

Rockefeller Foundation Support to the Khanna Study: Population Policy and the Construction of Demographic Knowledge, 1945-1953

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In the years that followed Indian independence from British Colonial rule, occurring in 1947, the people of India experienced unprecedented attempts to limit their numbers. In 1952, as the government of India began what was a ‘pioneering’ project of state-sponsored family planning, as part of the program of national development in its First Five Year Plan, advisors and funds flowed from abroad to encourage, augment, and supplement the program.

I visited the Rockefeller Archive Center (RAC) in 2010 as part of my Ph.D. research, in which I examine the history of population control in post-colonial India. At that point, my project looked widely at this history, guided by two broad research questions: why did population control become such an important project within the newly independent Indian nation, and why did India occupy such a central position within global ‘overpopulation’ discourse and related population control interventions? However, two weeks of research barely scratched the surface of the materials held at the RAC, where information on Indian population control spanned the records of the Rockefeller Foundation (RF), the Rockefeller Family, and the Population Council (PC). Above all, this research trip left me impressed by the complexity of concerns over Indian population growth, the extent of the network of players attempting to intervene, and the huge volume of information available for analysis.

In short, the history of population control in India seemed to pose something of a methodological challenge. Population control history defies conventional narrative, existing

as it does at the intersection of Cold War politics, international development aid, nationalism and post-colonial nation-building, communal politics, feminism, eugenics, reproductive science and new reproductive technologies, economics, commerce, private philanthropy, missionary medicine, international health and the burgeoning discipline of demography. Strands of this history can therefore be traced through hundreds of official and unofficial archives, through popular literature and a bewildering array of visual, audio and printed media, and through ethnographies and oral histories. The scale and complexity of this history seemed to preclude comprehensive analysis, particularly within the confines of a Ph.D. dissertation.

While I contemplated my approach to the problem, one set of documents held at the RAC stood out as representing an intriguing and potentially fruitful case study. These documents related to the Khanna Study, a population/birth control experiment conducted in rural India in the 1950s, as I will outline below, have already been the focus of important scholarship. The materials relating to this study, which are spread across the RF and PC records at the RAC, and across a number of other archives as well that I subsequently visited, are both particularly rich and interesting. When pieced together, these scattered records help to put the Khanna Study into clear historical perspective. Importantly, the archival materials revealed that this study, like population control more widely, emerged at the intersection of several different agendas. The Khanna Study was developed and implemented as a collaborative effort of the Harvard School of Public Health, the Government of India's Ministry of Health, the Ludhiana Christian Medical College (a missionary institution supported with funds from the RF), and behind the scenes, the eugenicist-philanthropist Clarence Gamble. Therefore, the study serves as a window into the multiple concerns and agendas which converged upon the issue of population in the early 1950s, and consequently into the emergence of the population control lobby more widely. Thus by tracing the origins,

actions, and impact of the Khanna Study, I hope to produce not only an analysis of the study itself, but to also raise wider questions about the nature of population control in India, and of the population 'science' which supports it.

As a result, the limits of my project redefined, I visited the RAC again in June 2011 to follow-up on my Khanna Study research. The aim of this visit was primarily to understand the role of the RF in the study by asking why the RF, which as several scholars have shown, maintained a cautious position on the issues of population and birth control throughout the 1940s and early 1950s, decided to pour such a large amount of money into a single contraceptive study in India? As historian Matthew Connelly notes, the RF finally got involved in population control in 1953, when it set aside almost a quarter of a million dollars for the Khanna Study.¹ As I will argue, the decision to fund the study was important because it represented more than just an isolated grant-in-aid appropriation, but was also a decisive policy move by the RF Trustees that marked population and family planning studies as a legitimate sphere for RF activity.

This report aims to answer why the RF decided to fund the Khanna Study, thereby placing it in the context of the following RF interests: population; public health work in India; existing links to Harvard School of Public Health, and to a lesser extent, the Ludhiana Christian Medical College and their respective staff. I argue that although the RF action on the issue of population was characterised by caution and internal disputes in the period leading up to 1953, the RF officers did agree that population growth was an issue of overwhelming importance, especially in light of their public health work, which they believed to be exacerbating the problem. Furthermore, the RF did agree that field studies were a necessary starting point to any intervention on a larger scale, for which affiliation with a U.S. university was desirable. Additionally, such an approach also fit within the broader strategy which came to characterise the RF approach to population, which consisting of producing

scientific research results for the consumption of policymakers, rather than intervening more directly into fertility. While the RF agreed that India was a site of particular concern, they also felt that cooperation within India was an essential prerequisite for any such studies.

Conveniently for the authors of the Khanna Study, by the time they submitted their proposal in 1953, the government of India had explicitly stated its interest in precisely these types of studies, and pressure was building within the U.S. to capitalise upon this interest.

Furthermore, the already-existing links between the RF, the HSPH, and the CMC, meant that theirs was a likely case for support. In other words, both the time and conditions were ripe for the RF to back the Khanna Study.

This report begins by summarising the Khanna Study and its political, scientific, and historiographical importance. It then attempts to summarise RF concerns regarding population growth, and the debates between the mid-1940s, when RF interest began in earnest, until 1953, when the Board of Trustees resolved to fund the Khanna Study. In this context, I argue that in spite of the obvious concern within the RF surrounding population growth, action up until 1953 had been limited to investigation and report-writing. The reasons for this were both the RF's caution over the issue and disagreements between its internal divisions. However, I argue as well that while the RF remained cautious in its approach until 1953, the demographic knowledge constructed within the first of these reports proved crucial to its decision to fund the Khanna Study, and that many of the assumptions reflected in the decision to fund the Khanna Study were embedded within this long debate: that population was an issue of vital importance; that studies were necessary and desirable; and that population, if not exclusively so, was a public health problem. Finally, it moves from the internal population policy debate to the context of the RF public health work in India, and its institutional links with Harvard and the Ludhiana CMC. Here I argue, firstly, that while field studies were deemed a likely place for the RF to start, the team assembled at Harvard was a

likely choice for support, and secondly that initial hesitance to interfere in India population issues had dissolved by 1953, in the face of overwhelming evidence that the government of India would welcome such projects.

Background of the Khanna Study

The Khanna Study was conducted between 1953 and 1960, in seven villages in the Ludhiana district of Punjab, with a total population of 8,000. A follow-up study was conducted in 1969. Field work was directed from the nearby market town of Khanna, from which the study took its name. Directors of the study stated their aims as firstly ‘to study population dynamics and the numerous influences that account for variations in population numbers,’ and secondly to measure the effects of a birth control program on the birth rate.² The underlying rationale for such an experiment was the Malthusian premise that ‘population pressure’ was a ‘social malady’ that could lead to famine, poverty, and civil unrest.³ The study is generally considered a failure in that few of the study participants accepted contraceptives, and even fewer actually used them. In the first year of the ‘definitive’ phase of the study ‘acceptance’ of contraception was only around 25 per cent, and declined thereafter. Moreover, field staff gradually realised that those who said that they were in favor of contraception, or even ‘accepted’ the contraceptives offered, did not necessarily use them.⁴

Despite its reputation as a failure, the Khanna Study was nevertheless extremely important for several of the reasons. To begin with, regardless of what the study results showed, Khanna became one of the surveys cited by both the government of India, and by demographers as evidence that Indian people wanted to limit the size of their families.⁵ Next, because the pattern of research established by the study went on to influence a whole series of other influential studies.⁶ Lastly, because the Khanna Study became the focus of a long-running debate as to whether or not children are an economic asset to their families, thanks to anthropologist Mahmood Mamdani’s critical polemic, “The Myth of Population Control.”

Turning the logic of the Khanna Study on its head, Mamdani argued that overpopulation was not the cause of poverty, but the result of poverty. After spending several months interviewing villagers in Manupur, the village in which the 'definitive study' was conducted, Mamdani concluded that there had been a huge gap between the perceptions of the villagers and those of the Khanna study staff. What plagued the study, Mamdani argued, was the basic perception of the problem, shared by the Study's directors and its Indian staff alike, of population as a disease to be treated with the techniques of an epidemiologist.⁷ He argued that the study staff had failed to understand that the people of Manupur needed large families both for labor and for physical security. Rather than posing a Malthusian threat to families on the breadline, children were in fact an economic necessity. Furthermore, in attempting to explain why a number of villagers had accepted foam tablets, but not actually used them, Mamdani argued that the villagers had accepted the contraceptives simply out of politeness. One man explained to him, "Babuji, someday you'll understand. It is sometimes better to lie. It stops you from hurting people, does you no harm, and might even help them."⁸ Mamdani also claimed that the Study Directors had 'exaggerated the impact' of the Study to ensure continual funding and to minimise the perception of the project as a failure.⁹

Since its publication in 1972, Mamdani's critique has attracted as much attention as the Khanna Study itself. Sociologists Roger Jeffery and Patricia Jeffery attribute the popularity of the book to its length and extensive use of anecdotes, and also suggest that it had 'caught a political tide' by providing 'a credible picture of arrogant Western medical and social scientists being outmanoeuvred by diplomatic but rational peasants.'¹⁰ However, Mamdani also provoked a large amount of criticism for his anecdotal method and lack of quantitative evidence in support of his conclusions.¹¹ In spite of its flaws, "The Myth of Population Control" has nevertheless helped to sustain a debate on alternative views regarding the causes and solutions to Indian poverty.¹² It has also helped to consolidate the

historiographical position of the Khanna Study as an infamous example of population control intervention. More recently, historian Matthew Connelly described the Khanna Study as ‘American social science at its most hubristic’ and a ‘notorious example’ of a large research grant which failed to reshape reproductive behaviour.¹³ In addition, Mohan Rao has argued that the Khanna study is as an example of the flawed ‘Malthusian arithmetic’ which was used to justify the actions of the population control lobby.¹⁴ By furnishing data showing favorable attitudes towards family planning, evidence was presented that family planning may be easier to implement than major structural and institutional change, thereby providing justification for population control programs.¹⁵

Public Health and Demography in the Far East

The RF officially became involved with the Khanna Study in October 1953 when it made an initial grant of \$10,000 for the study period ending 30th June 1954.¹⁶ However, this grant was by no means an isolated grant decision, but was made in the context of a long-standing interest in ‘Third World’ population growth. When the Khanna Study proposal was received within the RF’s offices in September 1953, one RF officer described it as ‘the most practical design which has come to us in some five years of waiting.’¹⁷ Indeed, the RF had been discussing population control for some years prior to the Khanna Study, but caution and internal divisions had prevented decisive action. I will argue that the resolution to fund the Khanna Study represented a policy decision on the part of the RF Trustees to become involved in population control through scientific studies.

In the late 1940s the RF, driven by Cold War anxieties, and influenced by John D. Rockefeller 3rd (JDR 3rd) became concerned about growing population growth in the Third World.¹⁸ Such population growth was believed to lead to resource shortages, economic stagnation and political instability, conditions believed to be ripe for the spread of communism. JDR 3rd had become increasingly alarmed by the crowded conditions he saw

during his travels in Asia and Africa following the Second World War, so he called for a dual strategy of increasing the food supply in developing nations, combined with population control through birth control. Like other organizations engaged in international health, JDR 3rd expressed concern that the RF's public health work was further fueling population growth.¹⁹ Believing that population issues needed to be placed on a 'scientific basis' that would address both the biomedical issues related to reproduction and the social implications of population growth, JDR 3rd urged the RF to undertake a population program.²⁰ However, wary of association with either eugenics or birth control, the RF officers were hesitant to act on the issue.²¹ Although the staff at the RF had debated at length the prospect of establishing a program for population assistance, nothing had come of their discussions. In 1948, in the hope of clarifying the issue, the RF sent a team of social scientists to survey public health and demography in the Far East.²²

The team was headed by Marshall C. Balfour, the Far East regional director of the RF's International Health Division (IHD). The other members of the team were Roger F. Evans, assistant director of the Social Sciences Division of the RF, and demographers Frank W. Notestein and Irene B. Traueber, of the RF-funded Office of Population Research at Princeton University. The three-month trip to six East and Southeast Asia countries seemed only to confirm the fears of the mission staff about the threat of population growth. Perhaps the most significant 'result' of the public health and demography report was a conceptual shift, made by the mission's Princeton demographers, in their approach to demographic transition theory, which was the predominant demographic theory of the era. The fundamental alteration made to it as a result of the Far East mission, proved crucial to the RF's decision to fund the Khanna Study, thereby entering the arena of population control. Given the importance of this shift in the RF policy on population, the next

section of this report will give a brief historiographical overview of transition theory, and its alteration during the Far East mission.

The Transition Theory and Rockefeller Foundation Policy

Demographic transition theory presented both an explanation for the demographic patterns of industrialised societies and a model for possible future patterns in the problematic ‘underdeveloped’ nations.²³ The ‘classic’ formulation of transition theory presented in 1944 by Notestein and his Princeton colleague Kingsley Davis, suggested that all populations passed through three principal demographic stages. Societies first passed through a ‘traditional,’ pre-industrial stage, characterised by high birth rates which were balanced by high death rates, and therefore the population grew very little. In the next stage, which included the early phase of industrialisation and modernisation, improvements in sanitation, diet, and public health contributed to a reduction in mortality. However, during this stage, the fall in the death rate was not matched by a fall in the birth rate, thereby resulting in a large population increase. Finally, the combined impact of modernisation, urbanisation and industrialisation led to a decline in the birth rate.²⁴ Factors such as enhanced survival, a growing culture of individualism and rising consumer aspirations, motivated people to limit their own fertility, and population growth stabilised.²⁵ Thus, by encouraging industrialisation and associated social change, population growth could also be curtailed. However, while this ‘classic’ model held that fertility would only fall as a result of the effects of full-scale industrialisation and modernisation, in the late 1940s the theory was altered. As Simon Szreter, Dennis Hodgson, and Susan Greenhalgh have argued, in order to provide a more immediate solution to third world population growth, Notestein and his colleagues ‘inverted’ the transition theory to argue that in the non-industrialised countries, high fertility itself was impeding economic development. Fertility would therefore need to be controlled in order for economic development to proceed.²⁶

Simon Szreter identifies Notestein's experiences with the RF Far East mission in 1948 as critical to this shift in transition theory, which was solidified following the fall of China to Communism in 1948 to 1949. The theme which ran throughout the RF public health and demography in the Far East mission report was the idea that the welfare of people in the Far East could not be solved by increased production alone, but that 'gains in production will be largely consumed by increasing numbers, and that the processes of population change will function, like the governor of a machine, to keep the system in a stable equilibrium of poverty and ill health.'²⁷ The report argued that fertility control would not therefore follow economic development and rising living standards, but was a 'necessary condition' for such economic and social changes. The link to Cold War concerns was made explicitly in the report, which stated that "the subcontinent of India, precariously divided between Hindu and Muslims, comes most forcibly to mind as the next possible location for a serious outbreak of communism."²⁸ The report therefore recommended that the RF intervene directly into fertility, and proposed the formation of a new population division within the RF for this purpose.

However, reflecting concern that activity in the field of birth control might antagonize leaders in Catholic countries in which they worked, and a belief that the RF was 'in the job of saving lives', the RF's Board decided against forming any new division which went beyond the medical field.²⁹ This decision, Donald T. Critchlow argues, 'reflected the Rockefeller Foundation's predisposition to avoid politically controversial issues.'³⁰ Instead, as John Sharpless argues, the approach that the RF favored was to develop a corpus of scientific knowledge on population, and disseminate it to policy-makers to act upon. Therefore, in a process which Sharpless terms the 'internationalizing demographic knowledge', that began with the Far East mission in 1948, and continued throughout the 1950s, the RF sponsored 'demographic missions' to developing countries by prestigious demographers, who would

meet ‘high level’ officials and highlight the importance of the ‘population problem’. They would return home, produce a report, and distribute it free of charge to the policy-making elites in the U.S. and overseas.³¹ As I will argue later in this report, while the type of scientific study disseminated within the process of ‘internationalizing demographic knowledge’ was intended to urge policymakers as to the importance of intervention into birth rates, the Khanna Study was intended to provide information on how such intervention might be conducted.

However, between the public health and demography in the Far East mission and the Khanna Study resolution, the RF’s approach on population remained characterised by caution and internal disagreement. Much of the debate between 1949 and 1953 surrounded a second report regarding population issues, led by the IHD, confusingly entitled “Human Ecology: Population.”

‘Human Ecology’: Diffusion and Confusion

As Edmund Ramsden has recently argued, in the late 1940s the RF had sought to diffuse controversy surrounding the issue by replacing the term “population” with “human ecology.”³² Upon his return from the Far East mission Balfour was paired with another IHD officer, medical entomologist Marston Bates, to review RF involvement in the field of ‘human ecology,’ a term which officers began to use almost synonymously with ‘population problems.’ The term was considered by some within the RF as ‘more acceptable to those who feel that population studies have a primary connotation of birth control.’³³ Not only did the term avoid direct association with the sensitive subject of birth control, but it was also considered ‘more inclusive.’ ‘Human ecology’ seemed at the outset, to reflect what RF officers saw as a uniquely complex problem which seemed to bear on every aspect of human life, and which therefore required the expertise of virtually every discipline. Staff within the RF’s divisions of International Health, Social Science, Natural Science, and Medical Science

could all contribute to the study of the 'population problem', which raised as many questions about human social behaviour and the environment as it did about reproductive biology.³⁴ As Ramsden argues, for many RF officers and trustees the concept of human ecology 'functioned to restrict controversy while encouraging communication across disciplinary boundaries.'³⁵

In 1949, Balfour and Bates produced a report entitled 'Human Ecology: Population,' which Balfour initially believed would "give overall perspective on population."³⁶ In agreement with the public health and demography in the Far East mission, the 'Human Ecology: Population' report recommended RF involvement in fertility control and suggested a field study in Ceylon, under the auspices of the IHD as a starting point.³⁷ However, rather than clarify the issue and clear the path for the RF policy action, the 'Human Ecology' report seemed only to bring further confusion and delay to definitive action. While the RF President Chester Barnard considered the report as "a clear and balanced presentation," trustee Henry Allen Moe complained that "It is not clear to me nor can I regard it as balanced." The problems were multiple and as fundamental as the objective itself. Moe complained about the convoluted approach, stating 'I should like the ultimate objective stated in simple language, more simple than "to serve as background for possible attempts at the manipulation of environmental and population density relations by those in whom the responsibility reposes." I don't know what these words mean.' Moe demanded specifics such as, what exactly was being proposed, who would do the work, and above all how much would a project cost? Moreover, Moe saw 'fictions' in the report, which he suspected to be 'written with the purpose of bringing practically all social science within the jurisdiction of the IHD.'³⁸ In seeking to avoid controversy, and by attempting to represent every possible RF division, the report produced both confusion and resentment. Moe's concerns were echoed by a number of

other RF staff and trustees, particularly those outside the IHD who believed that their divisions should be given a more prominent role in studying the issue.

Even those who agreed that the IHD should lead in the field of population saw population studies as fundamentally different from the disease eradication work that had preceded it. As one RF officer argued, in the case of a specific disease, it could be ‘safely assumed’ that those suffering the disease wanted to be cured and that to cure them was ‘a good idea’. Moreover, in the case of disease, it was not difficult to define what kind of training officers would require, before commencing their field work. Disease eradication was he argued, “Just like having plumbing fixed – everybody thinks it is a good idea to have plumbing fixed, everybody whose plumbing is bad wants to have it improved, and it is pretty clear how and where you go about finding and making plumbers.” Not so the question of ‘human ecology.’ It was unclear even what the RF was ‘trying to accomplish,’ much less how individuals would be trained for a task which seemed to involve ‘essentially all of the intellectual disciplines.’³⁹

Such was the disagreement and confusion over what exactly should be done and by whom, that the internal debate simmered on without resolution until 1953. By that time, Balfour himself felt that the ‘human ecology’ concept had ‘added vagueness and confusion to our purpose more than anything else.’ He wrote in his diary that ‘Population and/or Human Ecology ... are resting quietly on the shelf.’ Since the proposed field study in Ceylon was also related to the ‘human ecology’ project, it too had ‘languished.’⁴⁰ Meanwhile, as Sharpless and Critchlow both noted, JDR 3rd and a small group of scholars, disappointed with the RF’s failure to take action on the population issue, pushed ahead independently and founded the Population Council (PC) in 1952.⁴¹

In 1953 however, the RF finally make a decisive move to support population control by funding the Khanna Study. The resolution to fund the Khanna Study consequently

represented not only an isolated grant action, but the resolution of the long internal debate over the RF's policy on population. Indeed, when Dean Rusk brought the proposal before the Trustees for approval in December of 1953, he stated that one reason for presenting it to the full meeting of the Board was to 'obtain a clearer definition of trustees' wishes and the RF policy regarding population problems.' The item was approved unanimously, and with little discussion, an action which Balfour interpreted as 'an important policy decision.'⁴²

Given its reluctance to be associated with birth control, and its internal disagreements over how they should approach the issue, why did the RF decide to fund the Khanna Study in 1953? I contend that embedded within the long internal debate on the RF's population policy were several shared assumptions and points of agreement which made the Khanna Study a viable prospect for support: among them that population was a problem and that the RF could influence this problem through field studies, for which cooperation with a university was desirable. On a very basic level of course, the fact that the Khanna Study proposal came from outside the RF meant that it was removed from the possibility of internal disagreements over which division should lead the study. Moreover, the study came ready-staffed with a team that the RF believed to be peculiarly well suited for such work. Furthermore, with pressure building within the U.S. for population control action, exemplified by the 1952 Conference on Population Problems held at Colonial Williamsburg, combined with an explicit policy stance by the government of India to curb Indian population growth, the Khanna Study was made possible.

Study and Collaboration

While the RF staff believed birth control to be potentially controversial, they nevertheless agreed that the population problem was of 'overwhelming importance.'⁴³ They also agreed that the RF presently lacked sufficient knowledge to influence the 'population problem' and that a field study was the best way to obtain such information.⁴⁴ As one trustee

warned, 'it is easier to cry 'Onward' than to say whither.'⁴⁵ However, studies also represented an easier and less controversial way for the RF to become involved in population control. Warning in 1947 that population was 'an extremely difficult field to enter', one of the RF's Scientific Directors recommended that "an easy way to enter the field would be to sponsor one or two research projects centred around some university, on a grant-in-aid basis."⁴⁶ Echoing the sentiments expressed in that statement, the RF staff generally accepted that affiliation with a university department was desirable in any population study, whether led or simply funded by the RF. This association would be advantageous both for the additional expertise and academic legitimacy such cooperation could bring, and because such an approach meant that the affiliated university could 'bear the onus of opponent propaganda,' thereby deflecting oppositional attack from the RF itself.⁴⁷ Princeton, Johns Hopkins, Yale and Harvard were the top choices for such cooperation.

Early on in the process Bates argued strongly in favor of Harvard, because he believed that the faculty of the Harvard School of Public Health was already anxious to become involved in such a field study, was already 'promoting interdivisional relations through ecology,' and was already emphasizing population problems in its tropical public health work. Bates contended that thinking at the HSPH and the IHD was running such a 'parallel course,' that collaboration was 'not only easy and desirable, but almost inevitable.'⁴⁸

In fact, between 1949 and 1953, Bates and more often Balfour, had made several visits to the HSPH (a RF-funded institution) to 'make contacts' and to exchange ideas. During these visits Bates and Balfour found that the subject of their 'immediate interest', human ecology and population, was also 'a topic of primary concern' to Dean John S. Simmons and other faculty members at HSPH. Like many at the RF, at the heart of the HSPH professors' concern was the suspicion that their own public health work was exacerbating 'the problem'.⁴⁹ Just as the RF had tried to do, in 1949 the staff of the HSPH was attempting

to ‘broaden and integrate’ their teaching through new courses in the field of ‘human ecology,’ which emphasised ‘population problems.’⁵⁰ To Balfour and Bates, the ‘godfather’ of these new courses appeared to be the epidemiologist and ‘ardent human ecologist’, John Gordon.⁵¹ It was during one of Gordon’s periodic visits to HSPH that Balfour heard his plans for a population study in the Ludhiana district of Punjab, India.

Gordon had been working alongside two of his MPH students, medical missionaries Carl Taylor and John Wyon, on plans for a population study as part of a broader series of epidemiological studies in the Ludhiana district. The geographical setting was chosen for the practical reason that Taylor was set to take up a position as head of the newly-formed Department of Preventive Medicine at the Ludhiana Christian Medical College. Taylor, a medical missionary with the American Presbyterian mission, was already well known to the RF. He had been in a class of doctors that had been trained by the RF on behalf of the U.S. Army during the Second World War. In 1950 the RF awarded him a fellowship which allowed him to study at the HSPH, and in March 1952, they offered Taylor a position as head of the Department of Preventive Medicine at the RF-funded Vellore Christian Medical College in South India.⁵² Taylor declined the proposal on the basis that he was ‘morally and mentally committed’ to returning to Ludhiana. Taylor was born in North India to medical missionary parents, already spoke Hindi and Urdu fluently and was familiar with ‘Punjab village life,’ and therefore wanted to work in the region.⁵³

In November of 1952, Gordon, Taylor and Wyon outlined their plans for Balfour during his visit to the HSPH. Taylor, who was to return to India in January 1953, would set up the field practice area for ‘broad epidemiological studies’ and as an area in which medical students could gain field experience as well. Within this district, a group of experimental and control villages would be used for a population study. Gordon stressed that this would have ‘two aspects – biological and sociological.’ Based on ‘family studies’ over a five year period,

they would survey the families' demographic status, socio-economic conditions, attitudes towards family limitation and ultimately test contraceptive methods deemed 'practicable for such a region.' Taylor would provide overall supervision of experiments and Wyon was 'being prepared' to take charge of the population study. Balfour was immediately interested, and following the November 1952 meeting he wrote in his diary, "Probably this project will merit consideration."⁵⁴

RF officers heard further details of the planned population study from Taylor after he arrived at the Ludhiana CMC in January 1953. Ludhiana had been the site of medical missionary work for women since 1875 and home to a Medical School for Women since 1893.⁵⁵ Renamed the Christian Medical College in 1912, the school was now coeducational, and had recently been officially recognized as a college-level institution by the government of India.⁵⁶ After Taylor's previously mentioned meeting with the RF in March of 1952, in which he had been offered a position at Vellore, RF officers were so impressed with him that they asked Taylor to submit a summary of his ideas for the Department of Preventive Medicine at Ludhiana.⁵⁷

In April 1953, India-based officer Robert Briggs Watson received a letter from Taylor about his plans. Taylor's main objectives were as follows: collect 'long term reliable vital statistics,' study 'the total ecology of village life as it influences the health of the people,' train health workers for village service, conduct controlled epidemiological studies on major health problems, and develop suitable 'local adaptations of control measures'.⁵⁸ The specific health problems and control measures to be studied included malaria, to be treated with DDT and chemoprophylaxis, tuberculosis, to be treated through home care and home isolation or new drugs; and population growth, also to be treated as a 'health condition,' for which the 'control measure' would be 'methods of family planning which villagers would find acceptable.'⁵⁹

In June 1953 Watson spent two full days at Ludhiana in order to learn more about Taylor's plans. Watson was impressed by what he saw. After watching Taylor conversing with Ludhiana district villagers and hearing in detail his study plans for the area, Watson praised Taylor's 'imagination and enterprise', and deemed his fluency in the local vernaculars to be of 'inestimable value' to his proposed work. Taylor was, in Watson's opinion, 'a good risk for support.'⁶⁰ Other RF officers were also so duly impressed with Taylor, particularly his record at Harvard and linguistic fluency that a \$3,000 grant was made in August 1953 towards the 'medical education' component of his work at the CMC.⁶¹ However, even in April 1953, Watson was so doubtful about the possibility of the RF involvement in family planning that he warned Taylor that the RF would be unlikely to fund this aspect of his work.⁶² Consequently, family planning was not included in Taylor's revised proposal for his preventive medicine work at Ludhiana, for which the RF granted funds in August 1953. The population study proposal was sent to the RF separately, later in the year.

State Sovereignty and the Growing Demand for Studies

In spite of Watson's reservations, by 1953 there were clear signs that a population study in India was becoming a real possibility. Key to this likelihood were events largely outside the confines of the RF's internal policy debate on population. Rather, these events occurred within the context of its public health work in India, wider debates about population control in the U.S., and most importantly moves within India itself to curb population growth.

Throughout the internal debate on the RF's population policy there had been a broad consensus that 'the crux of the problem' lay in the 'East'.⁶³ From the beginning it is remarkable how much of the RF population debate was conducted 'with India in mind' and how India and China were invoked as 'classical examples' of overcrowding.⁶⁴ While Notestein had identified India as a potential site for the outbreak of communism, RF officers and trustees were concerned that the large scale of their public health work in India and China

presented them with a particular dilemma, which had to be solved if their science was to be of ‘value to mankind.’⁶⁵ As a result, though they disagreed over the role of the IHD vis-à-vis other divisions, the RF staff broadly agreed that population was a major concern to their public health work.⁶⁶

While India was featured prominently in RF debates on population policy in the late 1940s, population began to appear equally important in officers’ discussions on their public health work in India. These discussions revolved not only around the effects of RF public health work on population growth, but also around the role that the RF should take within the context of a rapidly changing Indian nation. With the recent shift to independent governance, and the advent of WHO, the RF officers felt that their longstanding role in Indian public health work would inevitably be altered. Balfour thought that their ‘best opportunity’ for future work in India may remain in one of the four following fields: nutrition studies, inquiries into specific causes of death, ‘rural hygiene,’ and population field studies. As early as 1948, Balfour believed that population studies were most likely to prove the ‘ultimate interest of the greatest importance’ in the long-term.⁶⁷

Still with characteristic caution, the RF officers felt that they could not yet become involved in Indian population control. Some argued that the ‘problem’ in India was simply too large and complex for the RF to make an impact, so instead they urged field studies in a ‘limited area,’ such as Ceylon or Puerto Rico, which could present ‘similar problems in miniature.’⁶⁸ More importantly however, all RF staff agreed that development of local population programs ‘should be indigenous and not urged or imposed on any country.’⁶⁹ In other words, state sovereignty would have to be respected over and above the RF’s interests in the field of population, and their officers decided to not intervene until they were sure that their actions would be supported in India. That did not mean of course that they would not try to influence leaders in India to move on this issue. The process identified by Sharpless of

‘internationalizing demographic knowledge,’ which began in 1948 with the public health and demography in the Far East report, was designed to do precisely that. Until Indian leaders took action, RF officers were resigned to wait on the sidelines until the time was ripe for intervention. As Balfour argued, “We should be ready to help [the Indians] in the directions in which they are moving toward the study of their problem and a solution, when such opportunities arise.”⁷⁰ By the time the Khanna Study proposal was received in 1953 it was clear that such an opportunity had arisen.

Throughout the 1940s and 1950s, discussions of population within India itself were being observed carefully by the RF officers stationed at their field offices in Bangalore, and later in New Delhi, eliciting both fear and encouragement. The results of the 1951 census were a source of particular concern. When Watson wrote from Bangalore he described the census figures as ‘frightening’ and noted that the numbers far exceeded the figure predicted by demographer Kingsley Davis, ‘by some millions of people.’⁷¹ Simultaneously however, in the early 1950s, RF officers increasingly saw evidence that leading Indian authorities were becoming convinced of the need to control the size of the Indian population.

Marshall Balfour’s diary in particular, records his conversations with his Indian contacts on the subject of population and birth control. He frequently ‘sketched out’ RF interest in population for prominent Indian scientists and solicited their opinions.⁷² In the late 1940s opinion on population control within India was far from unanimous and a state-led program of family planning seemed distant. For example, in December 1948 Balfour discussed the RF’s interest in population with P.C. Mahalanobis, Professor at the Indian Statistical Institute and a member of the government of India’s Planning Commission, and also with Dr. A.C. Chatterji, Director of Health and Medical Services for West Bengal. Chatterji felt that land reclamation and agricultural improvement should be India’s priority

rather than birth control, and while Mahalanobis expressed an interest in fertility change, he felt that government officials were ‘not yet population conscious’, but were ‘potentially so.’⁷³

The position of Prime Minister Jawaharlal Nehru was somewhat ambiguous as well. Stories reached the RF officers that Nehru had privately expressed concern that the Indian nation had ‘more people than could be handled in orderly development,’ while publicly he insisted that ‘India has no population problem.’⁷⁴ However, by February of 1951, RF officers began to see evidence in Nehru’s public pronouncements that he was ‘finally acknowledging the existence of a population problem.’⁷⁵ This encouraging news continued throughout the coming months.

By May 1951, the RF officers were receiving news from their contacts within the Planning Commission that an official population control policy was under serious consideration.⁷⁶ Balfour heard from Abraham Stone, Director of the Margaret Sanger Research Bureau in early 1952 regarding his recent visit to India, where he had been invited by the Ministry of Health as a WHO consultant on family planning. Stone reported a ‘cordial reception and great interest on all sides.’ Stone spoke particularly of the ‘keenness’ of Planning Commission economist Tarlok Singh and informed Balfour that the Planning Commission was anxious to hear Stone’s advice on all available contraceptive methods. He also found Rajkumari Amrit Kaur, the Minister of Health, ‘sympathetic,’ though he spoke of her intent to ‘limit’ any project to a study of the rhythm method. Kaur is typically characterised as a ‘Gandhian’ who waged ‘a rearguard action against birth control,’ and objected on moral grounds to any contraceptive other than the rhythm method.⁷⁷ As we shall see later though, Kaur’s stance on contraception began to shift when the Khanna Study plans were brought before her in 1953. Limitation to the rhythm method aside, Balfour felt that ‘the outstanding feature’ of Stone’s tour was ‘that it was requested and sponsored by government, [which] will no doubt be important in the course of time.’⁷⁸

The final confirmation of a firm government stance on population control came with the First Five Year Plan, submitted to Nehru by the Planning Commission in December 1952.

Drawing upon the version of demographic transition theory, which had come to the fore following the RF public health and demography in the Far East report, The Plan stated that

While a lowering of the birth-rate may occur as a result of improvements in the standards of living, such improvements are not likely to materialise if there is a concurrent increase of population. It is, therefore, apparent that population control can be achieved only by the reduction of the birth-rate to the extent necessary to stabilize the population at a level consistent with the requirements of national economy.⁷⁹

This reduction in the birth rate was to be secured by family planning (FP). Rs. 65 lakhs (Rs. 6,500,000) was set aside for the new family planning program, but like the RF, the GOI felt that a national FP program presupposed field studies to ascertain how such a program might be successfully conducted. Therefore, the appropriation made for family planning in the Five Year Plan included provision for field experiments using different contraceptive methods and ‘intensive studies about the attitudes and motivations affecting family size.’⁸⁰

The appropriations for family planning made by the government of India drew specific comment from population control circles within the U.S., for whom the approach outlined within the First Five Year Plan coincided perfectly with a strategy being developed by American foundation staff and academic demographers to influence the problem ‘through the back door.’⁸¹ In June 1952, the same year as the Five Year Plan was announced, a Conference on Population Problems was held at Colonial Williamsburg, which resulted in the establishment of the Population Council. At this conference, outlining the stance which would come to characterise the RF approach to the issue, Balfour argued that while ‘recognising that the determination of policy and action is a matter for the individual countries,’ concerned groups in the U.S. could promote ‘an understanding of the problem’ by training people through fellowships and scholarships through a system of visiting consultants, and by providing policy-making bodies with information and research results.⁸² Other

conference participants expressed similar sentiments and cited India as a promising location for scientific experimentation, both because of the interest in the issue already evident within India, and because of the government funding available for precisely this purpose.

Commenting on the strong interest in population studies which he had observed on a recent visit to India, Pascal Whelpton of the UN Population Division suggested that at least one study should be started in India with technical advice from the U.S.⁸³

Moreover, the Williamsburg conference gave a clear indication that India was a key area of concern within population control circles in the U.S. Just as India had elicited particular concern during RF discussions on population, India had dominated the discussion at the Williamsburg conference. As Connelly had observed, conference participants ‘projected their prejudices onto the subcontinent as they speculated about its future.’⁸⁴

Throughout the debates about the balance between population and resources, the relationship between population and development, and speculation about the spread of communism, India figured more prominently than any other nation. The strong interest in India was noticed by RF officers, whose interest in population projects was reignited by the debates at Williamsburg. Watson was ‘impressed by the extent to which India dominated the thinking of the Williamsburg conferees.’ In spite of his caution over his official handling of Taylor’s proposals for Ludhiana, he wrote to his colleague Balfour, “There has been a very great deal of talk and writing of various kinds about population control, without much in the way of field work. Isn’t it about time that some ideas wanting appraisal are brought to the field in a very substantial way?”⁸⁵

Consequently, the timing of the Khanna Study proposal could not have been more opportune. When Gordon and Taylor brought their plans before government of India officials in 1953, they found support for the project remarkably forthcoming. In an April 1953 visit to Punjab, Gordon accompanied Taylor on a visit to the state capital of Chandigarh to meet the

Director General of Health Services for Punjab, Colonel Dutta. They found Dutta not only receptive to their proposals, but ‘wholeheartedly committed to family planning.’ Dutta even mentioned that his wife was the secretary of a local family planning organization.⁸⁶ Their talks in Delhi, too, went ‘surprisingly well.’ In April 1953, cooperation and approval for the project, and funds from the central Ministry of Health were all sanctioned by Minister of Health, Rajkumari Amrit Kaur.⁸⁷ Taylor and Gordon had felt doubtful that Kaur would approve their project, given that it would include a range of contraceptives. After all Kaur, a little over a year earlier, had insisted that Abraham Stone’s WHO study be limited to the rhythm method alone. They were however, ‘with a certain amount of politicking ... able to get a rather fine distinction made between mechanical and biological contraceptives’. What this distinction implied, or how it was achieved, is unclear from the archival records, but the result was that Kaur not only approved of the project, but was ‘anxious to contribute to its support.’⁸⁸

When the final proposal was sent to the RF in September 1953, it easily passed through the RF’s approval process. The flurry of memos which followed its arrival at the RF was overwhelmingly positive. One RF officer argued that the proposal was ‘a preliminary approach that represents a real and unique opportunity for The Rockefeller Foundation. If I were free to use my own judgement, I would support it with ample funds.’⁸⁹ Another RF officer described it as ‘the most practical design which has come to us in some five years of waiting, ... it is high time we were doing something about the most important of all public health problems.’ When removed from the context of the RF’s internal tussle over divisional leadership in population control, the public health approach to population exemplified by the Khanna Study, and so similar to the IHD’s ‘human ecology’ approach, proved far less problematic. Importantly, the staff of the Khanna Study, which was comprised of the ‘godfather’ of Harvard’s new approach to public health, the impressive and linguistically

well-equipped Taylor, and his similarly well-positioned colleague Wyon (who, like Taylor, had worked in a medical mission in North India and was already fluent in Hindi), was considered singularly well-placed to conduct the study. The same RF officer remarked, ‘If anyone can do this most important job, the team of Gordon, Taylor, et al., would appear almost unbeatable.’⁹⁰

Combining their belief that population growth was a public health-induced problem with the lessons they had learnt about demographic transition theory following the public health and demography in the Far East mission, the grant resolution described the problem of population dynamics as ‘unusually complicated.’ It noted that, while mortality responded quickly to modern public health practices, fertility responded ‘slowly and scarcely at all to the initial events that cause a drop in mortality.’ It further explained that the ‘lag’ between the drop in mortality and the fall in fertility in Europe had occurred over three-hundred years, accruing a sevenfold increase of population, but that population growth could possibly be halted through intervention into fertility. The resolution stated:

There is nothing inevitable about the exact amount of time or the precise amount of growth involved in demographic transition, but it does not seem to come about until the small family system is implanted in a society. At the moment we do not know how to implant this small family system in a peasant population, and little attempt has been made to learn how this might be done.⁹¹

Therefore, just as demographic missions such as the 1948 Far East mission were part of a strategy to create and disseminate scientific knowledge of the problems caused by population growth, the Khanna Study represented a parallel effort to gain knowledge of how population growth might be checked. The resolution stated that the Khanna Study would be ‘a preliminary step in this direction designed to learn whether or not it would be feasible to inaugurate a program of family limitation in India.’ A later resolution stated that ‘such field tests of contraceptives would be necessary,’ if they were to be applied to the ‘general population.’⁹²

Conclusion

The RF, long concerned about population growth in the ‘Third World,’ particularly in those countries in which they believed their public health work to be a direct contributor to the problem, set out to provide solutions to the problem through the construction of scientific knowledge. The decision to fund the Khanna Study marked a decisive moment in the RF’s policy towards population-related activities, when it expanded from producing reports which emphasised the problems caused by population growth to field studies intended to show if and how fertility could be controlled. Building upon the knowledge of demographic transition gained in the 1948 public health and demography report, the RF set out to discover how and if the process of transition could be shortened through the introduction of birth control. While the RF’s approach up until 1953 had been characterised by caution and internal disagreement, the Khanna Study proposal came at a time when demand had grown both within the U.S. and within India itself, for precisely such studies, and therefore when cooperation could be readily secured. Moreover, the Khanna Study’s origins at the HSPH, with which the RF already had strong links, made their study a likely project for RF funding. The RF’s favorable impression of the team of Gordon, Taylor and Wyon, further secured its position as a solid prospect for support.

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The ideas and opinions expressed in this report are those of the author and are not intended to represent the Rockefeller Archive Center.

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