

Chapter 4

Population Growth: Is the World Over-Populated, and Should Governments Have the Right to Control Birthrates?

Key Terms: body politics, cultural imperialism, developed nations, developing nations, human rights, one-child policy, over-consumption, over-population, population theory

INTRODUCTION

“There is a well-documented correlation between poverty and high birthrates. In little countries and big countries, capitalist countries and communist countries, Catholic countries and Moslem countries, Western countries and Eastern countries ... exponential population growth slows down or stops when grinding poverty disappears. This is called demographic transition. ... Our job is to bring about a worldwide demographic transition ... by eliminating grinding poverty, making safe and effective birth control methods widely available, and extending real political power (executive, legislative, judicial, military ...) to women. If we fail, some other process, less under our control, will do it for us.” Carl Sagan, quoted in Alter (2010).

The idea that the world is over-populated and headed for environmental collapse is deeply ingrained in the Western psyche, and is difficult to refute because of its fundamental logic: too many people using too few resources will result in hunger, poverty, environmental degradation, and political instability. But is this hypothesis accurate or only part of a much larger issue? Is population growth the harbinger of socio-economic, environmental, and political ills or merely a symptom of global injustice and inequality? Are population-control policies designed to curtail rapid population growth in developing countries or to ensure adequate resources are available for developed countries? And finally, is the movement to control birthrates another form of **cultural imperialism**?

Environmentalists have long argued that population pressures are the main reasons for climate change and destruction of the planetary biodiversity. Those who hold this view advocate strict control of birthrates in countries with rapid population expansion to protect limited natural resources. Yet others suggest that **over-population** is not the problem; rather, **over-consumption** in developed nations is depleting the world's resources, as well as preventing people in developing nations from accessing much-needed resources. Since 1950, the richest 20 per cent of the global population has doubled its consumption of energy, meat, forests, and metals, and quadrupled car ownership (Firth 2012: 5). Critics



FIGURE 4.1 LAVISH AMERICAN BUFFET

of imperialism, then, believe that population-control programs are designed to provide wealthy Western nations with uncontested access to the resources they demand (Tobin 2004). Some critics even suggest that the pervasiveness of the over-population notion legitimizes the authoritarian actions perpetuated by wealthy nations against developing nations and their people.

Body politics also plays a significant role in population policies – women's reproductive rights are pitted against a political agenda to lower populations in developing countries. The issue of population is further exacerbated by a demographic saturation of young people – there are more than three billion people under the age of 25 in the world today, many entering their reproductive years. These youth will keep the global population expanding into the next century (Weiss 2012). In fact, 78 million people are born every year, or more than 200,000 people a day despite falling fertility rates (People and Planet 2011).

The socio-economic, political, religious, and environmental issues related to population growth are explored in this chapter. Although the poor in developing nations are often blamed for the socio-economic and environmental ills of the world, this chapter will present a more critical analysis of the so-called population problem and challenge prevailing claims concerning over-population. Every attempt is made to present a balanced discussion of this extremely complex and emotional issue through competing perspectives. For our case study we will evaluate the one-child, one-couple policy adopted by China in an attempt to curtail birthrates and improve the economic future of the country. China's policy, now 30 years old, has succeeded in reducing the rate of population growth in China, but at what social cost? The expertise of ecologists, NGOs, family-planning experts, anthropologists, and global demographers are drawn upon in this chapter.

THE NATURE OF POPULATION CONTROL

By the year 2050, the global population is projected to reach 8.9 billion,¹ with most people residing in **developing nations**, especially those in Asia, Latin America, and Africa (UN Department of Economic and Social Affairs 2004: 4). This estimate is lower than the dire predictions of the 1970s, but even this population level presents serious challenges. On the other hand, **developed nations**, such as Japan and Western European countries, are experiencing a dramatic decline in fertility rates. Countries with falling birthrates face looming labour shortages, aging populations, and a loss of vitality and innovation. Thus a demographic divide has evolved, with poor countries experiencing high birthrates, increasing populations, and low life expectancies, while wealthy countries have low birthrates, declining populations, and extended life spans. Table 4.1 illustrates the demographic divide between Tanzania, a developing nation, and Spain, a developed nation (Haub 2012: n.p.).

Proponents of population control policies operate under three premises: first, that over-population in developing nations is the major cause of hunger, environmental degradation, economic stagnation, and political instability; second, that people must be persuaded or even forced into producing fewer children, but not necessarily as a means to improve their economic situation; and, third, that birth control should be given to women in developing nations regardless of health and safety concerns (Hartmann 1995: xix).

Critics of population-control policies counter that rapid population growth is not the root cause of underdevelopment, resource depletion, or environmental degradation; rather, high birthrates are the result of the slow pace of social reform in developing countries. Blaming the planet's ills on over-population is a way to absolve the affluent of any responsibility. Indeed, population-control policies are often substituted for other strategies that would make a socio-economic difference, such as land redistribution, economic

"We now realise that the disasters that continue increasingly to affect the natural world have one element that connects them all — the unprecedented increase in the number of human beings on the planet." Sir David Attenborough, in the president's People and Planet address to the Royal Society of Arts and Commerce (People and Planet 2011).

TABLE 4.1 DEMOGRAPHIC DIVIDE BETWEEN TANZANIA AND SPAIN

	TANZANIA	SPAIN
Population (2012)	48 million	46 million
Projected Population (2050)	138 million	48 million
Lifetime Births per Woman	5.4	1.4
Annual Births	1.9 million	483,000
Percent of Population Below Age 15	45%	15%
Percent of Population Ages 65+	3%	17%
Percent of Population Ages 65+ (2050)	4%	33%
Life Expectancy at Birth	57 years	82 years
Infant Mortality Rate (per 1,000 live births)	51	3.2
Annual Number of Infant Deaths	98,000	1,600
Percent of Adults Ages 15–49 with HIV/AIDS	5.6%	0.4%

1 Estimates of population are highly variable, with UN projections ranging from 7.4 to 10.6 billion.

and social development, employment creation, and universal education and health care. These policies would reduce poverty, as well as economic, gender, and racial inequities, and ultimately result in fewer children per family (Hartmann 1995).

“When the affluent few regard the impoverished majority as simply a dark, faceless crowd overpopulating the earth, they deny poor people their humanity and diminish their own.” (Hartmann 1995: xxi)

As far as claims that over-population is polluting the world are concerned, Rodriguez-Trias (1995) points out that it is militarism that destroys the landscape and pollutes the environment with toxins, and that wasteful production and consumption patterns, as well as corporate greed, are the real causes of environmental destruction and resource depletion. As an example, the United States produces a quarter of the world’s carbon dioxide emissions – 5.43 tons as compared to 0.7 tons in most African countries (Population Connection 2009).

HISTORICAL CONTEXT

Historically, **population theories** have placed the blame for the planet’s ills on the poor. This viewpoint became so entrenched in the seventeenth and eighteenth centuries that any attempt to provide relief for the poor was soundly criticized because it would encourage them to have more children. Rev. Thomas R. Malthus, known as the father of population theory, used the scientific principles of the Enlightenment to “prove” that population growth among the poor must be checked (Tobin 2004). Although accused of being classist, Malthusian theory set the stage for modern-day misconceptions regarding over-population.

In 1844, economist Friedrich Engels countered Malthusianism by pointing out that the productive capabilities of humanity could be unlimited, considering new technologies, scientific inventions, capital, and labour potential, and therefore population growth was not a problem (Tobin 2004). Marxist critics of Malthusianism argued that uneven distribution of resources and wealth, not over-population, caused poverty, and that the consumer class, not the poor, were destroying the forests, releasing pollutants into the atmosphere, and causing the extinction of animal species (Tobin 2004).

The consequences of unrestrained population growth, including resource depletion and diminished economic and social development, became a serious concern in the mid-twentieth century, when demographers suggested that if current trends continued, the global population would soon become ecologically unsustainable. Neo-Malthusians of the same period, such as Dr. Paul Ehrlich (1971), coined the phrase “population bomb,” a concept that was instrumental in the development of current population policies. Demographers and biologists took up the mantle, exacerbating fears of food shortages, highlighting the perceived inadequacies of peasant farming, and pushing for foreign private investment in agribusinesses (see Chapter 10 for further discussion of agribusinesses and food security). Some Malthusians even predicted that deterioration of the climate would inevitably lead to Malthusian checks, including war, famine, and epidemics, and Zhang et al. (2011) contend that population collapses are inevitable when over-population and climatic deterioration occur at the same time. However, modern-day critics of neo-Malthusianism continue to argue that the upper classes, with their voracious consumer appetites, are the real cause of pollution emissions, natural resource consumption, and habitat disruption (Tobin 2004).

Nonetheless, neo-Malthusians continue to claim that over-population is the primary cause of war and political instability – the need to conquer new lands and compete for

scarce resources. Fear that uncontrolled population growth could lead to international conflicts has influenced population-control programs. However, this theory ignores the foreign policies of wealthy countries like the United States, which have created political instability in areas such as the Middle East (see Chapter 13 for a discussion of global conflicts).

Today, many demographers and population experts take a more balanced perspective on global population issues. They recognize that depletion of resources is partly due to high birthrates in some developing countries, but they also understand that irresponsible demands from wealthy nations for resources is causing most of the depletion of resources and exacerbating social inequalities in developing countries (Wirth 1995: 78).

"The gaping divide in material consumption between the fortunate and the unfortunate stands out starkly in their impacts on the natural world. ... The consumer society's exploitation of resources threatens to exhaust, poison, or unalterably disfigure forests, soils, water, and air."
(Durning 1994: 42)

POPULATION PRESSURES

Most population pressures are also environmental pressures, including deforestation, water shortages, contamination of the air, land, and water, and loss of biodiversity. The question we should all be asking is this: If we reach the environmental limits of the planet, what other options does the human race have? Population experts Hinrichsen and Robey (2000) point out that expanding populations consume more energy and resources, drive more cars, build more houses, and eventually may use space beyond what the planet can provide (CWAC.net n.d.). According to entomologist Edward O. Wilson, 27,000 plant, animal, and insect species go extinct every year because of human encroachment on their habitats (People and Planet 2011). Research on the correlation between over-population and climate change suggests that if global warming and the ensuing environmental problems (e.g., stunted crops, droughts, water shortages, violent weather) continue, the carrying capacity of the land will shrink, increasing the very real danger of mass starvation and population collapse (Zhang et al. 2011). However, whether we can blame these realities on population growth in developing countries or over-consumption in developed countries remains unclear.

Water and food shortages are increasing in some developing countries; according to the UN Food and Agriculture Organization, one in seven people is chronically hungry. However, the problem is not food shortages, but access to land and reasonable income distribution (Hartmann 1995). Poorer people tend to be landless, so they cannot grow their own food and do not have the money to purchase food. The issue of water shortages is more difficult to address; the two largest consumers of water are large-scale irrigation systems for agriculture (70 per cent) and industry (20 per cent), while residential use accounts for only 10 per cent, even in cities with large populations (Web of Creation n.d.). By 2025, more than two and possibly as many as three billion people, particularly in sub-Saharan Africa, will not have ready access to clean water (People & Planet 2011).

Numerous problems have contributed to water shortages, including climate change and inefficient agriculture. Increases in temperatures in mountainous regions due to global warming are reducing the amount of snow and ice for run-off during dry seasons. As a

"Each person's 'environmental footprint' has on average grown to 22 hectares of the planet but the report estimates the 'biological carrying capacity' is somewhere between 15 and 16 hectares per person." United Nations' Global Environment Outlook-4 report, quoted in Wilkinson (2007: n.p.).

"A country's ability to feed itself very much depends on three factors: availability of arable land, accessible water and population pressures. The more people there are, especially in poor countries with limited amounts of land and water, the fewer resources there are to meet basic needs. If basic needs cannot be met, development stalls and economies begin to unravel." Dr. Nafis Sadik, Executive Director of the United Nations Fund for Population Activities (UNFPA), quoted in FAO (n.d.).

result, mountain glaciers, known as "reservoirs in the sky," are melting. Leaky irrigation equipment, agri-chemicals that end up in the rivers, and the need for continuous irrigation have dried up rivers, lakes, and underground water sources (Raulkari, Toledo, & Harvey n.d.). Unsafe drinking water is responsible for numerous diseases. Indeed, the World Health Organization (WHO) estimates that 1,000 people die every day in West Africa from drinking unsafe water (*PBS Newshour* 2012).

Global deforestation is an example of the convoluted nature of population and environmental degradation. In Haiti the hills have been stripped of their trees, and environmental degradation on the island has reached crisis proportions. Despite the prevailing belief that Haitians have denuded the hillsides for cooking fuel, this is only the most recent assault on the forests in Haiti. The most devastating deforestation took place in the early 1800s, when the

newly independent nation had to sell its timber to pay off its debt to France. Since then the logging industry has grown to meet the constant cooking-fuel shortage in the country. Following the 2010 earthquake, foreign NGOs built temporary shelters on a fragile, protected mountainside, clearing all the trees to do so. All of these activities exacerbated the deforestation problem in Haiti, and by 2012 only two per cent of forest cover remained in the country (Laurent 2012).

"Our future hinges on whether we can strike an equitable balance between human numbers and consumption and the planet's capacity to support life.... Sustainable development." (Wirth 1995: 78)

In Brazil, large-scale commercial farming, ranching, logging, mining, and highway construction have destroyed much of the Amazon forest. None of these activities are a direct result of population growth but are instead due to consumer demands for products, mainly in developed countries. Deforestation in the Philippines was blamed on landless people moving into the uplands, but closer analysis shows that dictator Ferdinand Marcos gave logging concessions to relatives and cronies (Hartmann 1995). As for the poor of

the Philippines, they suffer from a shortage of fuel, so they cut down trees and have been pushed into marginal lands on the hills, which also results in deforestation. Nevertheless, their impact is minimal compared to that of the logging companies.

CHINA'S ONE-CHILD POLICY

In 1979, the Chinese government implemented the "one child, one couple" population-control policy. Deng Xiaoping, then-leader of the Chinese government, hoped that implementation of a **one-child policy** would relieve the population stress created by escalating birthrates and assist in his plan to transform the country into an industrial powerhouse (Nakra 2012). The political and scientific discourse that led up to this policy championed the ideology that over-population was "a serious threat to future living standards and the viability of economic reforms" (Bulte, Heerink, & Zhang 2011: 25). Marxist population theorists drew on Friedrich Engels' twofold concept of social production – production of subsistence and production of humans – and under a socialist system, both required controlled planning. The goal was to establish a stable population of 1.2 billion people by the year 2000. However, as anthropologist Ann Anagnost (1995: 27) points out, reducing

fertility rates was not the only goal; improving the *quality* of Chinese people, through improved education, and increasing general knowledge in areas such as health care, child-rearing, law, and technology were also seen as vital to future prosperity in the country.

The State Family Planning Bureau controls the timing of marriage and childbearing, as well as the size of families in China (Bulte, Heerink, & Zhang 2011). Although one child is the rule, in rural China, farmers may be allowed to have a second child after five years if their first child is a girl. Ethnic minorities, such as Tibetans, are also allowed to have more than one child. In recent years, in families with a disabled first child, or where the parents are both from one-child families, a second child may be allowed. However, for most urban residents and government employees, the one-child policy is strictly enforced (Nakra 2012).

Administering this policy is where most of the controversy arises. Initially, officials relied on media propaganda and education; however, financial incentives for producing only one child, including paid pregnancy leave for three years, a salary increase, and preferential access to housing, schools, and health services, soon followed (Richards 1996). The policy is enforced through residential registration, certificates of birth approval, birth certification, and social ostracism, as well as economic sanctions, such as fines, confiscation of property, and loss of government jobs. In addition, parents who contravene the policy are required to pay for their child's education and health care (Bulte, Heerink, & Zhang 2011).

Critics have called the one-child policy a vehicle for **human rights** abuses that exacerbates the very real problem of female infant abandonment and infanticide in China (Batabyal & Beladi 2004). Birth quotas in every city and province have led to reports of forced abortions and sterilization of both men and women (Bulte, Heerink, & Zhang 2011). Indeed, some of the methods for enforcing the one-child policy appear draconian;

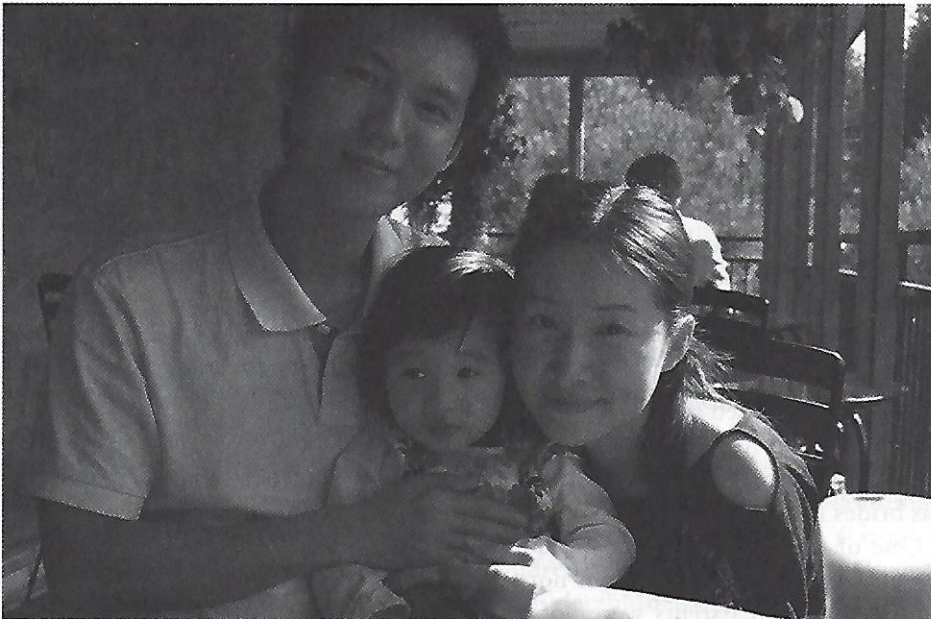


FIGURE 4.2 A CHINESE ONE-CHILD FAMILY

for example, in Hunan province officials have been accused of confiscating “illegal” babies from families that violated the policy, and putting these babies up for sale (*The Economist* 2011). These reports of parental or human rights abuses, whether substantiated or not, have resonated with many Westerners, specifically pro-life foundations and those with anti-Communist political agendas (Greenhalgh 2003a), but also with ordinary people who strongly object to any violation of human rights, including the right to have a family. However, the Chinese government contends that human-rights abuses, such as forced abortions, are the exception rather than the norm. They are quick to point out that the policy is working, and that 300 million births have been prevented.

“Li Aihai, happily married and the mother of a 2½-year-old girl, had a problem. She was four months pregnant with her second child. Sihui county family-planning officials ... told her what she already knew: She had gotten pregnant too soon. She hadn’t waited until her daughter was four years old, as Chinese law required of rural couples. The officials assured her that, because her first child had been a girl, she would eventually be allowed a second child. But they were equally insistent that she would have to abort this one. It was January 2000.” (Mosher 2006).

On the surface this policy has been successful; indeed, China now has one of the lowest fertility rates in the world (*The Economist* 2011). The most obvious benefit of this policy has been a significant improvement in the standard of living for many Chinese citizens no longer burdened with large families to support on meagre incomes. However, the success of this policy has also created far-reaching socio-economic consequences and presents some difficult challenges for China in the future. China’s fertility rate is now 1.5 children per woman (Nakra 2012). This rate, which is 30 per cent lower than needed to ensure population stability in the future, has created a low dependency ratio, which means fewer economically active adults to dependent citizens (Eberstadt 2010). In China’s case, the ratio stands at three working adults per non-working dependent. This low dependency ratio and the “greying” of China’s population will soon have far-reaching implications – economists have predicted that one third of China’s population will be over 60 by 2030 (Nakra 2012). Fewer young people will be available to care for their elderly parents and grandparents or pay income taxes that provide infrastructure such as health care. In the very near future

Chinese officials will have to grapple with pension plans and health care for their aging society and to take over the roles that children used to assume.

A second major consequence of the one-child policy has been a sex-ratio imbalance. Johnson (1996: 79) suggests that the reason for this imbalance is cultural preference for male babies: “Girls occupy a structurally marginal place in a patrilineal kinship system.” In rural areas, parents prefer sons to help on the farm or to migrate to cities with labour shortages to gain employment and send remittances back to their parents. Sons are also seen as care providers for parents in their old age. Thus, couples restricted to one child turn to ultrasound technology to determine sex. This has led to an increase in abortion of female fetuses, as well as female infanticide and abandonment (Bulte, Heerink, & Zhang 2011). The inability to find wives has caused socially disruptive behaviour among Chinese men, including kidnapping of women for wives. Indeed, human trafficking of girls, especially from Sichuan and Anhui provinces, and transporting them to prosperous coastal areas where they are sold as brides is a burgeoning business for rings of pedlars (Anagnost 1995).

One of the most dramatic social costs of the one-child policy is the creation of a black-listed population of children not registered in the national household registration system because their parents were not allowed to have another child. Their numbers are estimated to be in the millions, most of them girls from rural areas (Canada, Immigration

and Refugee Board 2007). Many of these children are the result of a rural underground culture of escape; women hide their “illegal” pregnancies and even their child after birth. They may flee to other regions and become part of the “floating population” on the edge of cities (Greenhalgh 2003b). These unregistered children are denied the most basic of citizenship rights, including state health care and education, and suffer from social and economic marginalization. In adulthood, unregistered people may have difficulty gaining employment, enrolling in the army, or marrying.

The increased prosperity and economic freedom in China’s cities has led to some children living lives of luxury that in some cases has created the “little emperor” syndrome. These lone children tend to be spoiled with material possessions, seldom receive punishment for bad behaviour, and expect everything to come easy. The increased egotism, selfishness, rude behaviour, and moral poverty among children of the one-child policy are causing concern about their ability to become productive citizens or future leaders (Clark 2008).

Acceptance of the one-child policy has been a long and difficult process with some serious social costs. However, by 2012, many young adults, having grown up in a commodified environment, now equate their ability to acquire goods to their country’s low birthrate (Anagnost 1995). Consequently, many of them now consider small families preferable. For this reason, Zuo Xuejin of the Shanghai Academy of Social Sciences believes the policy is no longer necessary (*The Economist* 2013). Public scrutiny and rejection of the policy has increased in recent years, so the future of the one-child policy is no longer as certain.

THE ETHICS OF POPULATION CONTROL AND FAMILY PLANNING

The controversy surrounding China’s one-child policy brings home this question: should governments be allowed to control birthrates? When China implemented its one-child policy the West applauded the move, hoping the possibility that China would take over the world by sheer numbers could now be laid to rest. But Western pundits ignored the human-rights abuses that such a policy might entail. Indeed, the International Planned Parenthood Foundation (IPPF) and the World Bank provided financial assistance to their Chinese counterparts to set the policy in motion and awarded full membership in the IPPF for their initiatives. Individuals and organizations such as the United Nations Population Fund (FPA) lauded the Chinese policy (Aird 1994). However, critics remind us that the human cost of the one-child policy cannot be ignored. On an individual level, being denied the right to have more than one child, despite economic means, is a human-rights tragedy.

Religion has always played a strong role in family dynamics. With regard to women’s reproductive rights, some powerful religious forces and anti-choice movements have taken an active interest in population politics, although opinions vary considerably between religions and even within religious sects. Catholicism is widely criticized for its condemnation of contraception and abortion. In the 1968 *Humanae Vitae* encyclical, section 14 prohibited the use of birth control pills, artificial barriers, sterilization, and abortion (Tobin 2004). Indeed, the Vatican led a movement to delegitimize the 1994 Cairo conference on reproductive choice. Buddhism, on the other hand, promotes curbing excessive over-consumerism and over-population, considering both to be agents of Earth’s destruction (Gross 1995: 167), while Hinduism considers the number of children to be a woman’s matter (Iyer 2002). Islam permits family planning, although there is considerable debate and even contradiction among clerics regarding interpretation of scriptures. In Egypt, for example, couples are told

they should not actively prevent conception, as it is Allah's will, although choosing to have only a few children is acceptable.

"I'm a Catholic, but women need access to contraceptives ... over and over again women have told me that all they want is to be able to put time between one child and another child. It's a universal thing to want to feed your children and to educate your children, and women know that the only way they can do that is not have so many." Philanthropist Melinda Gates, quoted in Moorhead (2012: n.p.).

"At 20, Francisca Kanyari already had two children and her husband wanted more. He had six other children by another wife, common in a country where polygamy is legal. He supported both households on one salary.

Kanyari believed she and her two boys would be better off if she stopped having babies. So every three months, she sneaked away from her thatch-roof hut in northern Kenya to visit a clinic and receive an injection of the hormonal contraceptive Depo-Provera.

'With Depo,' she said, 'no one sees it. And I'm free.'" (Weiss 2012: n.p.)

According to James N. Gribble (2012), vice-president of International Programs at the Population Reference Bureau, the reproductive rights of women, especially in developing countries, must be addressed through family planning. Family planning is not the same as population control; rather, family planning means providing access to contraceptives and empowering women through education and employment to make their own choices. Ultimately, family planning increases the economic well-being of everyone, since parents of smaller families are better able to provide more educational opportunities and regular health care for their children. As Dr. Amarjit Singh, executive director of the National Population Stabilization Fund, states, "An educated girl is your best contraception" (Yardley 2010).

The 2012 London Summit on Family Planning centred on control of family size and spacing between births. More specifically, the objectives were to improve access to contraceptives and to empower women to make reproductive choices. The organizers at the summit claimed that doing so would reduce maternal deaths by 200 million and result in 110 million fewer unwanted pregnancies, 50 million fewer abortions, and 3 million fewer babies dying before age one (Tran 2012). Empowering women in developing countries is an urgent global issue, especially since neo-liberal policies have resulted in increasing gender inequality in countries such as India (Shah 2012).

One of the major obstacles to empowering women is access to safe, effective contraceptives (Hartmann 1995). At the 1994 United Nations International Conference on Population, held in Cairo, Egypt, the voices of women from African nations were finally heard. These women protested international programs that focused on population control and birthrates rather than sustainable development. They also pointed out that Western contraceptives (e.g., banned Depo-Provera injections) were being dumped in their countries and threatened the health and well-being of African women.

Deeply rooted cultural practices and preference for male progeny represent another obstacle to population reduction. As in China, the cultural bias toward sons in India has resulted in abortion of female fetuses once the couple sees the ultrasound, thus creating a sex imbalance² (Yardley 2010). Marriages are often arranged at a young age, and starting a family immediately is still encouraged. Several policies have been put in place to curb population growth and address cultural practices, ranging from forced sterilizations in Andhra Pradesh state in the 1990s of women after their second child, to more benign campaigns to convince young couples to wait two years before starting a family. In Satara district in Maharashtra state, nurses visit each village and try to convince

² The term "sex imbalance" is used here rather than "gender imbalance," which is commonly used in the literature, because gender is a cultural construct, while sex is a biological reality.

parents not to marry their daughters off until they have finished school. Young couples are offered the “honeymoon package,” which consists of cash bonuses if they wait two years to have a child.

India’s birthrate is currently 2.6 children per family, well below earlier birthrates, but still above the 2.1 ratio needed to stabilize the population. Even when the rate falls to 2.1, India’s population will peak in 2060 at 1.7 billion people (Weiss 2012). To address this issue, on May 1, 2000, Maharashtra, the second most populous state in India, established a population-control policy whereby a third child born to a family would not receive benefits, such as reimbursement of medical expenses (Government of Maharashtra Public Health Department 2000).

As a model for future government-endorsed family planning, Thailand launched a successful government-supported family-planning program in 1971, following years of rapid population growth. The high-profile public-education campaign encouraged family planning and offered incentives such as loans that were linked to the use of contraceptives. Alternative income-generation projects were developed so that families no longer had to have large families working in the fields. None of the initiatives were coercive and, most important of all, were linked to women’s rights, increased employment opportunities, better health care, and support from the Buddhist religion (Frazer 1996).

“... the world can neither support everybody living an American lifestyle nor living as hunter-gatherers. The answer lies in between. ... those of us from the highly consumptive societies are going to have to find ways to do with less.” Biologist Thomas Lovejoy, quoted in Tucker (2006).

CONCLUSION

Population growth is extremely difficult to model; however, many demographers suggest there is a significant probability that the global population will reach its peak between 2050 and 2075 at just under nine billion, and then decline by the end of the century (Lutz, Sanderson & Scherbov 2001). Although this sounds like good news, a population this size will still place enormous strain on the Earth’s ecosystems. Yet, as has been pointed out numerous times in this discussion, large populations in developing countries are not the main source of socio-economic woes from a global perspective. There are many factors at work, not the least of which is rampant consumerism in wealthy developed nations. The footprint left by a multinational corporation or a coal-burning plant is much larger than that left by any group of people.

Ultimately, if the basic needs of people for food, shelter, clean water, health care, education, employment, and elder security are met, people will no longer feel the need to produce large families to ensure their social and economic well-being. Population numbers do not need to be addressed as much as socio-economic conditions and gender, as in countries such as India where birthrates are still high, to compensate for high mortality rates, the need for child labour, and to care for aging parents (Hartmann 1995).

China’s one-child policy was designed to slow population growth but also to change people’s attitudes about family size. From my own observations and discussions with young Chinese urbanites, it has succeeded, but this may not be due only to the one-child policy. Media have brought the world to China, making viewers more aware of the benefits of small families, and many Chinese couples are enjoying their new-found economic prosperity too much to jeopardize it with large families. However, there is also a great deal of opposition to such a drastic population policy, and growing evidence that the policy has created new and unforeseen consequences that threaten China’s development plans as much as rapid population growth once did.

"We have the capability to tackle these great issues and carve out a sustainable future ... but we have to persuade ourselves of the seriousness of the threats we face, so that we act." Former news editor Fred Pearce, in interview with Jon Stewart (Alter 2010)

In answer to the opening questions, the world may not be overpopulated, as claimed by population-control advocates; however, over-consumption is threatening our environment and biodiversity, and therefore also the ability of the Earth to sustain its current population. Despite this looming threat, the use of force or other coercive practices to control population growth is unjustified and predicated on cultural imperialistic agendas. As suggested by numerous advocates, people in developing countries need economic security and alternatives to large families; only then will birthrates fall and quality

of life improve. Equally important to resource sustainability is the call for people in developed countries to critically assess their current conspicuous consumption practices.

QUESTIONS FOR CONSIDERATION AND CLASSROOM ACTIVITIES

1. Choose a country, such as Burkino Faso, and trace its food-production and environmental-sustainability policies. Are these policies making a difference?
2. Class debate: is the world over-populated or over-consumed?
3. Choose a developing country and investigate its birthrate. Does the government provide any incentives to lower the birthrates? How does the populace react to these measures, and are the measures successful? Investigate the reasons behind this country's birthrate.
4. What measures do you think would best serve to reduce unsustainable population growth and improve the lives of people in developing countries?
5. Many of the resources on the web are directed toward the dangers of rapid population growth. Critically evaluate the assertions in these websites and report on their accuracy.
6. Search out websites that present a balanced picture, and critically assess the real causes of resource depletion and environmental degradation.

SUGGESTED READINGS

Hartmann, B. (1995). *Reproductive rights of women and the global politics of population control*. Cambridge, MA: South End Press.

An insightful analysis of population politics and the effect that population policies may have on women. The author uses case studies to explain the historical and political origins of population-control policies.

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Former news editor Fred Pearce presents a balanced, insightful discussion of population growth that ignores the doom-and-gloom rhetoric of many population theorists. Many of the views expressed in this chapter are discussed in greater detail in this book.