Family planning is a critical, human rights-based, and cost effective approach to climate change adaptation and resilience building.


Family planning is considered universally as the smartest development investment. For India to realize its sustainable development goals and economic aspirations, it is important to ensure that people have informed access to contraception and quality family planning services.

—NITI AAYOG, 2019

Nowadays, expenses are high. When we had children, it was less difficult. The way things are now, it’s not possible to keep them in school and marry them off. They shouldn’t experience the difficulties that we faced. For [my daughters] one or two children are enough, and then they should get the operation.

—DEVI, AGRICULTURAL LABORER IN TAMIL NADU, 2014

Each of these epigraphs frames reproduction, at least in part, as an economic concern. The report from the International Planned Parenthood Federation (IPPF) and the Population Sustainability Network (PSN) begins from the premise that controlling population growth is a means to control greenhouse gas emissions. If fewer people equal less pollution, then contraception becomes a “cost effective” way to prevent births and combat climate change.¹ NITI Aayog, a policy-making body that replaced India’s National Planning Commission, represents family planning as a
“development investment” that allows the country to pursue economic growth. It is both a universal strategy—relevant to all countries—and a specific Indian need. For Devi, who shared her story in an oral history interview conducted as part of the research for this book, family planning is a kind of economic decision because of the costs of raising children. She will advise her daughters to get “the operation”—tubal ligation—so that they can manage the costs of schooling and marriage.

These varied connections between reproduction and economy should be familiar, given the tangled histories of marriage reform and famine, of eugenics and migration, of birth control and national sovereignty, and of population control and post-colonial development examined in this book. Yet the epigraphs also outline the shifting contours of this long-familiar connection and situate reproduction in the context of changing global, national, and personal crises. The epilogue examines these points of continuity and change.

Within transnational population control networks, and in Global North countries, family planning has recently gained new visibility in the context of climate change. Reducing population growth in the present, the logic goes, is a means toward reducing greenhouse gas emissions in the future. Repurposing 1960s models that calculated the number of “births averted” by contraceptive use in a quest to defuse the “population bomb,” the new discourse views “averted lives” as “averted emissions.” The IPPF and PSN report outlines this argument, suggesting that eliminating the global “unmet need” for family planning could achieve 16–29 percent of the emissions reductions required to reach targets under the Paris Agreement on climate. Moreover, the document argues that contraception is among the cheapest ways to meet these targets, calculating that “emissions averted through investments in family planning would cost about $4.50 per ton of carbon dioxide, compared with more expensive options such as solar power ($30 per ton) or carbon capture and storage from new coal plants ($60 per ton).” The Sierra Club, an environmentalist organization, makes the point even more directly: “A concerted, worldwide family-planning campaign can be just as effective at reducing carbon output as conserving electricity, trapping carbon, or using alternative fuels.” Reducing population growth through contraception, in short, becomes a key mechanism to address climate change.

Certainly, population size impacts the environment. However, feminist scholars have identified problems with the simple equivalence between averted births and averted emissions. As Jade Sasser reminds us, there has never been a “single, evidence-based model that has successfully calculated
or predicted the global environmental impact of human numbers alone.”7 We have seen throughout this book that numbers acquire meanings within specific contexts; it is impossible to abstract the impact of these numbers from the social, political, economic, and environmental contexts in which they are embedded. Thus, for instance, transnational family planning networks tend to target women in sub-Saharan Africa, where fertility rates are higher than in most of the world. However, per capita emissions rates in the region are among the very lowest globally.8 Meanwhile, industrialized countries, which encompass just 20 percent of the world’s population, are responsible for 80 percent of accumulated carbon dioxide in the atmosphere.9 Claiming that family planning is a “cost effective” means to fight climate change ignores these disparities between who is responsible for emissions and who is rendered responsible for addressing them. The accompanying rhetoric that it is “easier” to institute family planning in sub-Saharan Africa than it is to require change in consumption patterns in the Global North, or to curb industrial emissions, similarly refuses to ask for whom is it “easy,” and who will pay the cost. Consequently, as Betsy Hartmann argues, focusing on family planning as a solution to climate change shifts attention away from the root causes of environmental degradation.10 Disregarding the role of fossil fuel industries and the biggest emitters of greenhouse gases, discourses that equate births and emissions blame women in the Global South for planetary crisis and offer family planning as a solution.

This idea that family planning can solve planetary crises is not new; it has been part of contraceptive advocacy since at least the mid-twentieth century. As we have seen, the IPPF made a similar link at the very moment of its founding in Bombay in 1952. Dhanvanthi Rama Rau and Margaret Sanger came together to advance a neo-Malthusian argument connecting family planning to global population crisis, while sidelining a competing agenda about contraception and sex education. This choice by Rama Rau and Sanger was, in part, strategic. By connecting their cause to an emergent global problem, they brought new attention and resources to birth control; this contributed to the vast expansion of family planning programs during the 1950s and 1960s. Now, decades later, as we face the material impacts of climate change, the IPPF and PSN may similarly be making a strategic connection between births and emissions. Their report thus notes that highlighting the impact of family planning on climate change “could lead to significant programmatic and funding opportunities” for the IPPF’s national affiliates as countries strive to meet their targets under the Paris Agreement.11 Pivoting toward climate, in other words, may allow
organizations like the Family Planning Association of India to tap into the development dollars directed to climate change adaptation and mitigation.

Whether strategic or not, however, such decisions have consequences. There is clearly an ongoing need for contraceptive access, and there is still a long road ahead to ensure sexual and reproductive health care on an equitable basis for all people. Linking to climate change may well allow increased resources to flow in this direction. However, when family planning is posed as a solution to climate change, it risks the same pitfalls we have seen in decades past, when it was posed as a panacea for economic development. In both cases, family planning is not geared toward reproductive autonomy for persons who may become pregnant. Instead, it becomes a means toward a different end—defusing the “population bomb” or mitigating climate change. Moreover, people, through their reproductive capacities, become the means toward this end, rather than ends in themselves. In the mid-twentieth century, this logic drove family planners’ assertions that birth control offered a mechanism to solve the problems of poverty without contesting underlying inequality. This was a seductive logic for some, since it avoided structural change in favor of a supposedly easier intervention in the fertility of poor women. But this logic also opened the door to coercion and abuse, as women’s bodies and lives came to be sacrificed to prevent a “population explosion” or promote economic development. Ultimately, this neither served women nor addressed poverty. Similarly, the notion that family planning can solve the growing climate crisis offers its own seductions, implying that global warming can be stopped by curtailing the fertility of poor women, rather than through structural changes that address greenhouse gas emissions. As in the past, this is only an empty promise, one that neither increases reproductive freedom nor guards against the dangers of a warming planet.

Even as family planning has been repurposed as a climate change solution in transnational contexts, it remains a linchpin of development discourse in contemporary India. Development policy is no longer outlined in Five Year Plans, since the government dismantled the National Planning Commission and ended centralized planning in 2017. The policy board NITI Aayog serves as a partial replacement for the NPC, but it is an advisory body that does not grant funding; its three-year action plans are recommendations only, and not binding. In 2019, NITI Aayog called attention to population, as noted in the epigraph. The policy board promoted family planning for “population stabilization” in service of the country’s “sustainable development.” The reference to sustainability alludes to climate
change, now increasingly part of development discourses, thus bringing climate into the long-standing nexus between population and national economic development. Although NITI Aayog’s call echoes Indian development planning from an earlier era, it confronts a demographic landscape that has changed substantially. For the last several decades, Indian women have been giving birth to fewer children than they did before. As of 2018, the total fertility rate—a calculation of the average number of children born per woman—was 2.2. This figure approaches a replacement rate and is below the global average. Despite regional variations in this number, which ranges from 1.6 in some states to 3.3 in others, there is no current “explosion” of population growth in India. Indian population is continuing to increase, but this is due to the large number of people who are currently within childbearing age; it does not portend significant population growth in the future. To this extent, the “population stabilization” that NITI Aayog calls for already exists.

Nevertheless, the framework of crisis pervades contemporary reference to population. There are some changes to the terms—NITI Aayog thus calls for “stabilization,” not control, and emphasizes “informed” contraceptive access with “quality” family planning services. The shift in language is due, in large measure, to transnational feminist organizing that successfully challenged the underlying logics of population control and called for a reconceptualization of population policy worldwide. These feminist efforts culminated in 1994, at the Cairo Conference on Population and Development, sponsored by the United Nations. The conference’s Program of Action marked a radical departure from earlier policies; it asserted that reproductive rights were universal, highlighted women’s empowerment, and called upon governments to abandon targets and quotas in their population policies. These were important changes, and they signaled the promise of a sexual and reproductive rights agenda that centered women. However, feminists at the time voiced concern that the Program of Action did not go far enough in rejecting the core premises of population control. In hindsight, we know that the declarations at Cairo ran headlong into rising neoliberal ideologies that promoted market-based solutions and encouraged the privatization of health care globally. In that context, the goals of the Program of Action still remain largely unfulfilled.

In response to the Cairo declaration, the Indian government abandoned its population targets, but it maintained an assumption that population posed a crisis for development. Consequently, the state supports a “two-child norm” that is enforced through policies that serve as both carrot and
Meanwhile, the government’s continued underinvestment in healthcare, including in maternal and child health, becomes plain in its family planning programs. For instance, between 2003 and 2012, an average of twelve women died per month due to botched surgical sterilization procedures across the country. Occasionally, there have been catastrophic failures, as in the case of a sterilization camp in Chattisgarh in 2014, when thirteen patients died after a surgeon operated on eighty-three women in a single day using the same unsterilized gloves, syringes, and sutures, spending just three minutes per patient. While this case was exceptional in its high death rate, it reflects a disregard for poor women’s health, rights, and well-being that is widespread among the sterilization camps that are still a mainstay of Indian population programs.

If the actual workings of the Indian family planning system employ a model of population crisis, so also does the government’s rhetoric. In his 2019 Independence Day speech, for instance, Prime Minister Narendra Modi announced his concern about the country’s “population explosion” due to “uncontrolled population growth.” He praised families that regulated their reproduction, and urged others to follow their example: “Before a child arrives into our family we should think—have I prepared myself to fulfill the needs of the child? Or will I leave it dependent on the society?” Those who recognized the need for family limitation, Modi concluded, were contributing not only to the “welfare of their family but also to the good of the nation.” Modi’s words resonate with long-standing Malthusian assumptions about population and poverty, and they echo, nearly unchanged, the pronouncements of postcolonial India’s first population controllers, who insisted that reproductive control was a chief method of promoting national development. Yet at the same time, the long history of representing Indian population as a crisis—and thus as a target of intervention—now shapes new modes of reproductive regulation as well. Alongside the rhetoric of population control, which we see in Modi’s speech, emerging population discourses sometimes function without explicitly pathologizing fertility. Beyond reducing numbers, they also aim to promote economic development through a “demographic dividend,” which capitalizes on a high ratio of younger workers to older retirees, or to produce a “bio-citizen” who manages her own fertility in line with markets.

The question of population and reproduction rears its head in yet another way in contemporary India, in its skewed and worsening sex ratio. As I discussed in chapter 5, the question of son preference was both hinted at and obscured in family planning propaganda that centered the heterosexual
happy family. However, the demographic consequences of son preference have grown increasingly clear in the decades that followed. Currently, the sex ratio (expressed as the proportion of “Females/1000 males”) stands at 900 nationally and falls as low as 837 in the state of Haryana. This disparity is due not only to the neglect of girl children but also to the use of technologies to determine the sex of the fetus before birth, followed by the selective abortion of female fetuses.

Feminist activists have called attention to this problem and, in 1994, pushed for legislation to prohibit health-care workers from revealing fetal sex to prospective parents. Today, campaigns against sex selective abortion are an important part of feminist health movements. Nevertheless, the ratio continues to worsen and is now a fact of life even in states where, a few decades ago, this was not a problem. The government has intervened through policies that provide financial incentives to families of daughters. Known as Conditional Cash Transfer (CCT) programs, these policies provide monetary incentives to parents whose daughters meet certain milestones, such as immunizations, schooling, or remaining unmarried until age eighteen. However, although these policies may have offered some benefits to recipients, they are also tied to ongoing legacies of population control. Some state plans, for instance, provide cash incentives only if the parents accept sterilization after two children; others limit incentives to only two daughters and not to a third. In this way, policies that claim to promote the value of girls enact potentially coercive mechanisms of reproductive control against their parents, and in particular, their mothers.

The relationships of mothers and daughters—and the attendant questions of reproduction, population, and economy—emerge differently in Devi’s narrative, the third epigraph above. As a mother of four children who works as an agricultural laborer in rural Tamil Nadu, Devi spoke about her difficulties in raising children and her hopes for their future. Her story was among fifteen oral history interviews conducted in the Thiruvallur District as part of my research for this book. The women interviewed ranged in age from about thirty to ninety years, with the majority in their fifties and sixties. Most worked in agricultural labor and were also enrolled in programs under the Mahatma Gandhi National Rural Employment Guarantee Act, which provides one hundred days of wage employment to people willing to do manual work. All fifteen women depended on the public health-care system, which meant they visited Primary Health Centers (PHCs) for their basic health needs, including for reproductive health care, and were sometimes referred to secondary and tertiary centers, such as
public hospitals. Some women also used their own funds to access privatized healthcare for themselves or their families. As patients within the public healthcare system, and as poor and working women, they fit the demographic profile most targeted by state-led family planning and population control. The state of Tamil Nadu, in particular, has historically prioritized targeting women like Devi. During the late colonial decades, as we have seen, organizations like the Madras Neo-Malthusian League and the Self Respect movement brought birth control to public attention in Madras Presidency. Since independence, the state of Madras, now Tamil Nadu, has been heralded by the Indian government and international agencies as a “success story” of Indian family planning. Today, the state’s total fertility rate, at 1.6, is lower than that of the country as a whole.26

In collecting and learning from women’s narratives, my first instinct was to seek alternatives to the kinds of economic rationalities that I analyze throughout this book. In an admittedly oversimplified fashion, I initially sought a way out of the reproductive injustices this book has documented; I hoped for ways of thinking and speaking that did not filter reproduction so narrowly through population and economy and that offered different imaginings of reproductive futures. However, upon hearing these stories, and in light of the enduring connections among reproduction, population, and economy that this book documents, I eventually began to approach women’s narratives differently. Rather than seeking an imagined alternative that severed reproduction from economic rationalities, I began to ask how women narrated these intersections.

Thus, for instance, our interview questions invited women to speak about their reproductive histories in relation to pregnancy and childbirth; however, our interlocutors tended to focus more on the reproductive labor of raising children and grandchildren. For instance, Devi spoke of this labor in intergenerational terms. Her mother, she said, had eight children, since “there was no family planning back then.” She managed to raise them all, but Devi herself made a different decision. After having two sons and two daughters, and despite the opposition of her father-in-law, Devi decided to have the “family planning operation.”27 Her advice for her own daughters, as cited in the epigraph, would be to have just one or two children, in order to be able to pay for their education and their marriage. In this way, Devi represented her reproductive decisions, at least in part, in relation to their economic costs. Surgical sterilization became a technology that would align reproduction with her household’s economic capacity, and in this sense, Devi’s words seem to fit the mold of the “rational” subject figured by family
planning discourses. Like the responsible citizen praised in Modi’s Independence Day speech, Devi recounts her reproductive history in terms of her ability to bear the financial costs of raising children. However, her narrative is not exactly in alignment with Modi’s call for citizens to contribute to the “welfare of the family but also to the good of the nation.” It is less a story about modern and prosperous futures—the seductive ideal of much family planning discourse—than it is about scarcity and precarity. So that her daughters will not experience “the difficulties that we faced,” she will encourage them to have just one or two children.

Many women spoke similarly about the reproductive and economic exigencies of the present, rather than the promise of future prosperity. Darshini, an agricultural laborer and mother of three, for example, decided upon surgical sterilization after her son and two daughters were born. She had considered it even earlier, after the birth of her son and first daughter. But her son fell ill, and fearing she might lose him, she delayed the operation. After her third child, a daughter, she and her husband decided it was time: “Costs are high, and so people like us cannot care for many children. People like us don’t have land and all that. Only if we earn that day, do we eat that day.” Darshini’s family’s landlessness, a fact linked to her class and caste position, meant that they were entirely dependent on wages earned from labor, and in these circumstances, she and her husband saw sterilization as a necessity. Like Devi’s story, Darshini’s narrative models a kind of economic rationality, but it also challenges the promise of small and happy families to narrate stories of difficult survival. It is “people like us,” and emphatically not all people, who face these burdens on their reproduction. While national governments and transnational family planning networks have long imagined the small family as a site of desire for all citizens committed to familial and national prosperity, Darshini figures the small family as a necessity of survival for landless laborers. More than achieving the promises of development, it is development’s failures—the failure to redistribute land, the failure to provide other sources of employment—that shape Darshini’s account of reproduction as a point of intervention into her own economic future.

Kasturi, who was the mother of one son, now deceased, and the grandmother of two children, made explicit this distinction between people who had to limit their childbearing and those who were truly free to choose. The issue, she explained, was money: “That’s how the country is. If you don’t have money, no one respects you. If you have money, you could have as many daughters as you want and settle all of them in marriages. Those who don’t
have money are just beggars.” Throughout her interview, Kasturi was consumed with worry about supporting her grandchildren, especially her granddaughter. Kasturi helped to pay for her granddaughter’s school fees, and the girl was doing well in school. Kasturi also planned to help her daughter-in-law pay for the granddaughter’s marriage when the time came. She was deeply concerned about these responsibilities: “Back in the day, it was common to have even seven children without any concerns. But now, everyone says one is enough, or two is enough. Somehow, back then, my mother got four daughters married off. But now, even the guy who delivers the newspaper asks for [a dowry of] eight savaran [sixty-four grams of gold]. So nowadays, if you have so many children, how could you manage all this. . . . People who don’t have wealth, if they have so many children, how could they do it? I myself, how will I be able to marry off my granddaughter?” Like Darshini, Kasturi ties her narrative about children and grandchildren to economic precarity. As the quotation suggests, this precarity is also gendered. Because of the costs associated with her marriage, Kasturi represents her granddaughter as a tremendous financial responsibility. Since the girl’s father is deceased, Kasturi adds, this is a responsibility that falls exclusively to women. While wealthy households can afford to raise girls and “settle all of them in marriages,” she and her daughter-in-law confront a present and future of struggle.

These concerns about the costs of raising children and grandchildren echo across the narratives, linking reproductive choices to economic constraints and posing “the operation” as a necessary response to financial precarity. Among all the women interviewed, Veena made this point most explicitly. At the time of her interview, Veena was thirty-three years old and the mother of two children, a son and daughter. Although her husband wanted more children, she dismissed his logic: “Even when there was no food to be had, he thought we should have another child.” After giving birth to her first child, a son, Veena was ready for sterilization and obtained a consent form from the hospital, but she was dissuaded from this decision by her aunt. After her daughter was born, she decided to have the operation. When the hospital asked for her husband’s signature on the consent form, she recounts, “I said, ‘I’m the one who works hard for the kids, and I’m not able to take care of another one’ . . . I do everything. So I just decided that two is enough.” Her husband, she added, brought some income into the household, but he refused to contribute in any other way. Veena’s narrative is a recounting of reproductive, and social reproductive, labor. She connects reproduction and economy through work—and in particular, through the
work that women do to bear children, to raise and educate them, to arrange their marriages, and to support their grandchildren. Like the discourses of population control, she is concerned about what children “cost,” but hers is not the rationale of “averted births” or, indeed, of “averted emissions.” Therefore, Veena’s decision to have “the operation” was based not on “the economy” in some abstract sense, but on her experiences of her labor in raising and caring for children. While linking reproduction to economy, she does not employ the justificatory frameworks of national development or global environmental crisis. Rather, her labor justifies these connections and, in her telling, guides her reproductive decisions.

As this book demonstrates, enduring connections among reproduction, population, and economy have shaped over a century of reproductive politics. Colonial officials alongside nationalists, eugenicists alongside postcolonial bureaucrats, transnational population controllers alongside Indian feminists have argued that regulating reproduction was a necessary mechanism to intervene in the population and insisted that limiting the population was essential to economic development. They have blamed reproductive practices for poverty and the failures of development, while hoping that more effective methods of contraception would enable more effective reproductive regulation in the future. These connections have endured even when population growth rates were not increasing, such as in the late nineteenth century or in the contemporary moment, and have redoubled when faced with documented growth in population. They have been part of a specifically Indian story, but Indian developments have come to shape the global and modern history of reproduction as well. We have seen, moreover, that the connections linking reproduction to population and economy have created situations of reproductive injustice—of top-down control of people’s reproductive capacities, of a disregard for their bodies and lives, of a demonization of some women’s reproduction as the cause of national and planetary catastrophe. This history should make us wary of the ongoing instrumentalization of women’s reproduction to serve other ends, whether to shore up state claims about economic progress or to claim action on climate change. Yet this history also shows us how to ask questions and think differently. From the women of Gomet who asked the family planner for schools when they envisioned alternative reproductive futures for their daughters to Veena, who insisted that her work as a mother gave her the right to decide about “the operation,” women have challenged the instrumentalization of their bodies. They pose different means of connecting their reproduction to their lives, and to history.