



The Population Debate

With around four babies born every minute, Philippine population is expected to hit 84.2 million by the end of the year. Growing at an average of 2.3% annually, the country’s population has increased fourfold since the 1950s. It now ranks 14th in the world in terms of population size and 8th in terms of population density. This phenomenon is seen either as an onus or a gift, depending on whose side of the fence one is looking from.

Recognizing the dilemma and the repercussions of a huge population to the economic and social conditions of the Filipinos, the long running debate on the appropriate population policy again hits the headlines. This paper aims to provide a view of both sides of the debate in the hope that the information will clarify issues on the topic.

The Core Issues

The population debate generally revolves around two core issues. The first centers on whether population is a problem or an asset in attaining economic growth and development. The second is the debate on how to address the consequences of a huge population.

Is population a problem?

It has been observed that through the years, the world population has grown much faster. Before, it took 123 years for one billion

people to be added to the global population. Now, it only takes twelve. This population boom is seen by “pessimists”¹ as putting unsustainable pressures on food production, the environment and capital, which may possibly lead to famine and widespread poverty especially in developing countries.

Table 1. World Population, 1804-1999

Year	Number of Years Later	World population, in billion
1804		1.0
1927	123	2.0
1960	33	3.0
1974	14	4.0
1987	13	5.0
1999	12	6.0

Source: Bloom, Canning and Sevilla, 2002

This view was contested by the “optimists” who sought to promote the idea that population growth can be an economic asset. They assume that human beings and institutions are “rational” and have the capacity to adapt to a changed demographic regime. Simon Kuznets (1960) and Julian Simon (1981) argued that as populations increase, so does the stock of human ingenuity. As population growth creates pressure on resources, people become more innovative.

a. Population and Food Production

As early as the 18th century, Thomas Malthus, an English economist, already pre-

¹ Bloom, Canning and Sevilla (2002) used the terms “pessimists” and “optimists” to distinguish the differing views on population. Pessimists see population as one that restricts economic growth while optimists believe that it can fuel growth. The same terms will be used in this paper.

dicted that the increase in population will eventually outrun the increase in food production and will lead to declining standards of living (Ray, 1998).

Optimists, however, maintain that while it is true that the global population has grown much faster, the worldwide trend of food output per person has been generally upward (Antonio, et al, 2004). Statistics from the Food and Agricultural Organization (FAO) show that from 1961 to 2002, available food supply per person has gone up by 24.4%. In fact, the largest increase in food production is actually observed in developing countries, particularly in India and China (Sen, 1998).

In the Philippines, the impact of population to food production is viewed in the light of food sufficiency concerns. The stagnant growth in the production of rice, combined with the rapid population growth are identified as the two most important factors explaining why the country lost its self sufficiency in rice. From 1980 to 2000, the annual growth in the production of rice averaged at only 1.9%, well below the country's yearly population growth rate of 2.36%. (Tolentino, 2002)

b. Population and Human Capital Investments

Pessimists also argue that rapid population growth heavily strains the capacity of families and governments to provide health and education services to the children. Lower-fertility households have more parental time, materials and financial assets and are more capable of sending children to school (Knodels, 1994). These micro effects are reinforced in the macro level. For instance, Philippine per capita spending for education and health declined from P1,789 to P1,455 and from P266 to P151 in 1998 and 2003 respectively.

Table 2. Philippines' Real Per Capita Spending on Social Services Over Time (2000 prices)

Social Services	1997	1998	1999	2000	2001	2002	2003
Total Social Services	2,487	2,417	2,323	2,302	2,035	2,022	2,016
Education	1,789	1,761	1,675	1,608	1,516	1,505	1,455
Health	266	221	223	202	166	171	151
Social Security	392	387	364	376	331	327	392
Housing	39	48	61	115	22	19	19

Source: Manasan, 2003, "Analysis of 2004 President's Budget: Fragile Turnaround"

In 2002, the government spent a mere P0.47 per person daily for the health care of Filipinos. This was further reduced in 2003 to P0.41 per day. There is only one government doctor for every 28,493 people, and one rural health unit to provide service to 29,746 people (PLCPD Talking points, July 2003). As a result, the Philippine lagged behind its neighbors in terms of life expectancy, infant and maternal mortality as well as child nutrition (Dayrit, 2004). Similarly, resources for education were spread thinly. In 2003, the government spent barely P4 per person daily for education while the education department had to face a shortage of almost 40,000 classrooms and 500,000 teachers. This situation has significantly contributed to the low cohort survival rates and the poor performance of the students in global standardized tests.

Optimists, however, contend that a larger population does not necessarily mean less funds for health and education. Antonio, et al. (2004) argue that the government can raise the necessary funds by simply improving its governance and arresting the widespread tax evasion and corruption. They cited the report of the Development Budget Coordinating Committee Tax Study Group in 2001 showing a government loss of around P194 billion in evaded taxes. The Office of the Ombudsman in 1997 also estimated a government loss of \$48B or P132² billion from corruption in the past 20 years. The magnitude of the funds needed to cover the needs of the

² Under an exchange rate of \$1=P55

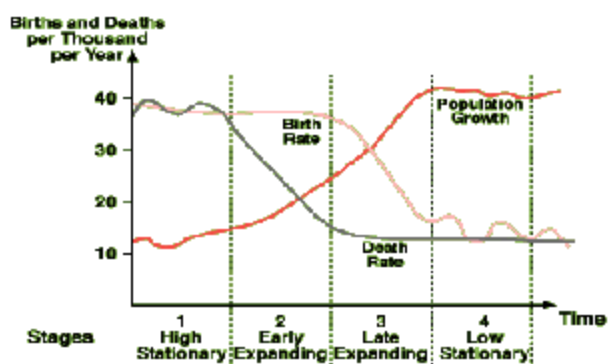
education sector, on the other hand, is way below the amount of taxes evaded and funds lost to corruption. Building 3,000 classrooms every year, the current administration's target, will amount to P7.5 billion, representing only 3.9% of the estimated tax evasion or 5.7% of the losses due to corruption.

c. Population and Labor Force

In explaining the impact of population growth to the labor force, a discussion of the demographic transition is necessary.

Demographic transition occurs when a country moves from a situation of high birth rates and death rates to one of low birth and death rates as part of the economic development from a pre-industrial to a post-industrial economy (De Vera, 2003). In the early stages of the development process, both death and birth rates are high resulting to a low population growth. With improvements in medicine and public health, death rates drop without a corresponding fall in birth rates. Countries undergoing this process, like the Philippines and other developing countries, experience a large increase in population. At the end of the process, both rates are lower, leading to a population that is static or shrinking. Several countries such as Japan, Sweden, Denmark, Germany, and United Kingdom have already entered this stage.

Figure 1. Demographic Transition Model



Source: Vogeler, 1996

A **demographic dividend/bonus** or the opportunity to achieve faster economic growth is said to be present during that stage of the demographic transition when the fertility decelerates and labor force increases faster than the pool of dependents. A larger labor force accelerates growth because it increases the country's capacity for economic production while fewer dependents mean less people to feed, cloth and send to school, which result to more savings and investments. This demographic bonus was essential to the success of the East Asian tigers from 1965 to 1990 and has been found to contribute as much as one half of recorded growth in South-east Asia and about one-third in East Asia between 1965 to 1990 (Orbeta, 2000).

The country's slow decline in fertility prevented the economy from taking advantage of the demographic dividend. At present, the country's fertility rate remains one of the highest among Asian countries, and well above the world average of 2.9 (Pernia and Herrin, 1999). As a consequence, the Philippines had to bear a greater dependency burden. In 2001, 64 young and six old dependents had to be supported per 100 persons in the economically productive ages. If a labor market adjusted dependency ratio³ is considered, the ratio gets even higher at 177 dependents per 100 employed Filipino.

Table 3. Philippine Population, Population Growth Rate and Fertility Rate, 1980-2001

Country	Total Population, (in million)		Average Fertility Rate, (number of births)		Dependency Ratio, (in percent)	
	1980	2001	1980	2001	2001 (young)	2001 (old)
Indonesia	148.3	209.0	4.3	2.4	0.47	0.07
Korea, Rep.	38.1	47.3	2.6	1.4	0.30	0.09
Malaysia	13.8	23.8	4.2	2.9	0.55	0.07
Philippines	48.0	78.3	4.8	3.3	0.64	0.06
Singapore	2.4	4.1	1.7	1.4	0.31	0.10
Thailand	46.7	61.2	3.5	1.8	0.34	0.09
Vietnam	53.7	79.5	5.0	2.2	0.54	0.09

Source: Health, Nutrition, Population-World Bank
Dependency Ratio is the proportion of young and old dependents (aged 0-14 years and 65 years and over) to the working age population (15-65 years old)

³ The labor market-adjusted dependency ratio includes as dependents persons aged 15-64 who are not employed. It shows the number of persons not employed per 100 employed persons, and hence, is a more realistic indicator of dependency.

Villegas and Dacanay(2003), on the other hand, argue that controlling the country's fertility and population growth rates will shorten the demographic gift phase, approximately, by two decades. Instead of having a ratio of 2.25 people in the workforce for every dependent between 2020 to 2040, the country will only post a ratio of 1.7: 1.0.

They estimated the start of demographic gift stage in the Philippines during the period 1980 to 2000. Further, they project that the growth of the labor force will be much higher than the dependents in the next three to four decades. This large labor force will be the country's main economic growth driver, and once employed, will increase savings and investments.

Many countries in the industrialized world, they further claim, are already in the alarming stage of a demographic winter⁴ where a much smaller labor force is posing serious difficulties in supporting the dependent population.

Bloom, Canning and Sevilla(2001 and 2002), however, point out that the demographic dividend is not automatic and can only be reaped if appropriate policies that create jobs to absorb the rising labor force are in place. Unfortunately, the Philippines' employment creation record has been far from impressive. Historically, jobs generated almost always fall short of the increase in labor force.

Pessimists further claim that there is no need to fear a demographic winter since half of the country's population is below the age of 21. Herrin (2003) projects that the population will continue to increase dramatically until the middle of the 21st century whether fertility declines rapidly or slowly.

Table 4. Philippine's Fertility Assumption and Projected Population

Fertility assumption	Projected Population by 2040
Low (replacement fertility at 2010)*	114 M
Medium (replacement fertility at 2020)	126 M
High (replacement fertility at 2030)	137 M

Source: NSCB, *Population Projection Based on 1995 Census, 1997* cited in Herrin (2003)

*Replacement level fertility is the number of births or babies a female would need to have over her reproductive life span to replace herself and her partner. It is estimated at 2.1 babies per female.

d. Population, Growth and Poverty

Empirical studies by Nobel prize winner Simon Kuznets's (1966) have shown that there is no clear link between population growth and economic growth. Similar conclusions have been arrived at by the more recent studies of Levine (1992), Kling and Pritchett (1994), and Ahlburg (1996).

Kuznets explained that the direct relationship between population and growth or poverty is difficult to establish because they are linked through "a common set of political and social institutions." Thus, any "direct causal relation" between them "may be quite limited." Karl Marx, likewise, reasoned that rapid population growth is the *consequence*, and *not the cause* of economic and social inequalities. Hence, there is a need to address economic development first and the decline in fertility rates will naturally follow. Other optimists aver that the problem of shortage is caused principally by the inequitable distribution of wealth and resources among the world's population rather than the increase in numbers.

Antonio, et al. (2004) further argued that the Philippine experience proves that higher population densities do not translate to lower personal incomes. Hongkong, Singapore and Korea

⁴ When population growth rate hits zero

have higher population densities than the Philippines, yet they have higher personal incomes as well.

Table 5. Population Density, 2004 and Per Capita GDP, 2003 for selected countries

Country	2004 Population Density (in ppsk)	2003 Per Capita GDP (in US\$, PPP*)
Belgium	339	29,000
Hong Kong	6,278	28,700
Netherlands	393	28,600
Japan	337	28,000
Singapore	6,285	23,700
Israel	298	19,700
South Korea	493	17,700
Philippines	276	4,600
Bolivia	8	2,400
Zimbabwe	1	1,900
Cameroon	34	1,800
Senegal	55	1,600
Kenya	55	1,000
Zambia	14	800
Ethiopia	60	700

Source: CIA World Factbook, Antonio, et al.'s calculations

*PPP = Purchasing Power Parity

*PPSK = Persons per square kilometer

Population growth, they furthered, has also little or no direct effect on poverty. From 1961 to 2000, the Philippines increased its population from 27 million to 76 million but poverty incidence decreased in the same period.

Table 6. Philippine Poverty Incidence, 1961-2000

Year	Poverty Incidence (in %) (Proportion of poor families)		
	Total	Urban	Rural
1961	59.0	51.0	64.0
1965	52.0	43.0	55.0
1971	52.0	41.0	57.0
1985	44.2	33.6	50.7
1988	40.2	30.1	46.3
1991	39.9	31.1	48.6
1994	35.5	24.0	47.0
1997	31.8	17.9	44.4
2000	34.2	20.4	47.4

Source: Family Income and Expenditure Survey (FIES), various years

They underscored the role of institutions, stating that too many people doesn't really cause poverty, but bad governance and bad policies do.

This, however, is challenged by the latest study of Balisacan and Mapa (2004) covering 80 developed and developing countries. Using a regression model to determine the impact of different variables to growth, the authors were able

to show that "population growth rates have opposing effects on economic growth". It was estimated that all other things being equal, a one-percentage point reduction on the average population growth results in approximately 1.23 percentage point increase in the average economic growth rate of countries between 1976 and 2000.

The same study also made a simulation of the Philippines' development experience and Thailand's performance during the period 1975-2000. Thailand and the Philippines were once considered as "twin countries" because of their similar characteristics decades ago but are now poles apart in terms of per capita income. While the Philippines was only able to increase its initial per capita income by 2.6 times from 1975 to 2000, Thailand's income increased 8 times in the same period.

The difference between the two countries' population growth rates accounts for about 0.768 percentage points of foregone growth for the Philippines. This means that had the Philippines pursued Thailand's population growth rate, its average per capita income would have been 0.768 percentage point higher every year and would have risen from US\$3,971 to US\$4,839 in 2000. Differences in governance or in the quality of public institutions, on the other hand, accounted for only 0.574 percentage points of foregone growth for the Philippines.

The authors also included in their econometric model other dependent variables such as the initial conditions or the initial level of income in 1975, openness to trade, the proportion of the country's land area in the geographical tropics, the illiteracy rate of the population as well as the average savings rate from 1976 to 2000. Together with population growth and institutions, the model was able to account for a total growth differential of 2.83 percentage points between the Philippines and Thailand. The actual difference in the average GDP per capita between the two countries was 4.74 percentage points.

Table 7. Why the Philippines Grew So Slow

Variables	Phils	Thai	Foregone Growth
Initial Conditions			1.072%
GDP per person, 1975	\$1502	\$805	
Ratio of workers to total population	53.76%	52.12%	
Population Growth			0.768%
Total Population	2.36%	1.58%	
Workers	2.85%	2.53%	
Openness ¹	64.36%	67.96%	0.028%
Savings Rate ²	22.03%	28.02%	0.206%
Life Expectancy ³	64.39 yrs.	66.11 yrs.	0.072%
Illiteracy ⁴	7.93%	5.58%	0.116%
Institution ⁵	2.97%	6.26%	0.574%
Tropic ⁶	1.00%	1.00%	0.000%
Total Growth Differential			2.836%
Average ¹ GDP growth per capita (1975-2000)	4.1%	8.84%	4.740%

Source: Balisacan (2004)

- 1 measure of how open to trade the country is; measured as the percentage of total trade to GDP
- 2 the natural logarithm of the average saving rate from 1976 to 2000
- 3 the natural logarithm of the life expectancy at birth from 1976 to 2000
- 4 the illiteracy rate of the population aged 15 years and above
- 5 quality of institutions based on the overall index developed by Knack and Keefer; index is scaled from 0 (worst) to 10 (best)
- 6 the proportion of the country's land area in the geographical tropics

Another important finding of the study is population's impact on poverty. Balisacan and Mapa estimate that if the Philippines achieved its potential growth, the country would have had six million less poor people in the year 2000. In 2000, there were 26.5 million poor people in the country. Moreover, household level data shows that poverty incidence is more severe in larger sized families.

Table 8. Poverty Incidence by Family Size

Family Size	1985	1988	1991	1994	1997	2000
National	44.2	40.2	39.9	35.5	31.8	33.7
1	19	12.8	12.7	14.9	9.8	9.8
2	20	18.4	21.8	19	14.3	15.7
3	26.6	23.2	22.9	20.7	17.8	18.6
4	36.4	31.6	30.1	25.3	23.7	23.8
5	42.9	38.9	38.3	31.8	30.4	31.1
6	48.8	45.9	46.3	40.8	38.2	40.2
7	55.3	54	52.3	47.1	45.3	48.7
8	59.8	57.2	59.2	55.3	50	54.9
9 or more	59.9	59	60	56.6	52.6	57.3

Source: FIES, 1985-2000; Reyes(2002)

Antonio, et al., however, opine that it would be a poor judgement call to use this observation as a basis for limiting the family size

of the poor because the more likely reason why they are poor is the limited schooling of the household heads. Providing education might therefore be a more appropriate intervention and not the limiting of the family size.

The Debate on the Method

While the debate on whether population is a problem remains unresolved, the Philippine government through the Department of Health and the National Economic Development Authority, and even the Catholic Church appear to recognize the need to manage the country's population.

In 1973, the Catholic hierarchy released the "Position Paper on the Population Question" summarizing the official stand of the Church regarding birth regulation and the population issue. The paper asserts that "the Church realizes that a rapid growth in population may present an obstacle to a country's development" and that "the Church is not against any birth regulation as such, nor is it against aiming a particular growth rate for the country. The demographic factor can be taken into consideration when a couple is deciding the number of their children" (Herrin, 2002).

The bone of contention now lies on the method to be used in managing the population. The Catholic Church, lobbies against the use of artificial contraceptives and allows only "natural family planning" techniques. The center of their argument is the theological issue on whether it is right to separate procreation from the sex act, and by artificial means, curtail the transmission of life.

The current government strategy is also largely in accord with that of the Catholic Church. The national government promotes natural family planning, birth spacing and responsible parenthood and leaves the provision

of other reproductive health methods and services to the local government units.

However, development planners, women's groups and other sectors of Philippine society have found the Church and the government's position as too conservative. Natural family planning methods, they argue, are often unreliable and impractical as they offer no protection from sexually transmitted infections, requires daily or regular monitoring and recording and are inappropriate for women with irregular or unpredictable menstrual cycles. (Vogel song, 2004) They are also unable to fully address the rights of women to have control and responsibly decide on matters related to their sexual and reproductive health. This is indicated by the large disparity between the total fertility rate of 3.5, and the wanted or the desired fertility rate of 2.5. Unwanted fertility also increases as the socioeconomic status of the women declines.

Table 9. Philippine Fertility Indicators, 2003

Fertility Indicator, number of births	Wealth Index Quintile						Poor-Rich Ratio
	Lowest	2 nd	3 rd	4 th	Highest	Total	
Total Fertility Rate	5.9	4.6	3.5	2.8	2	3.5	2.9
Wanted Fertility Rate	3.8	3.1	2.6	2.2	1.7	2.5	2.2
Difference	2.1	1.5	0.9	0.6	0.3	1.0	7.0

Source: Final Report 2003 National Demographic and Health Survey, NSO

Demographic surveys also show that at least two million married women of reproductive age favor family planning but cannot do so because of lack of information, lack of affordable access to high quality family planning services, and concerns about the potential health effects of using contraception (Remulla, 2004)

The lack of a clear national policy on population and reproductive health prompted

these groups to push for the enactment of a law on Reproductive Health which will ensure the provision of all family planning methods including artificial contraceptives such as condoms, IUD, birth control pills, as well as information and educational services for both men and women. The law is also seen to remedy the inconsistencies and limitations of the current system where access and support to the family planning program purportedly depends on the religious beliefs of the existing government leadership.

A clear and more aggressive population policy has proven to be crucial in the population reduction experience of other Asian countries. Countries that implemented family planning programs and ensured the provision of access to reproductive health services experienced rapid decline in fertility.

After embarking on a widespread family planning effort in 1971, Thailand was able to lower its birth rate from about 5 children to the current 1.9. Its policy stance, although, voluntary, was successful because of the creativity of their family planning approaches, government and private cooperation in family planning, as well as their culture. The Thais are predominantly Buddhists whose scriptures say "that many children make you poor."

The Japanese government, meanwhile, only indirectly contributed to their fertility reduction as their family planning program was only for the purpose of reducing induced abortion. The fertility decline was more of a function of the rising cost of childcare and educational needs and women's emancipation which resulted to delays in marriage and the rise in the single proportion of the population. Nonetheless, the Japanese government provided direct support and made access to contraceptive methods readily available.

Country Comparison: How Their Fertility Rates Fell

Thailand

- Thai government embarked on a widespread family planning effort in 1971
- Supported massive and widespread use of new contraceptive technologies
- Implemented a high profile public education campaign such as condom blowing contests during festivals, handing out of condoms and providing birth control carts in public places such as movie theatres, traffic jams, bus stations and in other public events. Policemen were also made to distribute condoms and the like.
- Government worked with the Population and Community Development Association, a private non-profit organization and largest NGO in Thailand that served as a frontrunner in family planning efforts.
- Set up monetary loan funds wherein priority of loan acceptance is given to family planning users. Dividends and shares of members of the loan fund are also given higher values corresponding to the effectiveness of family planning method used.

Singapore

- Singaporean government started to recognize the importance of family planning and provided assistance and funds to the Singapore Family Planning Association (SFPA), a private-led family planning organization.
- Government established the Family Planning and Population Board in 1966 which handled the provision of clinical services and education on family planning.
- Legalized abortion and sterilization in 1970
- Instituted a system of disincentives and incentives for their family planning campaign starting 1969 to 1972
- Disincentives included no paid maternity leave after the second child of civil servants and progressively higher hospital fees for each additional birth.
- Incentives included priority in housing assignments for small families, seven days of sick leave and priority in the allocation of housing and education for those who undergo voluntary sterilization, and priority in acceptance to the best schools for children whose parents were sterilized before age 40.

China

- Chinese government embarked on their first birth planning campaign in the 1950s
- Introduced widespread educational campaign on the benefits of smaller families
- Increasing access to contraceptives and abortions
- Established national and provincial birth targets
- Instituted one-child policy in 1979
- Introduced a system of rewards that gave greater opportunity to access social services and punishments that remove those services

Japan

- Introduced family planning only for the purpose of reducing induced abortion
- Provided direct support and made access to contraceptive methods readily available
- The rising cost of childcare and educational needs as well as the emancipation of women greatly contributed to the reduction in the fertility rate

The Singaporean government, on the other hand, instituted a system of disincentives and incentives for its family planning campaign. Disincentives included unpaid maternity leave after the second child of civil servants and progressively higher hospital fees for each additional birth. Incentives included priority in housing assignments for small families, seven days of sick leave, prioritization in the allocation of housing and education for those who undergo voluntary sterilization and prioritization in acceptance to the best schools for children whose parents were sterilized before the age 40.

Conclusion

Population and its impact to growth is unquestionably a contentious issue. Contentious as it is, it does not need to be divisive, and policymakers need not turn away from it. Arguments from both optimists and pessimist all hold water, and the challenge really is how to integrate all of them.

For the legislature, the immediate task ahead is to consider and seriously study pending population and reproductive health bills with

the end view of having a definite and clear population policy. Experiences of other countries show how crucial family planning programs were in the reduction of their population and consequently, in their attainment of an accelerated economic growth.

It must, however, be emphasized that solely increasing or decreasing population growth does not, by itself, spell the growth and development of a country. As the Catholic Church puts it, there is also a need for “greater initiative and spirit of enterprise, a more equal

distribution of wealth and power, and a wiser use of our resources as solutions to our underdevelopment.”

Hence, direct interventions such as family planning programs should also be complemented by socioeconomic policies that will promote a rise in educational levels and provide economic opportunities to both men and women. The power of this sheer process of modernization and development, will, in the long run, also lead to a rapid decline in fertility and ultimately, raise the living standards of the people.

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