of the Rockefeller and Ford Foundations and the Population Council in inaugurating programs of rural development, nutritional research, and resource management, uncovering the colonial area roots of their interventions in the 1950s and 1960s. Efforts led by Indian nationalists, British colonial officials, and American philanthropists and scientists in the context of colonial development and a global population "crisis" generated institutions and ideas vital to the later Green Revolution. They receive close readings in my work to understand the underlying motives of philanthropic investment and the strategic planning involved in launching new and unprecedented programs. The motivations and inaugural planning behind these early activities reveal how far decolonization shaped the demographic and agricultural theories central to development discourse across independent South Asia.

# **Colonial Era Origins of American Philanthropy in India's Food Economy**

The impetus for increased food production in South Asia drew from the work of agricultural scientists and physicians in the late colonial period. During the 1920s and 1930s, the emerging nutritional sciences and a rising doctrine of social intervention in rural communities would influence the agendas of the philanthropic and new international organizations entering India after the Second World War. To demonstrate this influence, my work features the narratives of agricultural scientists and rural extension experts at work in late colonial India, including Presbyterian missionary Sam Higginbottom, agronomists Albert and Gabrielle Howard, and physicians Robert McCarrison and W.R. Aykroyd. Well before formally launching an agriculture program in India in 1956, the Rockefeller Foundation experimented with rural extension by supporting the work of the missionary Higginbottom at the Allahabad Agricultural Institute during the interwar years. Similarly, this American foundation supported investigations into malnutrition and deficiency diseases undertaken by McCarrison and Aykroyd in the Madras Presidency. In turn, late colonial ideas regarding the causes of famine and malnutrition directly informed later efforts to energize South Asia's food economy through rural extension training and agricultural education programs. Following the Bengal Famine of 1943-44 and Partition in 1947, fears of overpopulation and food shortage played a powerful role in driving efforts to reshape Indian agriculture. The urgency of this "double crisis" of food shortage and population growth, as the British writer Aldous Huxley termed it, justified the efforts of the Rockefeller and Ford Foundations and the agencies of the United Nations (UN) in their first development initiatives across South Asia during the 1950s.<sup>1</sup>

Independent India's community development initiatives of the 1950s emerged from the immediate imperatives of post-Partition refugee rehabilitation. Building upon the example of the state-funded rehabilitation township of Nilokheri launched by S.K. Dey in East Punjab, along with a handful of other colonial-era models, the Ford Foundation and the Technical Cooperation Administration

(TCA) worked closely with the Indian government to launch nationwide community development and rural extension initiatives. The extension and training programs organized by the Allahabad Agricultural Institute under the direction of Arthur T. Mosher, for instance, helped to expand the reach of the Ford and Rockefeller Foundations across rural India in the quest to reorder the countryside and regulate the population. Pursuing such goals, the Indian government organized rural extension training programs that would take urban, college-educated Indians and convert them into village-level workers. Financed and lauded by American philanthropic organizations and international agencies alike, these ambitious programs of the 1950s show that the quest to address the “double crisis” of overpopulation and food shortage went far beyond India’s nutrition laboratories and agricultural experiment stations, pursuing broad social interventions across the subcontinent. At the same time, the community development methods tested at Nilokheri and refined in the rural extension training programs of the TCA and Ford Foundation failed to engage women effectively, drawing official scorn for neglecting half of India’s rural population. Further, the bureaucratic heft of the new Ministry of Community Development complicated matters into the early 1960s. As community development programming repeatedly failed to deliver promised increases in food production, American philanthropic organizations and the Indian government concluded that direct funding for innovations in the agricultural and nutritional sciences would prove a more effective investment.

Investments made in South Asia by the Rockefeller Foundation and the Food and Agriculture Organization (FAO) of the UN following the Second World War redirected and amplified the capacity of the nutritional sciences, particularly as funding poured in for the work of the All-India Institute of Hygiene and Public Health and the Nutrition Research Laboratories at Coonoor and Hyderabad. The subsequent exchange of scientific knowledge and expertise profoundly shaped the global health priorities of both the Rockefeller Foundation and the FAO, enabling the formation of an international network for the sharing of the fruits of research in the nutritional sciences. Into the early 1960s, nutritionists and agricultural scientists became increasingly engaged with one another’s research agendas. The research program laid out by late colonial nutritional scientists would both reflect

and resist the priorities of the production-focused brand of agricultural science advanced by the Rockefeller and Ford Foundations through the 1950s and 1960s. Just as nutrition researchers approached vulnerable populations as their test subjects in postwar Europe and the Americas, FAO and Rockefeller Foundation-backed scientists in India pursued investigations into childhood and maternal nutrition, as well as the dietary needs of agricultural laborers and the rural poor.

## **Confronting the “Double Crisis” of Food Production and Population Growth**

Further, Indian and American scientists associated with the Rockefeller Foundation and the Population Council connected notions of seed and soil fertility to wider concerns of overpopulation as they advanced down the road to the Green Revolution. Eugenic ideas of fertility regulation played an important role within the planning efforts of the agricultural scientists of the Rockefeller Foundation and the physicians of the Population Council as their operations in India commenced in the 1950s. For instance, at the first All-India Conference of the Family Planning Association in Bombay in November 1951, the Indian demographer and economist Sripati Chandrasekhar delivered his inaugural address as president of the group. Having earned his Ph.D. in Sociology from New York University in 1944, Chandrasekhar would go on to work with Julian Huxley’s UNESCO and serve as a controversial cabinet minister under Indira Gandhi.<sup>2</sup> Assessing India’s food production capabilities, Chandrasekhar stated:

Despite the great advancement of modern science and technological skill, our total food production, not to speak of other necessities, has not kept pace with the growth of population. On the contrary, our natural resources are not only not increasing with the growth of population, but what is worse, they are actually dwindling on a global scale, resulting in what Aldous Huxley calls “a double crisis.”<sup>3</sup>

Indeed, Huxley’s essay, “The Double Crisis,” had appeared in the April 1949 issue of the *UNESCO Courier* journal. As R.S. Deese shows, Huxley’s essay served as a

clarion call for the postwar population control movement, but its fatalism had caused editors at *Harper's*, *Life*, *Foreign Affairs*, and the *Atlantic* to reject its publication.<sup>4</sup> At least in a rhetorical sense, Aldous Huxley was perhaps ahead of his time as fears of a population “bomb” would sweep popular publications and scholarly journals through the 1950s and 1960s, articulated notably by businessman Hugh Moore in 1954 and biologist Paul Ehrlich in 1968.<sup>5</sup> Either way, Huxley’s warning of an impending ecological crisis brought on by overpopulation caught Chandrasekhar’s attention.

Postwar population growth rates were indeed increasing rapidly, though perhaps not at a rate that would bring the global total to 9.2 billion by the year 2000, as Chandrasekhar projected in his 1951 remarks to the Family Planning Association. Nevertheless, by invoking Huxley, author of the dystopian novel, *A Brave New World*, and the brother of Julian, Chandrasekhar linked India’s challenges to the wider discussion surrounding global population regulation.<sup>6</sup> He also expressed fears of overpopulation and resource exhaustion that were becoming commonplace within the global scientific community and the popular press in the postwar years, particularly following the publication of the influential article, “The World Demographic Transition,” by American sociologist Kingsley Davis in 1945, which contended that industrialization itself held the key to fertility decline.<sup>7</sup> When coupled with perceived resource degradation and the apparent causal link between strict food shortages and famine, the postwar population boom presented India’s policymakers and economic planners with a frightening glimpse of things to come. It was their contention that time was running out and a classic Malthusian catastrophe loomed on independent India’s horizon. By Chandrasekhar’s own estimates, only immediate, radical advances in developing India’s agricultural sector, encouraging urbanization, and promoting family planning could prevent it, guaranteeing a stable future for the new nation. Following Partition and into the early 1950s, American philanthropic organizations sought to become the heroes of this effort to meet food supply and population pressures with social and scientific interventions.

Motivated by the promises of financial and diplomatic support offered by the Truman Administration’s Cold War-inspired Point Four Program, the Rockefeller

Foundation and the heftily-funded Ford Foundation moved almost simultaneously through 1949 and 1950 to investigate the prospect of launching projects in nutrition, agriculture, and community development in independent South Asia.<sup>8</sup> While the Second World War had postponed the Rockefeller Foundation's arrival as a force in South Asian agriculture, the conflict had also forced the foundation to transfer its institutional investments in China and Europe to Mexico, enabling a programmatic shift toward research into high-yield grain varieties.<sup>9</sup> Through the early 1950s, agents of the Rockefeller Foundation conducted extensive inquiries into what role, if any, their organization should play in independent India, Pakistan, and Ceylon. These discussions reveal the foundation's intentions in South Asia, exposing the ways in which thinking on the relationship between food shortage and overpopulation fundamentally steered the philanthropic planning process.

## **Tension Between Investments in Population Regulation and Food Science**

In Mexico through the 1940s, successful projects in the agricultural sciences undertaken by the Rockefeller Foundation, particularly involving innovations in high-yield seed varieties, herbicides, pesticides, and fertilizers, prompted renewed debate over the foundation's role in South Asia following the war and in the run-up to independence.<sup>10</sup> Still, tensions lingered between the organization's commitments to public health — which extended lifespans, limited disease morbidity, and reduced childhood mortality — and new experiments in agricultural science that seemed to hold the key to vastly increased food production. As early as May 1947, Rockefeller representatives had begun to decline overtures from Indian public officials and scientists, such as statistician P.C. Mahalanobis, requesting that the Rockefeller Foundation expand its programming in India beyond the existing International Health Division, which still concentrated its efforts on distributing small grants and bringing the fruits of American and European biomedical research to South Asia.<sup>11</sup> In the aftermath of Partition, however, Rockefeller Foundation officials began seriously to consider

intervention on a much larger scale. The only remaining question would be whether the foundation would invest more deeply in public health or collaborate with new international organizations like the FAO and the rapidly expanding Ford Foundation to translate knowledge drawn from the fields of Mexico into a wider agricultural development program for South Asia.

In early July 1949, the Rockefeller Foundation's top staff in New York received a memorandum entitled, "Relation of the Point IV Program to Population Problems," outlining federal guidelines for financing birth control programs in target nations.<sup>12</sup> The unsigned memo suggested that it would be inappropriate for the United States government either to promote or oppose projects of population control launched by the governments of developing and decolonizing countries. That said, government officials should not discourage birth control programs, if they were independently making progress abroad. After all, the "savings of lives" promoted by public health projects and humanitarian efforts would likely raise population growth rates and jeopardize economic development, undermining the objectives of the Point Four Program.<sup>13</sup> The United States would not, however, directly fund birth control measures, and "requests for assistance in such projects would normally be referred to private or international agencies."<sup>14</sup> As the memo concluded: "The only definitive check on population growth consonant with humanitarian ideals is the voluntary reduction of births whether through the postponement of marriage, continence, or other forms of family limitation."<sup>15</sup> In this way, the door had been opened for private philanthropic organizations to take the lead in the global population control movement, though such efforts would not receive the explicit support of the United States government under the Point Four Program. It remained now for Rockefeller Foundation officials to decide how their organization — and the closely-related Population Council that would be launched by John D. Rockefeller 3rd in 1952 — would proceed in South Asia.

On January 2, 1952, Warren Weaver and John D. Rockefeller 3rd met for dinner at the Century Club in Midtown Manhattan. Joined by businessman Lewis L. Strauss, biophysicist (and soon-to-be president of the Rockefeller Institute for Medical Research) Detlev W. Bronk, and attorney Donald H. McLean, Jr., they discussed a problem that had recently begun to plague the mind of the forty-five-

year-old Rockefeller. Heir to his grandfather's fortune and to his father's legacy as one of the world's leading philanthropists, John D. Rockefeller 3rd explained that he had developed a concern for the issue of "population and resources" on a global level.<sup>16</sup> As they ate, the group discussed the prospect of organizing a conference of fifteen to twenty of the nation's top experts in demography, population control, and the agricultural sciences to inform Rockefeller's thinking on such topics. Already busy with preparations for an upcoming fact-finding mission to India to plot a possible Rockefeller Foundation intervention in agriculture, Weaver insisted he had little time for a new project.<sup>17</sup> Nevertheless, Rockefeller would summon him frequently through 1952, distilling Rockefeller's vague concerns into clear plans for a new philanthropic organization: the Population Council.

After consulting experts at the conference hosted by the National Academy of Sciences in Williamsburg, Virginia in late June, John D. Rockefeller 3rd moved enthusiastically toward the idea of a new non-profit organization that would open population offices around the world. Its objective would be to gather data and raise local awareness of the threat of overpopulation.<sup>18</sup> The new agency would be at once socially-engaged and invested in increasing food resources, tackling population issues in the broadest sense possible.<sup>19</sup> Alarmed by the broad scope of this proposal, Weaver pressed his employer to confine the organization's attention to fertility restriction as a matter of public health.<sup>20</sup> Rockefeller pushed back. As Weaver recorded in his Rockefeller Foundation officer's diary on September 4, 1952:

It would be WW's own personal recommendation that JDR III undertake activity in the field of control of human fertility, on the grounds that this is obviously an exceedingly important and pressing problem, [...] that no one else seems to be working actively or completely in this particular area, and finally that this is an area in which the RF itself is very unlikely to work. It is fairly clear that JDR III is not very happy about this suggestion.<sup>21</sup>

Through the second half of the year, Weaver observed John D. Rockefeller 3rd at first resisting and, gradually, accepting a strict focus on the control of human fertility. As Matthew Connelly notes, Rockefeller's conclusion that the Population Council should emerge as a separate institution came in part at the behest of

Frank Notestein and Frederick Osborn, the influential Princeton eugenics-embracing demographers who argued that a new institution could become “a nexus for all other major players in the field,” including the International Planned Parenthood Foundation (IPPF), the Ford Foundation, and others.<sup>22</sup> By December, the new Population Council, endowed with an initial \$100,000, stood poised to join the Rockefeller Foundation in India, exploiting the latter’s institutional connections in public health and complementing the foundation’s emerging investments in the agricultural sciences.<sup>23</sup>

## **A Strategy for the Rockefeller Foundation’s Agricultural Work in India**

The Rockefeller Foundation’s new Indian Agricultural Program (IAP), launched in 1956, immediately began work on improving South Asia’s seed stocks in maize and sorghum and invested in the hybridization of American and Asian grain varieties to promote better growth. In turn, rural extension work and nutritional research assumed subsidiary roles within efforts to improve South Asian grain yields and to restrict human fertility. The task of calculating precisely how to invest Rockefeller Foundation’s funds in South Asia fell to chief scientific staff at the foundation. Warren Weaver, the influential director of the Rockefeller Foundation’s Division of Natural Sciences from 1932 to 1955, began his career as a mathematician at the University of Wisconsin.<sup>24</sup> During the Second World War, he served with the US National Defense Research Committee and spent time on assignment in London, supporting Britain’s development of radar and anti-aircraft systems. For his work, the British government awarded him the King’s Medal for Service in the Cause of Freedom in 1948.<sup>25</sup> While visiting Carlsbad, New Mexico in July 1949, Weaver composed a series of memoranda investigating the foundation’s postwar priorities for scientific research. One memo, “Translation,” would become an important theoretical text in early computing research into linguistics and the prospect of machine translation.<sup>26</sup>

Weaver, who would be a powerful influence in determining the course of the Rockefeller Foundation's program in independent India, also wrote another memo on that trip, entitled "Food and Population." It circulated widely among Rockefeller Foundation staff and scientists as plans for work in agricultural development and nutritional research in South Asia took shape. As Alison Bashford notes, Weaver's influential analysis boiled the global food problem down to an issue of efficient solar energy exploitation.<sup>27</sup> Weaver calculated that the average American required 3,000 calories per day from food and about 125,000 calories per day from carbon-derived fuels. The global average for each figure stood somewhat lower, however, at 2,400 for food and 6,000 for fuel.<sup>28</sup> In accounting for these average energy needs, a total figure for global energy demand could be derived. Weaver argued that considering the food problem primarily as an energy problem, Rockefeller Foundation's Natural Sciences Division could more effectively focus on improving the ways human bodies absorb solar energy. More importantly, Weaver rejected Malthusian projections of a coming food catastrophe and placed faith in the potential for science to escape the "traditional patterns of the past."<sup>29</sup>

Beyond undertaking such seemingly futuristic and speculative analyses, Weaver was also tasked with evaluating the Rockefeller Foundation's basic strategy in India. On January 30, 1951, he circulated among Rockefeller staff his strategy for the foundation's proposed collaboration in agrarian development with the Allahabad Agricultural Institute under its new principal, Arthur T. Mosher. Joseph H. Willits, director of the foundation's Division of Social Sciences, noted his own personal connection to Allahabad; at an intercollegiate YMCA conference in 1912, he had nearly been persuaded by the charismatic Sam Higginbottom to become a missionary in India. As Willits reflected, "The Indians have had to suffer many things, but from that, at least, they have been spared."<sup>30</sup> Moving on from the mission deferred, the memo detailed Weaver's thinking on the utility of an expanded Rockefeller Foundation intervention in India.

Weaver began by presenting a simple arithmetic fraction originally conceived by American geographer, J. Russell Smith, which placed "Developed Resources" as the numerator above the denominator "Population." Dividing the former by the

latter yielded “Average Level of Living.”<sup>31</sup> With this ratio, Weaver argued that India, with its vast population and underdeveloped food resources, presented one of the best platforms from which to improve the standard of living for the entire world. Echoing his optimism in the widely circulated “Food and Population,” Weaver explained the practical implications of the ratio he had introduced:

I assume RF has decided not to try to encourage studies and methods which would tend to shrink the denominator of the above fraction, but, rather, to increase the denominator (in my judgement quite properly) by continuing work in public health. The shrinkage of the denominator would be left for nature “to take her course” by the century-long processes of modernization, urbanization, and education.<sup>32</sup>

In the face of those assumptions, Weaver concluded that, given its existing investments in public health, Rockefeller Foundation’s best course of action in India would be to work toward increasing the food supply “faster than Indians breed.”<sup>33</sup> He offered a note of caution that such efforts would inevitably “provide the world with a lot of additional Hindus, Moslems, and Untouchables, of which we already have a fair stock of samples.”<sup>34</sup> Strikingly, this racialized commentary echoed Mosher’s own assessment of India’s agricultural situation. As he concluded in a 1950 solicitation pamphlet that emphasized the Allahabad Agricultural Institute’s Christian mission: “The greatest obstacles to progress for the masses of India are certain basic beliefs which have been inherited from Hinduism. Hindu culture is so interwoven that no problem — economic, social, political, or religious, — can be solved successfully in isolation.”<sup>35</sup> In this way race — and religion — featured prominently within the categorizations of Indian agriculture as ‘backward’ on the part of Rockefeller Foundation agents.

For these experts, the need to balance the equation between population growth and food production rested upon the assumption that the Indian “masses” were intrinsically inclined to reproduce uncontrollably. On the same token, in Mosher’s view, Indians were also completely incapable of revising their cultivation practices without the help of white Christians and their modern methods. For Mosher, as with Higginbottom before him, Christianity, science, and whiteness went together seamlessly, informing one coherent gospel of rural development. Within such an analysis, British colonialism received little to no attention as a purveyor of

inefficient, exploitative practices. Certainly not at odds with such a worldview himself, Weaver proposed a fact-finding mission to India to consider investments in agricultural research and to evaluate the rural extension agenda of the Allahabad Agricultural Institute.<sup>36</sup>

## **From Complementary to Conflicting Approaches en Route to the Green Revolution**

In December 1951, the Rockefeller Foundation's board of trustees sent a group of scientists and top program officers to India to investigate the potential for programmatic investments in the subcontinent. For some, visiting independent India underscored the overpopulation crisis about which they had previously only theorized. From Bangalore, for instance, Alan Gregg relayed a dispatch, entitled "Precarious Welfare," back to Rockefeller Foundation's New York office on December 10, 1951. Now vice president of the foundation, Gregg pondered his organization's potential role in India.<sup>37</sup> Like Weaver, Gregg asked his colleagues to indulge him in a thought experiment to clarify his concerns about Rockefeller Foundation's coming intervention in South Asia. "Imagine an uninhabited island with a population of about 1,000 head of deer," he began. On the island, the deer faced three factors which restricted their numbers: an inadequacy of parasite-free water, a limited amount of forage, and hungry pumas. He continued: "Now what will happen if you construct one clean and steadily flowing water trough or well, hold a successful puma hunt every year, and introduce successfully a few new forage grasses?" The deer population would increase, Gregg concluded.<sup>38</sup>

Corresponding with the forces of pestilence, famine, and war pulled directly from the pages of Malthus, the factors limiting the deer population on Gregg's imagined island represented precisely the same elements the Rockefeller Foundation looked to constrain in India. From the heart of South India, the foundation's vice president dispatched an urgent warning to his more confident scientific

colleagues:

It seems to me that the main problem for us in India is to teach the Indians how to produce locally and by themselves the knowledge and skills now and till now furnished to them by the West. Medical science, stability of government, and agricultural technology have made possible the growth in population, and on these their enormous number now utterly depend.<sup>39</sup>

In contrast with Weaver's cautiously optimistic estimates of the capacity for science to manage growing populations, the physician Gregg lamented that Rockefeller Foundation's programs might trigger the very sort of Malthusian crisis the foundation had hoped to avert. With Gregg's vivid and dehumanizing warning duly noted, the Rockefeller Foundation continued its broad investigation of conditions in India, searching for a programmatic opening and focusing on the convergences between public health and agricultural science.

Though striking, Gregg's concerns by no means represented an outlying opinion within Rockefeller Foundation officials' discussions of programming possibilities in independent South Asia. Mirroring Gregg's foreboding evaluation from the previous year, Dr. Richmond K. Anderson, assistant director of the Rockefeller Foundation's Medicine and Public Health Division and future associate director of the Population Council, wrote on March 5, 1952:

It seems entirely fallacious to say that because public health has done a good job in preserving human life, we should therefore now stop our efforts and promote economic development and agriculture. [...] Giving security and ample food to an animal is the best possible stimulus to multiplication and without motivating forces toward smaller families, there is no reason to suppose that man would not act the same.<sup>40</sup>

Again, the assessment of conditions on the ground in India hinged on the idea that exclusive support for welfare initiatives in public health and agricultural development might simply compound the perceived population crisis facing Asia. In contrast with the optimism expressed by Weaver, Aykroyd at the FAO, and even the earlier Famine Inquiry Commission, Anderson and Gregg articulated a common concern among Rockefeller Foundation and Ford Foundation officials

that development investments in independent India would merely fuel the perceived global population crisis of the postwar era.

Tensions subsequently emerged between scientists and administrators countering a perceived dual crisis of food shortage and overpopulation. The Rockefeller Foundation's top officials and strategists interpreted India's ascendant community development and rural extension initiatives with skepticism. In their view, neither food shortage nor overpopulation could be satisfactorily addressed through complex and often expensive social restructuring programs. Only unprecedented innovations in the agricultural sciences could provide the tools necessary to rectify the underlying imbalance between population growth and food production. Still, Rockefeller Foundation-funded organizations pursued social interventions of a different, more invasive sort into the early 1960s. The new emphasis on the agricultural sciences in India represented a social experiment itself, transplanting the model that had successfully increased Mexican grain yields into a much larger national context. Further, the Population Council supported projects aimed at rural fertility restriction, but camouflaged as simple demographic research. In both cases, the Population Council and the Rockefeller Foundation worked closely with Indian scientific institutions and the Indian government to pursue two rural agendas influenced by eugenic thinking and often in conflict during the inaugural era of their interventions during the 1950s and 1960s — one to restrict human fertility, the other to augment the fertility of crop plants.

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<sup>1</sup> Aldous Huxley, "The Double Crisis," *UNESCO Courier* April (1949): 6-9.

<sup>2</sup> Alison Bashford, *Global Population: History, Geopolitics, and Life on Earth* (New York: Columbia University Press, 2014), 285.

<sup>3</sup> "Demographic Disarmament for India: A Plea for Family Planning, Presidential Address by Dr. S. Chandrasekhar," 1951, p. 1, Folder 862, Box 90, Series 464, RG 1.2, Projects, Rockefeller Foundation records (RF), Rockefeller Archive Center (RAC).

<sup>4</sup> R.S. Deese, "The New Ecology of Power," in J.R. McNeill and Corinna R. Unger, eds., *Environmental Histories of the Cold War* (New York: Cambridge University Press, 2010), 292.

<sup>5</sup> Bashford, 306., See also, Paul R. Ehrlich, *The Population Bomb* (New York: Ballantine Books, 1968).

<sup>6</sup> "Demographic Disarmament for India: A Plea for Family Planning, Presidential Address by Dr. S. Chandrasekhar," 1951, p. 2, Folder 862, Box 90, Series 464, RG 1.2, Projects, RF, RAC.

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- <sup>7</sup> Bashford, 305-306.
- <sup>8</sup> Eugene S. Staples, *Forty Years: A Learning Curve – the Ford Foundation Programs in India, 1952-1992* (New Delhi: The Ford Foundation, 1992), 7.
- <sup>9</sup> Amanda Carroll Waterhouse, *Food and Prosperity: Balancing Technology and Community in Agriculture* (New York: The Rockefeller Foundation, 2013), 136.
- <sup>10</sup> Waterhouse, 136.
- <sup>11</sup> “Inter-Office Correspondence from RBF to JHW,” 1947, Folder 1, Box 1, Series 460, RG 1.2, Projects, RF, RAC.
- <sup>12</sup> “Confidential: Relation of the Point IV Program to Population Problems,” 1949, p. 1, Folder 1, Box 1, Series 460, RG 1.2, Projects, RF, RAC.
- <sup>13</sup> Ibid.
- <sup>14</sup> Ibid.
- <sup>15</sup> Ibid., 1-2.
- <sup>16</sup> Warren Weaver diary, January 2, 1952, RG 12, Officers’ Diaries, RF, RAC.
- <sup>17</sup> Ibid.
- <sup>18</sup> Weaver diary, June 22, 1952, RG 12, Officers’ Diaries, RF, RAC.
- <sup>19</sup> Weaver diary, August 21, 1952, RG 12, Officers’ Diaries, RF, RAC.
- <sup>20</sup> Ibid.
- <sup>21</sup> Weaver diary, September 4, 1952, RG 12, Officers’ Diaries, RF, RAC.
- <sup>22</sup> Connelly, 159.
- <sup>23</sup> Weaver diary, December 1, 1952, RG 12, Officers’ Diaries, RF, RAC.
- <sup>24</sup> “Warren Weaver Biographical Data,” Folder 330, Box 8, Biographical Files, RF, RAC.
- <sup>25</sup> Ibid.
- <sup>26</sup> Ibid.
- <sup>27</sup> Bashford, 289.
- <sup>28</sup> Warren Weaver, “Population and Food,” July 17, 1949, p. 5, Folder 474, Box 42, Series 474, RG 1.2, Projects, RF, RAC.
- <sup>29</sup> Ibid., 1
- <sup>30</sup> “Warren Weaver’s Memo Re: Allahabad,” January 30, 1951, Folder 1, Box 1, Series 460, RG 1.2, Projects, RF, RAC.
- <sup>31</sup> Ibid.
- <sup>32</sup> Ibid.
- <sup>33</sup> Ibid.
- <sup>34</sup> Ibid.
- <sup>35</sup> Arthur T. Mosher, “Allahabad Agricultural Institute: Present Resources,” 1950, p. 2, Folder 221, Box 28, Series 464 India, RG 1.2, Projects, RF, RAC.
- <sup>36</sup> “Warren Weaver’s Memo Re: Allahabad,” January 30, 1951, Folder 1, Box 1, Series 460, RG 1.2, Projects, RF, RAC.
- <sup>37</sup> Alan Gregg, Memo entitled “Precarious Welfare,” December 10, 1951, Folder 1, Box 1, Series 460, RG 1.2, Projects, RF, RAC.
- <sup>38</sup> Ibid.
- <sup>39</sup> Ibid.
- <sup>40</sup> Excerpt from Dr. Richmond K. Anderson’s Diary, March 5, 1952, Folder 1, Box 1, Series 460, RG 1.2, Projects, RF, RAC.