# Chapter 5 Controversies Surrounding Fertility Policies



#### 5.1 Introduction

What is the relationship between development and fertility decline? Is Path 1 (Fig. 1.4), socio-economic development, the cause of the developing world's fertility transition? Can Path 2, family planning programs, stimulate fertility decline in agrarian societies and thereby expedite economic development? Can the causal arrow between development and fertility decline run both ways? Many of the controversies surrounding the developing world's fertility transition centered on these questions. They sound like dry "academic" questions, but they played out in a contentious international political environment during the decades following WWII.

The spread of an effective vaccine for smallpox, the use of newly developed antibiotics, and the application of effective methods for controlling malaria produced unprecedented mortality decline at mid-century. Between 1950 and 1970 life expectancy (United Nations, 2019) increased by 25% for the world, 33% for Asia, 20% for Latin America and the Caribbean, and 25% for Africa. Since the developing world's fertility declined little during this period (see Fig. 1.1), rates of population growth increased, especially in Asia and Africa. Fears of famine and stagnant economic growth grew. The First Five Year Plan (1951) of newly independent India noted this connection (Paragraph 105): "The recent increase in the population of India and the pressure exercised on the limited resources of the country have brought to the forefront the urgency of the problem of family planning and population control." Funds were allocated to establish a "family planning programme" in the Ministry of Health and Family Welfare. As early as 1958 Sweden began a pilot family planning project in Ceylon aimed at lowering birth rates (Hyrenius and Åhs, 1968).

Colonial empires crumbled and political independence brought rising expectations and a universal quest for development. In the postwar bi-polar world the United States and the Soviet Union vied for the allegiance of Third World countries whose hopes and problems became a matter of concern to First World policymakers and

academics. The "uncommitted" third of the world was a "prize" to be won in a struggle between "the Communist and the free worlds" (Davis, 1956: 354). Demographer Philip Hauser worried in *Science* (Hauser, 1960: 1646) that "explosive population growth" would frustrate the development plans of "underdeveloped nations" and expose them to the "blandishments" of the Communist bloc. He feared that "if the underdeveloped Communist nations demonstrate that they can achieve more rapid economic progress than the underdeveloped free nations, the free way of life may well be doomed. Success or failure in this fateful contest may well hinge on the ability of the nations involved to decrease their rates of population growth." The Cold War, as well as genuine humanitarian concerns, obliged policymakers and academics to look at fertility decline, the only humane way of decreasing the developing world's population growth, in a new way (Hodgson, 1988).

### 5.2 Controversies During the Pre-transition Phase, 1950–1970

In the mid-1940s demographers at Princeton University outlined a theory explaining modern demographic trends. Transition theory viewed all trends in mortality, fertility, and population growth as being responses to structural changes associated with "modernization". A society transforming from a traditional agrarian state to a modern industrial one would first experience mortality decline as people quickly employed increased production to improve diets, housing, and health. When significant numbers found themselves in competitive jobs living in cities and faced with the costs of children increasing and their economic benefits declining, small families became the norm. The period of rapid population growth brought on by the early decline of mortality came to an end when fertility approached mortality's low level in fully modernized societies.

In cases where a traditional agrarian society suffered colonial domination, transition theorists (Davis, 1945: 5–11; Kirk, 1944: 28–35; Notestein, 1945: 50–57; Thompson, 1946: 251–318) contended that an attenuated, "one-sided" modernization caused a peculiar demographic imbalance. Colonial domination produced the rationalization and commercialization of agriculture, the maintenance of internal order, improvements in transportation and communication, and the implementation of public health innovations, all of which resulted in mortality decline. Yet colonial rule prevented or failed to foster, the urbanization and industrialization that were expected to lower fertility. Thompson (1946: 313) called this "the Malthusian dilemma of all colonialism" and predicted the demise of the colonial system.

Some observers in colonies came to the same conclusions. In 1947 A. R. Paterson, Director of Medical Services of Kenya Colony, presented evidence of rapidly declining mortality, estimating a 2 to 2.3% annual rate of population growth. The British presence, he contended, so positively affected health conditions that it ignited "the time fuse of a biological bomb." The response of Africans, he feared, to "any

direct birth-control propaganda would merely be 'Now indeed, we know that your object is to exterminate us'" (Paterson, 1947: 147). In the end he reasoned that only a program of industrialization and modernization would stimulate a desire for smaller families. Well before that could happen, however, the Mau Mau rebellion erupted in Kenya and independence came in 1963.

Myrdal (1970: 153) noted that "the population explosion has been by far the most important social and economic change in the underdeveloped countries in recent decades." Although it was widely recognized that rapid population growth would inhibit development in the poorest countries, there was initially no consensus on how to address the problem. This lack of agreement led to vigorous academic and policy debates.

## 5.2.1 From Transition Theory to Advocacy of Family Planning Programs

In the 1950s demographers found themselves in a perplexing situation. They faced what they believe was a crisis with a theory about demographic transitions that argued that modernization propelled changes in fertility and mortality, and offered little support for the idea that a "direct" family planning approach would work to change women's reproductive behavior. Notestein in his original version of demographic transition theory contended that fertility control was determined by social structural factors. Change the social structure with "a complete and integrated program of modernization," and fertility would decline, "for it is only when rising levels of living, improved health, increasing education, and rising hope for the future give new value to the individual life that old customs break and fertility comes under control" (Notestein, 1945: 57). Yet just eight years later, in the face of increasing rates of population growth, he saw "almost insuperable difficulties involved in achieving the sort of economic development required to permit reliance upon the automatic processes of social-economic change for the transition to low birth- and death-rates" (1953: 25). He described the new situation (Notestein, 1953: 25): "The objective is no longer restricted to the increase of production. It now also becomes that of speeding the processes of social change in directions that yield falling birth-rates, which in turn will permit more rapid increases in per capita income." To resolve this dilemma, he went on to advocate trying "direct measures" to lower fertility: "It is within the bounds of possibility that the wise use of modern methods of communication and training to promote higher marriage age and the practice of birth control would bring a considerable reduction of the birth-rate even in peasant societies" (Notestein, 1953: 28).

Kingsley Davis and other population scientists underwent a similar change during that decade (Hodgson, 1983). In 1945 Davis thought that "the Asiatic peoples, and others as well, will acquire modern civilization in time to check their fertility and thus achieve an efficient demographic balance" (1945: 10). Yet only a year later

Davis was calling "rapid and massive population growth" India's "gravest problem," noting that economic development could not "indefinitely provide for increasing numbers" (Davis, 1946: 243). By 1950 population growth had become the independent variable in Davis' thinking and development the dependent one (1950a: 43): "Can industrialization of the underdeveloped areas be achieved in face of their population problem?" His answer was stark: first there is likely to be "strife and turmoil, which at once reduce the existing demographic glut and sweep away old institutions and vested interests" (1950a: 49). By 1953 he was somewhat more optimistic about birth control, contending that if only new birth control technologies could be developed and governments would use the means at their disposal to construct effective family planning programs "the results may prove astounding to the skeptics" (Davis, 1953: 19). He saw "no inherent reason why peasant-agrarian populations cannot adopt the customs of fertility control, in advance of and to the advantage of modern economic development" (Davis, 1953: 18).

Both Davis and Notestein questioned the predictive ability of demographic transition theory's modernization explanation of fertility decline. In 1953 Notestein presented a standard version of transition theory but then followed with an equally lengthy consideration of apparent exceptions to the transition model, including the birth rate declines in eighteenth century agrarian France and more recently in Bulgaria, an "almost wholly agricultural area." He concluded that the rise of urban-industrial society "provided no mystical means for the reduction of fertility" (Notestein, 1953: 18). Likewise in 1954 Davis questioned the validity and utility of transition theory. He began by asking about the Western experience and how accurate the theory had been "as a description of fact." He noted that the length of the transition period from high to low vital rates had varied greatly among Western countries. He also pointed out that the magnitude and contour of the gap between mortality and fertility decline had exhibited no universal pattern. Finally, he emphasized that the West's increase in fertility since the mid-1930s cast doubt that a transition had been completed or a "cycle" terminated. He concluded: "Clearly the notion of the demographic transition, despite its fruitfulness as an organizing idea, should not be viewed as inevitable or as a predictive instrument" (Davis, 1954: 67-68). Later research under the direction of Coale (1969: 18) examined the historical relationship between the timing of marital fertility decline in a number of European countries and found there "to be little in the statistical record for Europe which confirms the existence of an association between the beginning of fertility decline and any specific level, or threshold, of economic and social development."

While demographers debated the strengths and weaknesses of demographic transition theory, the focus of policy makers increasingly turned to the option of direct intervention to lower fertility by means of family planning programs. But policy makers needed some evidence to support the feasibility of Path 2 (Fig. 1.4), family planning, as a way to achieve needed fertility declines. As early as 1950 Kingsley Davis interpreted the findings of a survey of rural Indian women as offering such evidence. Responders expressed a modal preference for a woman of forty having two or three living children, an answer which Davis construed as "a desire among Indian peasants for small families" (Davis, 1950b: 17). The implications of such

findings were obvious. If a "ready market" for birth control could be demonstrated, then a family planning approach to fertility decline appeared feasible. Surveys of knowledge, attitudes, and practices with regard to family planning matters (KAP studies) were administered in a wide variety of settings. By 1970 four hundred KAP surveys had been conducted in virtually all of the world's geographic and cultural areas (Fawcett, 1970: 38). Although criticized for being "methodologically naïve" (Hauser, 1967: 404), these surveys collected data which could be interpreted to mean that a substantial majority of respondents were interested in learning methods of fertility control. KAP studies supplied to those working within the family planning movement their most powerful weapon with which to combat the doubts raised by decades of prior social demographic research that suggested fertility decline was invariably linked to modernization.

In the mid-1940s demographers studying fertility transitions had been able to differentiate industrialized, industrializing, and non-industrialized societies on the basis of the presence and extent of their fertility declines. The close relationship between the level of economic development and the level of fertility had been considered confirmation of their contention that Path 1 (Fig. 1.4), socio-economic development, led to lower mortality and lower desired family size and explained the fertility transition. During the 1950 and 1960s advocates of the new "direct approach" to fertility decline were able to classify individuals within a given population into users of contraception, potential users, and nonusers. The existence of a sizable group of potential users was considered confirmation that family planning programs, Path 2, could play a central role in bringing about the developing world's fertility transition.

Further support for investments in family planning programs came during the 1950s from economists who quantified the economic gains that a decline in fertility might entail. They emphasized the role played by capital accumulation in the development process. Underdevelopment represented a workforce with little capital stock, and development was a process of adding to that stock. Rapid population growth produced high dependency ratios that increased the need for "demographic investments" and thereby limited the capital available for more directly productive investments. Some theorists (Leibenstein, 1954; Nelson, 1956) developed models describing a "low-level equilibrium trap" in which population growth stymied growth of per capita income. The specter of growing numbers living at subsistence levels, making economic development increasingly improbable, was presented as a real possibility (Leibenstein, 1954: 70, 194). Coale and Hoover (1958) quantified the economic cost of continued high fertility and found it significant. This research in particular was used to convince developing world leaders of the benefits of fertility control and slower population growth.

### 5.2.2 The Rise of a Population Control Movement

The concerns of a small group of American demographers would have meant little if they had not been amplified by the actions of certain wealthy individuals and foundations that also worried about the geo-political significance of developing world demographic trends. During the early 1950s, John D. Rockefeller 3rd and the leadership of the Ford and Rockefeller foundations worked to establish a neo-Malthusian movement with a global focus. Their goal was to establish family planning programs throughout the developing world, lower fertility, and lessen population growth. They recognized that only governments could implement effective family planning programs, and their immediate task became convincing government leaders, in both developed and developing countries, that high fertility and rapid population growth were major social problems in need of state intervention. They determined that a dramatic increase in academic research on international population issues was a necessary first step in this conversion process. During the next two decades they expended millions of dollars to develop demographic research centers that focused on international population issues as well as on bio-medical research to develop new contraceptives.

The expenditures on demographic research had a profound impact. In the United States in 1950, for example, courses in demography could be found at the graduate level in only three universities. Between 1951 and 1967 major population research centers were established at 16 US universities; all owed their existence to foundation funding, largely from the Ford Foundation. Similar expenditures helped to establish internationally oriented population centers at a number of major universities in Europe and Australia. Funding from the Population Council, a research and technical assistance organization established by John D. Rockefeller 3rd in 1952 to provide a leadership role for the international population control movement, helped establish UN regional centers for demographic training and research in Bombay, India (1957), Santiago, Chile (1958), and Cairo, Egypt (1963). Additionally, its fellowship program brought hundreds of developing world students to major population research centers in developed countries for graduate training in demography.

The international population movement experienced heady times in the 1960s. In March 1963 the Ford Foundation trustees stated their intention to "maintain strong efforts both in the United States and abroad to achieve breakthroughs on the problems of population control" (Harkavy, 1995: 39). That same year the Rockefeller Foundation population program announced their bold goal to "bring about reduction of the growth rate of the world's population and its eventual stabilization" (Harkavy, 1995: 44). Such a goal became more credible with the conversion of previously reluctant First World governments to neo-Malthusianism. In January 1965 President Johnson (1965a) endorsed international family planning programs in his State of the Union message, promising to "seek new ways to use our knowledge to help deal with the explosion in world population and the growing scarcity in world resources." That year USAID began providing technical assistance in family planning, with President Johnson (1965b) presenting an economic argument for family planning: "Let us act on the fact that less than \$5 invested in population control is worth \$100 invested in economic growth." When he (Johnson, 1966: 321) first asked Congress for fertility control funds, he did so on the basis that high population growth rates "challenge our own security."

The US government immediately began to expend significant funds on fertility control. Department of Health, Education, and Welfare expenditures increased from \$4.6 million in 1965 to \$14.7 million in 1969; USAID funding increased from \$10.5 million in 1965 to \$45.4 million in 1969 and to \$123 million by 1972 (Caldwell & Caldwell, 1986: 102–104). Most of the funds came to flow through the Office of Population at USAID, which due to the convictions of Dr. Reimert Ravenholt, its director, were spent on family planning programs to maximize their immediate impact on fertility (Warwick, 1982: 45–51). The involvement of the US government politicized the population control movement, especially since the US simultaneously was ramping up its unpopular involvement in the Vietnam conflict. In much of the Third World the US came to be seen as having its own agenda for the newly independent nations that might not correspond with their own desires.

There was also significant international involvement in developing world family planning happening at the same time (Caldwell, 2002: 3–4). In 1965 the World Health Organization entered the field, and family planning advisory commissions were sent to India by both the World Bank and the United Nations. That same year the IUSSP and UN Population Division organized a World Population Conference in Belgrade. In 1967, at the instigation of the Secretary-General of the United Nations, the UN Trust Fund for Population Activities was established to fund family planning programs; its name changed to the UN Fund for Population Activities in 1969. In 1950 the UN Population Division had projected that the world's population would reach 3.3 billion by 1980, but by1968 their projection for that year had increased to a much more accurate 4.5 billion. Rapid population growth had become a significant global concern.

### 5.2.3 Fears of Famine, Failure and a Population Bomb

In the 1950 and 1960s India and China, densely settled and with rapidly increasing populations, both experienced significant challenges to their development efforts. Questions arose about food shortages and mass starvation. From 1958 to 1962 China attempted a "Great Leap Forward," an accelerated industrialization effort. Mao Zedong launched this campaign to quickly move China from an agrarian economy to a communist industrial one through the formation of people's communes that would dramatically increase grain yields and simultaneously bring industry to the countryside. It failed miserably. Grain production dropped significantly leading to tens of millions of starvation deaths, which were systematically hidden from view. And the small backyard steel furnaces produced very little useable steel.

India's major challenge in 1965 was growing enough food to feed its 500 million people, increasing at more than 2% a year. Since independence India had experience a number of famines and between 1954 and 1965 the US had granted it \$30 billion worth of agricultural assistance (Ahlberg, 2007: 673). In 1965 the US shipped 20% of the its entire wheat harvest to India to make up its growing grain deficit. With the US grain surplus shrinking, mass starvation seemed imminent. In

1966, as India was experiencing a drought that threatened famine for 77 million people, President Johnson told Indian officials that the US would withhold its wheat shipments unless India "modernized" its agriculture and enhanced its family planning efforts (Ahlberg, 2007: 695). Under this US pressure India did fit more women with new IUDs, some causing significant infections (Connelly, 2008: 220–223). And throughout its prime wheat growing areas it planted the dwarf variety of wheat that Norman Borlaug, with Rockefeller Foundation funding, had perfected just four years earlier. The dwarf variety required the extensive use of irrigation, fertilizers, pesticides, and mechanization. This "Green Revolution" produced a record 1968 wheat crop that simultaneously put India on the road to food self-sufficiency and began a process that made redundant a significant portion of India's agriculture workforce.

During the 1960s doubts surfaced over whether voluntary family planning programs (Path 2) could produce the fertility decline needed to adequately control population growth. Davis (1967) now argued that to bring growth rates to sustainable levels, state interventions much more intrusive than providing couples with contraceptives would be needed, measures such as increasing the permissible age of marriage, paying people to be sterilized, or levying a "child tax" on parents. Hardin (1968), with his evocative image of the Commons, provided the rationale for moving "beyond family planning": pursuit of individual goals can, at times, work against the collective interest. Those believing that high fertility significantly worsened the commonweal thought governments might have the right (perhaps the duty) to limit individual reproductive freedom. In the 1970s both China and India responded to their experiences by implementing coercive fertility control programs.

Norman Borlaug won the 1970 Nobel Peace prize for developing high-vield cereal strains that helped feed the world's hungry people. In his acceptance speech (Borlaug, 1970) he noted that "there can be no permanent progress in the battle against hunger until the agencies that fight for increased food production and those that fight for population control unite in a common effort." He viewed his accomplishment as providing a short breathing space during which the "population monster" might be subdued. Others thought that such a "breathing space" no longer existed. In 1967 William and Paul Paddock, agronomist and diplomat respectively, published Famine 1975! America's Decision: Who Will Survive? Their analysis (Paddock & Paddock, 1967) of recent famines led them to believe that population growth was placing many developing countries on a collision course with starvation, and they outlined a triage approach for the US to use with its limited grain surplus. It would block all food aid to countries deemed incapable of ever achieving food self-sufficiency. In his review of the Paddocks' book in Science, James Bonner, a Caltech plant biologist, found (Bonner, 1967: 915) that "all responsible investigators agree that the tragedy will occur," differing only on "whether it will take place in ten years or less, or in ten years or a little more."

A year later Paul Ehrlich published his widely read Malthusian tract, *The Population Bomb* (Ehrlich, 1968), that identified overpopulation as the fundamental cause of not only famine in the developing world but of global environmental deterioration. By 1970 over 88% of Americans believed that the world was experiencing a population problem, and over 70% thought that the United States was also

(Westoff & McCarthy, 1979). In 1972 the Commission on Population Growth and the American Future, appointed by President Nixon and headed by John D. Rockefeller 3rd, issued a fundamentally neo-Malthusian report (Commission on Population Growth, 1972) recommending "that the nation welcome and plan for a stabilized population."

Although the apocalyptic views of the Paddocks, Ehrlich and others were not universally accepted there was wide agreement that rapid population growth was a serious problem that deserved to be high on the international policy agenda. Family planning programs were considered an important intervention that should be fully supported by governments everywhere. China's and India's coercive programs inevitably produced strong national and international criticism that affected all discussions of population policy for the next several decades. The large majority of developing countries, however, considered coercion unacceptable and implemented voluntary family planning programs.

### 5.3 Controversies During the Rapid Decline Phase, 1970–2000

#### 5.3.1 Controversy at the 1974 UN Conference on Population

By the time the UN held its World Population Conference at Bucharest in 1974 advocacy of population control had come to be identified as a First World policy position. Like "the links of a food chain" (Notestein 1971: 82), the actions of a few concerned and influential individuals in the United States led to the involvement of foundations, universities, governments, and finally international organizations in this effort. Many voices carried the message: the World Bank, USAID, a number of Western governments, a variety of United Nations agencies, economists and demographers trained in Western universities, to name a few. And Third World governments could easily find First World monetary support for fertility control (Piotrow, 1973: 145–158). This raised questions about motives and priorities.

Those initiating the conference, principally the United States, planned it to be a staging ground for a united worldwide effort to lower fertility through voluntary family planning programs (Finkle & Crane, 1975: 87). Yet the "world" divided. The head of the Indian delegation asserted "development is the best contraceptive" and was greeted with "the acclaim of most Third World participants" (Ford Foundation, 1985: 18). This slogan questioned the priorities of First World actors, not the usefulness of family planning programs for individuals. The view that continued underdevelopment, unemployment, and malnutrition were fundamentally caused by rapid population growth had great attraction to First World policymakers, and family planning programs seemed a relatively inexpensive way to mitigate these problems. The view that underdevelopment, unemployment, malnutrition, and rapid population growth were fundamentally caused by the ties of dependency that bound the Third

World to the developed world had great attraction to Third World policymakers, but ending these ties would require crafting a difficult "new international economic order." Few Third World leaders at Bucharest, even those with active family planning programs, could resist making political points about the misplaced priorities of the United States (Finkle & Crane, 1975: 109). The conference ended with the adoption of a developmentalist World Population Plan of Action, and with John D. Rockefeller 3rd (Rockefeller, 1974: 4) announcing his conversion: "I now strongly believe that the only viable course is to place population policy solidly within the context of general economic and social development."

This developmentalist position was a challenge to the population control movement: assuming that development and fertility control could proceed hand in hand assumed a population problem significantly less virulent than the one perceived at mid-century. Although clearly a political defeat for the movement, it is not clear that the Bucharest Plan of Action had a noticeable effect on the course of the developing world's fertility transition. By 1974 evidence of fertility decline was appearing in many developing countries. Significant numbers had already begun their fertility transitions (Fig. 2.2). Singapore had completed its transition, and South Korea, Mauritius, and China would do so within a decade (Fig. 2.4). Two years after the Bucharest conference the UN first surveyed governments about their population policy positions (Table 5.1). Of the 116 developing countries responding, 55 countries, with 79% of the developing world's population, reported that they thought their fertility level was "too high." Forty countries, with 77% of the developing world's population, reported that they had a policy to lower fertility. And seventy-four countries, with 87% of the developing world's population, claimed to offer "direct support" for family planning services, implying that family planning services were being "provided through government-run facilities or outlets," although no data was collected on how extensive these provisions of services were.

Clearly, the precepts of the population control movement, that fertility levels were too high and needed to be lowered, had made significant inroads among developing country governments by the mid-1970s. The move to coercive population control by China and India during the 1970s, two of the loudest critics of the US at Bucharest, convincingly showed that they too believed that lower fertility was needed. The responses to the UN's follow-up 1986 and 1996 surveys (Table 5.1) indicate a continuous increase in governments' adopting antinatalist policies and providing direct support for family planning. By 1996 nine developing countries had already completed their fertility transitions, and some of them, including China, had shifted their view of fertility from "too high" to "satisfactory."

By the mid-1970s African countries, though, had yet to embrace the need for fertility control. Only three African countries (Tunisia, Morocco, and South Africa) had started their fertility transitions by 1974. Of the forty-eight African countries responding to the 1976 UN population policy survey (Table 5.2), eighteen, with 35% of Africa's population, thought that their fertility was "too high." Only twelve countries, with 30% of Africa's population, had a policy to lower fertility. There were historical reasons for African countries' hesitancy to view high fertility and rapid population growth as problematic. Many countries had only recently emerged

**Table 5.1** UN world population policy survey 1976, 1986, 1996: developing world

	Number of countries			Percent of countries			Percent of population in developing world		
	1976	1986	1996	1976	1986	1996	1976	1986	1996
View on fertility									
Too high	55	67	86	47	52	59	79	81	59
Satisfactory	52	50	50	45	38	34	16	14	39
Too low	9	13	9	8	10	6	2	2	1
Total	116	130	145	100	100	100	97	97	99
Policy on fertility	-				'	'			-
Lower	40	54	81	34	42	56	77	78	85
Maintain	12	10	15	10	8	10	2	2	2
No intervention	58	55	38	50	42	26	17	16	11
Raise	6	11	11	5	8	8	1	1	2
Total	116	130	145	100	100	100	97	97	99
Support for family	y plannin	g			'	'			-
Direct support	74	98	115	64	75	79	87	91	95
Indirect support	11	14	11	9	11	8	5	4	2
Limits	7	4	1	6	3	1	2	1	0
No support	24	14	14	21	11	10	3	2	2
No data			4			3			0
Total	116	130	145	100	100	100	97	97	99

Policy Data: https://www.un.org/development/desa/pd/content/older-revisions Definitions of Policy Variables: https://esa.un.org/poppolicy/img/Definitions\_Policy\_Variables.pdf Population Data: World Population Prospects 2019, POP/DB/WPP/Rev.2019/POP/F01-1

from colonialism, and were optimistic that independence would allow economic development to speed forward. Many government leaders came into power with a traditional "mercantilist" perception of population size: larger populations meant greater national strength and wealth potential (Watkins & Hodgson, 2019: 231–234). Many also were saddled with national borders that had been set by colonial powers, and often encompassed a variety of ethnic groups with different languages, customs, and religions. In a democratic context, ethnic competition for political power often inspired a numbers competition that led ethnic groups to favor larger rather than smaller families. Additionally, many African countries had relatively low population densities, and their governments did not fear immediate land or food shortages. The relatively high percentage of Africa's population that lived in a country that "directly supported" family planning (69%) likely reflects the easy availability of international funds for starting family planning programs by that date.

In Africa's case, the twenty years from 1976 to 1996 produced dramatic increases in all three measures indicative of acceptance of a Path 2 approach to fertility transitions. By 1996 87% of Africa's population lived in a country that viewed its fertility

	# of African countries			Percent of African countries			Percent of population in Africa		
	1976	1986	1996	1976	1986	1996	1976	1986	1996
View on fertility									
Too high	18	31	41	38	61	77	35	76	87
Satisfactory	25	17	11	52	33	21	58	23	13
Too low	5	3	1	10	6	2	3	1	0
Total	48	51	53	100	100	100	97	99	100
Policy on fertility									
Lower	12	21	36	25	41	68	30	55	84
Maintain	2	3	3	4	6	6	1	2	1
No intervention	32	24	12	67	47	23	61	40	13
Raise	2	3	2	4	6	4	4	2	2
Total	48	51	53	100	100	100	96	97	100
Support for family	plannin	g							
Direct support	24	38	43	50	75	81	69	85	92
Indirect support	7	6	5	15	12	9	13	10	7
Limits	3	0	0	6	0		2	0	
No support	14	7	4	29	14	8	11	4	1
No data			1			2			0
Total	48	51	53	100	100	100	96	99	100

Table 5.2 UN world population policy survey 1976, 1986, 1996: African countries

level as "too high," 84% in a country with a policy to lower fertility, and 92% in a country that gave direct support for family planning. This was the time when most African countries entered into their fertility transitions (Fig. 2.2), and many African couples began experiencing the increase in unwanted and mistimed pregnancies that accompanies a decline in their desired family size (Fig. 3.9).

# 5.3.2 Questions of Coercion, Reproductive Health and Reproductive Rights

From 1970 to 2000 the international population movement came closer to realizing its goals: more countries adopted policies to lower fertility, and more countries began to experience significant declines in fertility. The movement's success was accompanied by rising concerns over coercion. At the country level, concern arose around issues of sovereignty, the right of each country to independently determine its own national policies and programs. From its beginning, the movement had clear demographic objectives, with the Rockefeller Foundation actually specifying "population"

stabilization" as its goal. Funding education efforts and voluntary family planning programs were its preferred means of attaining "buy-in" by developing countries, but from early on movement advocacy occasionally incited more coercive intrusions. We have seen that President Johnson used the threat of withholding food aid from India to pressure it to "enhance" its family planning program. The World Bank under the presidency of Robert McNamara (1968–1981) made it clear that development money was contingent on establishing family planning programs. The Bank even felt free to specify a country's program specifics. When it thought that the Ministry of Health was doing a poor job running Kenya's family planning program, it made establishing a new National Council on Population and Development "a condition for release of the second tranche of the Second Structural Adjustment Loan" (World Bank, 1992: 54). In 1984 the Reagan administration blocked US family planning assistance to any NGO that provided abortion counselling or referrals, or that advocated for the decriminalization or expansion of abortion services. Because the US played a central role in funding international family planning activities, this coercive "global gag rule" altered the provision of family planning services, significantly depressing their delivery especially in sub-Saharan Africa (Meulen Rodgers, 2018: 13 - 38).

Where governments independently viewed fertility control as being in their national interest, issues arose over the level of pressure states used to induce individuals to have fewer births. The blatant coercion of China's one-child program garnered world-wide approbation, as did India's forced sterilization campaign. But there was no universal agreement about when the line was crossed in terms of the use of incentives and disincentives. Some thought (Sinding, 2007: 8) that the size of Bangladesh's reimbursement payments for sterilizations and the amount of pressure the Indonesian government put on local leaders to meet contraception targets were coercive. Others, often holding a more dire assessment of these countries' situations, found them not coercive. By the 1980s, though, the very success that many developing countries had with both lowering fertility and expanding their economies began affecting people's judgments about what was acceptable. The reception given the World Bank's World Development Report 1984, a sophisticated treatment of "population and development" from a movement perspective, illustrated this point. Richard Easterlin in his review called it a "brief for the World Bank's official position" (Easterlin, 1985: 115) that placed an incorrectly high priority on the need for family planning programs in poor countries and thus inappropriately legitimized coercive "beyond family planning" measures (119).

The 1984 UN Conference on Population in Mexico City marked a turning point in movement development. The Reagan appointed US delegation asserted that "population is a neutral phenomenon" in the development process, and that excessive state control of the economy was more responsible for economic stagnation than rapid population growth. Adopting this anti-Malthusian position undercut the economic development rationale for fertility control programs, and allowed the Reagan administration to oppose the use of any pressure in family planning programs and all induced abortion. Although inspired by domestic political considerations, this position had concrete consequences. In response to the administration's positions, the head of

USAID protected its funding and bureaucracy not only by isolating its family planning programs from all connection with abortion services, but also by elaborating new non-population control rationales, designating them as components of maternal and child health programs (McPherson, 1985). Reproductive rights feminists objected strenuously to USAID's abortion position, but actively endorsed the recasting of family planning as a health program (Dixon-Mueller, 1987).

The question of state attempts to coercively influence women's reproductive decisions has a long history, and opposition to it goes back to the rise of the birth control movement in the early twentieth century. In many developed countries the fertility transition occurred gradually over the course of many decades with the small family norm being adopted first by the upper classes. At the time a number of governments passed laws that criminalized both contraception and abortion. Movements arose in both the US and Great Britain with the goal of legalizing contraception. In 1952 eight of these national family planning associations met in Bombay, India and established the International Planned Parenthood Association with Margret Sanger as its president. She imprinted it with her feminist belief that birth control was essential for women's equality. She believed that all women desired to control their fertility but simply lacked the means to do so. IPPF representatives and members of the Population Council met in 1955, 1956, and 1957 "to develop and define general principles for promoting birth control overseas" (Piotrow, 1973: 14).

But second-wave feminism, which arose in the 1960s, aligned more with the civil rights and anti-war movements than with the early birth control movement (Hodgson & Watkins, 1997). Some radical feminists began questioning the motives behind First World interest in controlling Third World women's fertility. The term "reproductive rights" entered the feminist lexicon during the decade 1975–1985. Originally it was a counterpoint offered by leftist feminists to the focus on "abortion rights" by liberal feminists. It aimed at broadening the feminist reproductive agenda: women should have more than just a right to an abortion, they should have full "reproductive rights" to a government-subsidized abortion in case of need, contraception, prenatal care, and early childhood health care. And all women, including poor women, should have the right to have as many children as they wanted.

Beginning in the mid-1980s, a network of feminists committed to improving women's reproductive health "played an increasingly influential role both in shaping the terms of the policy debate and re-orienting the population agendas of major international institutions" (Higer, 1997: 1). The Cold War fears that had generated a good deal of political support for population control efforts for 40 years had ended with the collapse of the Soviet Union. Family planning programs continued to receive international funding, but an increasing proportion of funding was provided by governments of developing countries themselves, indicating a growing commitment to family planning on their part. By 1996 the developing world had about 95% of its population living in countries that "directly supported" family planning activities (Table 5.1), its total fertility rate had fallen to about 3 (Fig. 1.1), and a significant number of countries had completed their fertility transitions (Fig. 2.4). This success took some of the urgency from the fertility control movement, and its advocates began seeking new allies. The environmental movement seemed an obvious candidate,

given that one strand of explanation for environmental problems emphasized population growth. But women meeting in Rio de Janeiro in preparation for the 1992 UN Conference on Environment and Development objected vigorously and successfully to including population as a cause of environmental degradation. They feared that blaming environmental degradation on the prolificness of the poor rather than on the overconsumption of the rich would simply provide a rationale for restricting the reproductive rights of women in developing countries.

At the 1994 International Conference on Population and Development in Cairo the new alliance that came to sustain the movement was largely initiated by feminists. Its Program of Action (United Nations, 1994) assigned in Principle 4 an explicit feminist agenda to population programs: "Advancing gender equality and equity and the empowerment of women, and the elimination of all kinds of violence against women, and ensuring women's ability to control their own fertility, are cornerstones of population and development-related programmes." It offered a rationale for this partiality by asserting (3.16) that "eliminating social, cultural, political and economic discrimination against women" is a "prerequisite" for "achieving balance between population and available resources." Protecting the individual rights of women was presented as an indispensable means for achieving neo-Malthusian ends. Although many had expected Cairo would be a battleground where feminists and neo-Malthusians would fight over framing the world's population agenda, there was little hostility between the two. They actually became allies in the one controversy that did erupt at Cairo. They fought, largely unsuccessfully, against a Vatican delegation intent on keeping any mention of abortion out of the Program of Action. Great care was taken at Cairo to define "family planning" and "birth control" in ways that explicitly excluded abortion, as had been the case in all previous UN Programs of Action.

## 5.3.3 Does Fertility Decline Promote Development? Do Family Planning Programs Promote Fertility Decline?

As evidence of substantial fertility decline became clearer, the level of controversy over fertility policy declined in the international arena. The Green Revolution allayed the fears of mass famine that arose in the 1960s by increasing crop yields in the developing world by 75% from 1962 to 1989 (Bongaarts, 1996: 488–489). This increase alone was almost enough to feed the concurrent 84% increase in the developing world's population. Preston (1987: 628–634) explained the fall-off in "alarmist" international discussion by pointing to the developing world's rapid rates of per capita economic growth (especially high in countries with market economies) and its declining fertility. While these trends lessened international worries, they provoked greater controversy in academic circles. This controversy revolved around whether two foundational premises of the neo-Malthusian movement were true: fertility decline will promote economic development; family planning programs will promote fertility decline.

At mid-century the agreement about the severity of the population crisis among most demographers had smoothed over tensions arising from the contradictory demands of objectivity and advocacy (Hodgson, 1983). Demographic transition specialists were able to overlook the policy implication of their original theory and became advocates of an international population control movement even in the absence of much evidence supporting its feasibility. But as the population crisis receded, it became more difficult for some demographers to incorporate the optimistic economic and demographic trends of the 1970 and 1980s into their discipline. The near-zero correlation during these decades between population growth and per capita economic growth within the developing world led Preston (1987: 628) to conclude "population growth could not be an overriding factor in economic growth." This near zero correlation had been noted 20 years earlier by Kuznets (1967: 190–191) and Easterlin (1967), but then it could be ignored as a temporal anomaly due to the sparsity of significant fertility decline. But as the developing world's fertility transition accelerated, some, most notably (Simon, 1981), were so emboldened by this lack of association as to present true movement heresy: population growth stimulates economic growth.

Increasingly sceptics were given a serious hearing, especially after the National Research Council published in 1986 *Population Growth and Economic Development: Policy Questions*. It noted (National Research Council, 1986) on its first page the developing world's falling total fertility rate (from 6.2 in 1950–1955 to 4.1 in 1980–1985) and on page 5 the positive annual growth rates of real gross domestic product per capita (ranging from 2.4% to 3.5% for the entire developing world over the period 1950–1960 to 1965–1970 and approximating 5.5% in the East Asia and Pacific region over the period 1965–1981). The pessimism endemic to works relating population growth and development from the time of Coale and Hoover's (1958) study was laid open to doubt: "But it is clear that despite rapid population growth, developing countries have achieved unprecedented levels of income per capita, literacy, and life expectancy over the past 25 years."

More than thirty years has passed since the publication of the National Research Council's study. Many additional developing countries have completed their fertility transitions and the developing world's rate of population growth has declined by a full percentage point, from an annual rate of 2.2% in 1986 to 1.2% in 2020. The demographic effects of fertility decline on age structure also have become more evident, and the effects of these changes on the economy have been the focus of considerable study. In Chap. 6 we will examine in more detail what is currently known about the relationship between fertility decline and economic development and demonstrate that this relationship is more complex than suggested by NRC report. In particular new evidence indicates that fertility decline stimulates growth in income per capita.

Do family planning programs promote fertility decline? In a 1994 article Lant Pritchett, using data from World Fertility Surveys and Demographic and Health Surveys from the 1970s and 1980s, questioned whether family planning programs had much effect on rates of fertility decline. He found (Pritchett, 1994) that "ninety percent of the differences across countries in total fertility rates are accounted for

solely by differences in women's reported desired fertility," and that "in spite of the obvious role of contraception as a proximate determinant of fertility, the additional effect of contraceptive availability or family planning programs on fertility is quantitatively small and explains very little cross-country variation." Now there is more than thirty years of additional data to use when examining this question. Many more developing countries, with more varied backgrounds, have entered the middle and late phases of their fertility transitions. In Chap. 7 we will examine what is currently known about the extent to which family planning programs promote fertility decline and document the shortcomings in the Pritchett study. Unravelling these relationships is central to better understanding how the developing world's fertility transition occurred, and what it might mean for the welfare of its population.

#### 5.3.4 Africa and the AIDS Crisis

As the twentieth century ended, most women in developing countries were actively controlling their fertility, their children were attending schools for longer periods, and extreme poverty was less common. The heated mid-century controversies over the population crisis had died down considerably. Areas of Africa were the exception. In Middle, West, and East Africa women were still giving birth to over six children (Fig. 1.3), some countries were seeing their fertility transitions stall (Fig. 2.5), and fewer than 20% of couples were using contraception (Fig. 3.6). The mid-century population crisis seemed to have assumed a narrower geographic focus. But mortality conditions in Africa were very different than those present at mid-century. Instead of life expectancy increasing significantly, from 1985 to 2000 sub-Saharan Africa experienced no improvement at all, with many countries suffering dramatic declines: Zimbabwe life expectancy went from 61 to 45, in Botswana it went from 61 to 51, in Kenya from 59 to 51, in the Central African Republic from 50 to 44, and in South Africa from 61 to 55.

AIDS was initially recognized in Africa in 1983, although the true magnitude of the epidermic took time to come into focus (Quinn 2001: 1156–1157). In 1986 WHO estimated the annual number of new AIDS cases in Africa at 400,000 with between 1 to 2 million Africans being HIV-infected. By 2000 the reality was very different: an estimated 25.3 million Africans HIV-infected with 3.8 million new cases being reported that year. Sixteen countries had more that 10% of their adult population aged 15–49 HIV-infected. In the 1990s demographers and epidemiologists incorporated the severity of the AIDS epidemic into their projections of African population growth. Anderson et al. (1991: 558) concluded that the only uncertainty was "whether AIDS induced mortality will decrease population size over a few or many decades." Gregson et al. (1994: 843) produced two simulations of sub-Saharan Africa's population growth, one with the annual population growth rate by the fifteenth year of the epidemic falling from 2.6% to less than 1%, and the other with it falling into negative territory (-0.9%). The 2000 Revision of the UN's World Population Prospects (United Nations Population Division, 2001: 13) estimated that the thirty-five most

affected African countries experienced 8.3 million additional deaths due to AIDS from 1995 to 2000, projected that by 2010–2015 excess deaths would reach 14.5 million and that South Africa would have negative population growth.

#### 5.4 Conclusion

The population crisis that loomed so large at mid-century nearly disappeared from international discourse as the year 2000 approached. The one region which still had significant ground to cover in its fertility transition faced an AIDS epidemic that rolled back decades' worth of mortality improvements, devastated innumerable families, and promised to balance birth and death rates in a most disastrous fashion. At the time no one knew how the AIDS crisis would end. Scientists, policy makers, leaders of NGOs, and international organizations all placed AIDS high on their agendas, and funds flowed into AIDS research and prevention efforts. Meanwhile the US was reducing its funding for bilateral international family planning (DaVanzo & Adamson, 1998). World leaders met at the Millennium Summit held at the UN headquarters in New York City in September of 2000 and promulgated the United Nations Millennium Declaration (2000) that set the international policy agenda for the first decades of the twenty-first century. It included sections on peace and disarmament, development and poverty eradication, protecting the environment, meeting the special needs of Africa, and strengthening the United Nations. There was no mention of "population," "family planning," or "fertility" in the document. The Declaration served as the basis for the later elaboration of the eight Millennium Development Goals and the specification of twenty-one specific targets that all countries should try to meet by 2015. Only one of the twenty-one targets (5B)—"achieve, by 2015, universal access to reproductive health"—bore any connection to family planning.

The century ended with the average women living in the developing world giving birth to just 2.9 children (Fig. 1.1), indicating a successfully traversing of the fertility transition. While this was true for the developing world in the aggregate, it was not true for much of Africa (Fig. 1.3), where fertility levels in 2000 looked much like they did in 1950. These areas faced exceptional challenges with respect to successfully completing their fertility transitions: an ongoing AIDS epidemic, and an international community which no longer had lowering high fertility as a central policy goal.

#### References

Ahlberg, K. (2007). Machiavelli with a heart: The Johnson administration's food for peace program in India, 1965–1966. *Diplomatic History*, 31(4), 665–701.

Anderson, R., et al. (1991). The spread of HIV-1 in Africa: Sexual contact patterns and the predicted demographic impact of AIDS. *Nature*, *352*, 581–589.

References 81

Bongaarts, J. (1996). Population pressure and the food supply system in the developing world. *Population and Development Review*, 22(3), 483–503.

- Bonner, J. (1967). Review: A challenge to those who would avert starvation. *Science*, 157(3791), 914–915.
- Borlaug, N. (1970). Acceptance speech for noble prize for peace. https://www.nobelprize.org/prizes/peace/1970/borlaug/lecture/.
- Caldwell, J. (2002). Thirty years of global population changes. In N. Sadik (Ed.), An agenda for people: UNFPA through three decades (pp. 2–23). NYU Press.
- Caldwell, J., & Caldwell, P. (1986). Limiting population growth and the Ford Foundation contribution. Frances Pinter.
- Coale, A. (1969). The decline of fertility in Europe from the French Revolution to World War II. In S. Behrman (Ed.), *Fertility and family planning: A world view* (pp. 3–24). University of Michigan Press.
- Coale, A., & Hoover, E. (1958). Population growth and economic development in low-income countries. Princeton University Press.
- Commission on population growth and the American future. (1972). *Population and the American future*. Superintendent of Documents.
- Connelly, M. (2008). Fatal misconception: The struggle to control world population. Harvard University Press.
- DaVanzo, J., & Adamson, D. (1998). Family planning in developing countries: An unfinished success story. RAND Corporation. https://www.rand.org/pubs/issue\_papers/IP176.html.
- Davis, K. (1945). The world demographic transition. *Annals of the American Academy of Political and Social Science*, 237, 1–11.
- Davis, K. (1946). Human fertility in India. American Journal of Sociology, 52(3), 243-254.
- Davis, K. (1950a). Population and change in backward areas. *Columbia Journal of International Affairs*, 4(2), 41–51.
- Davis, K. (1950b). Population and the further spread of industrial society. *Proceedings of the American Philosophical Society* 95,(1), 8–19.
- Davis, K. (1953). Future population trends and their significance. *Transactions of the eighteenth North American wildlife conference* (pp. 8–21). Wildlife Management Institute.
- Davis, K. (1954). Fertility control and the demographic transition in India. In *The interrelations of demographic, economic, and social problems in selected underdeveloped areas*. Milbank Memorial Fund.
- Davis, K. (1956). Population and power in the free world. In T. Free, J. Spengler & O. Duncan (Eds.), *Population theory and policy* (pp. 342–356). Press.
- Davis, K. (1967). Population policy: Will current programs succeed? Science, 158, 730–739.
- Dixon-Mueller, R. (1987). U.S. international population policy and "The Woman Question." *Journal of International Law and Politics* 20(1), 143–167.
- Easterlin, R. (1967). Effects of population growth on the economic development of developing countries. *Annals of the American Academy of Political and Social Science*, 369, 98–108.
- Easterlin, R. (1985). Review of world development report 1984—world bank. *Population and Development Review, 11*(1), 113–119.
- Ehrlich, P. (1968). The population bomb. Ballantine.
- Fawcett, J. (1970). Psychology and population. The Population Council.
- Finkle, J., & Crane, B. (1975). The politics of Bucharest: Population, development, and the new international economic order. *Population and Development Review, 1*(1), 87–114.
- Ford Foundation. (1985). *The Ford foundation's work in population* (Ford Foundation Working Paper).
- Gregson, S., Garnett, G., & Anderson, R. (1994). Is HIV-1 likely to become a leading cause of adult mortality in sub-Saharan Africa? *Journal of Acquired Immune Deficiency Syndromes*, 7, 839–852.
- Hardin, G. (1968). The tragedy of the commons. Science, 162, 1243–1248.

- Harkavy, O. (1995). Curbing population growth: An insider's perspective on the population movement. Plenum Press.
- Hauser, P. (1960). Demographic dimensions of world politics. Science, 131(3414), 1641–1647.
- Hauser, P. (1967). Family planning and population programs: A book review article. *Demography*, 4(1), 397–414.
- Higer, A. (1997). Transnational movements and world politics: The international women's health movement and population policy. Unpublished Ph.D. dissertation, Brandeis University.
- Hodgson, D. (1983). Demography as social science and policy science. *Population and Development Review*, 9(1), 1–34.
- Hodgson, D. (1988). Orthodoxy and revisionism in American demography. *Population and Development Review*, 14(4), 541–569.
- Hodgson, D., & Watkins, S. (1997). Feminists and neo-Malthusians: Past and present alliances. *Population and Development Review, 23*(3), 469–523.
- Hyrenius, H., & Åhs, U. (1968). Ceylon: The Sweden-Ceylon family planning pilot project. *Studies in Family Planning*, 1(36), 6–11.
- Johnson, L. (1965a). *State of the union message*. https://www.presidency.ucsb.edu/documents/ann-ual-message-the-congress-the-state-the-union-26..
- Johnson, L. (1965b). Address in San Francisco at the 20th anniversary commemorative session of the United Nations. https://www.presidency.ucsb.edu/node/241692.
- Johnson, L. (1966). President Johnson's message to Congress on foreign assistance. The State Department Bulletin 54, 1392
- Kirk, D. (1944). Population changes and the postwar world. *American Sociological Review*, 9(1), 28–35.
- Kuznets, S. (1967). Population and economic growth. Proceedings of the American Philosophical Society, 111(3), 170–193.
- Leibenstein, H. (1954). A Theory of economic-demographic development. Princeton University Press.
- McPherson, P. (1985). *International family planning: The reasons for the program.* Speech delivered to the American Enterprise Institute.
- Meulen Rodgers, Y. (2018). The global gag rule and women's reproductive health: Rhetoric versus reality. Oxford University Press.
- Myrdal, G. (1970). The challenge of world poverty: A world anti-poverty program in outline. Pantheon Books.
- National Research Council. (1986). Population growth and economic development: Policy questions. National Academy Press.
- Nelson, R. (1956). A theory of the low-level equilibrium trap in underdeveloped countries. *American Economic Review*, 46(5), 894–908.
- Notestein, F. (1945). Population-the long view. In T. Schultz (Ed.), *Food for the world* (pp. 36–57). University of Chicago Press.
- Notestein, F. (1953). Economic problems of population change. In *Proceedings of the Eighth International Conference of Agricultural Economists* (pp. 13–31). University Press.
- Notestein, F. (1971). Reminiscences: The role of foundations, of the Population Association of America, Princeton University and the United Nations in fostering American interest in population problems. *Milbank Memorial Fund Quarterly*, 49(4), 67–85.
- Paddock, W., & Paddock, P. (1967). Famine—1975! America's decision: Who will survive? Little Brown.
- Paterson, A. (1947). The pax britannica and the population; the human situation in East Africa—Part I: On the increase of people; Part II: Towards a population policy. *East African Medical Journal* 24, 77–80, 81–97, 144–151.
- Piotrow, P. (1973). World population crisis: The United States response. Praeger.
- Preston, S. (1987). The social sciences and the population problem. *Sociological Forum*, 2(4), 619–644.

References 83

Pritchett, L. (1994). Desired fertility and the impact of population policies. *Population and Development Review*, 20(1), 1–55.

- Quinn, T. (2001). AIDS in Africa: A retrospective. *Bulletin of the World Health Organization*, 79(12), 1156–1158.
- Rockefeller, J. (1974). Population growth: The role of the developed world. In *Lecture series on population*. International union for the scientific study of population. Liege. Reprinted in full in *Population and Development Review* 4(3), 509–516.
- Simon, J. (1981). The ultimate resource. Princeton University Press.
- Sinding, S. (2007). Overview and perspective. In W. Robinson & J. Ross (Eds.), *The global family planning revolution: Three decades of population policies and programs* (pp. 1–12). The World Bank.
- Thompson, W. (1946). Population and peace in the pacific. University of Chicago Press.
- United Nation. (1994). Program of action. In *Adopted at the international conference on population and development*. Cairo. https://www.unfpa.org/sites/default/files/event-pdf/PoA\_en.pdf.
- United Nations. (2000). United Nations millennium declaration. General Assembly, 18 September 2000, A/RES/55/2. https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A\_RES\_55\_2.pdf.
- United Nations Population Division. (2001). World population prospects 2000: Highlights, online: http://enerpedia.net/images/2/2c/Wpp2000h.pdf.
- United Nations Population Division. (2019). World population prospects 2019, Online Edition. Rev.1. Department of Economic and Social Affairs, United Nations (File INT/1: Interpolated demographic indicators by region, subregion and country, annually for 1950–2099).
- Warwick, D. (1982). Bitter pills: Population policies and their implementation in eight developing countries. Cambridge University Press.
- Watkins, S., & Hodgson, D. (2019). Developmental idealism, the international population movement, and the transformation of population ideology in Kenya. *Sociology of Development*, 5(3), 229–247.
- Westoff, C., & McCarthy, J. (1979). Population attitudes and fertility. *Family Planning Perspectives*, 11(2), 93–96.
- World Bank. (1992). Kenya. Operations evaluation department, population and the world bank: Implications from eight case studies (pp. 50–55).

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

