Population Stabilization: Philippine Case

Nimfa B. Ogena
University of the Philippines Population Institute (UPPI)

Consultants: Dr. Mercedes B. Concepcion and Dr. Juan Flavier

Background

The World Leaders' Statement on Population Stabilization signed in 1994 by heads of seventy-five (75) countries including the Philippines, acknowledged that the degradation of the world's environment, income inequality, and the potential for conflict exists because of rapid population growth, among other factors. With early population stabilization of interest to all nations, each agreed to adopt the necessary policies and programs consistent with their culture and aspirations supported by voluntary measures that respect individual human rights and beliefs.

More than sixteen years later, the issue remains contentious. Many of the world's countries continue to confront natural and human-made challenges that impinge on the wellbeing of their populations. Concomitantly, dramatic age structural changes have occurred. While most developed countries have "graying" populations, many developing countries continue to have very young populations. An increasing number of countries are facing a double-edged challenge, i.e., having a young population and a fast growing population of older people (UN 2009). Given these conditions, is early population stabilization still the best strategy to take? This paper aims to review the progress made towards achieving the articulated goal of population stabilization and to discuss its future prospects in the Philippines.

A stable population refers to a population closed to migration with an unchanging rate of growth and an unchanging age composition as a result of age-specific birth and death rates that have remained constant over a sufficient period of time. Under these conditions, the population growth rate may be positive, negative or even zero. The latter is a special case often referred to as stationary population with fertility reduced to replacement level, i.e., a net reproduction rate equal to one (NRR= 1), until a stable equilibrium is attained. Attaining a stable population condition is desirable to many government policy makers and program planners due to the predictability of future population growth. Therefore, the estimation of population size useful in measuring the demographic overhead required for the provision of social services, e.g., education and health services, is made possible.

Population Trends and Dynamics

The size of the Philippine population surged more than tenfold during the past 100 years (see Table 1). From less than 8 million in 1903, the level of population more than tripled by 1960 (27.1 million). From 1960 onwards, the Philippine population again more than tripled by 2007 (88.6 million) over a span of 47 years. The World Bank (2008) placed the Philippines as the 12th most populous country despite its small land area. In the Southeast Asian region, the Philippines is the second most populous country next to Indonesia (UNESCAP 2009).

Table 1. Population of the Philippines, 1903-2007

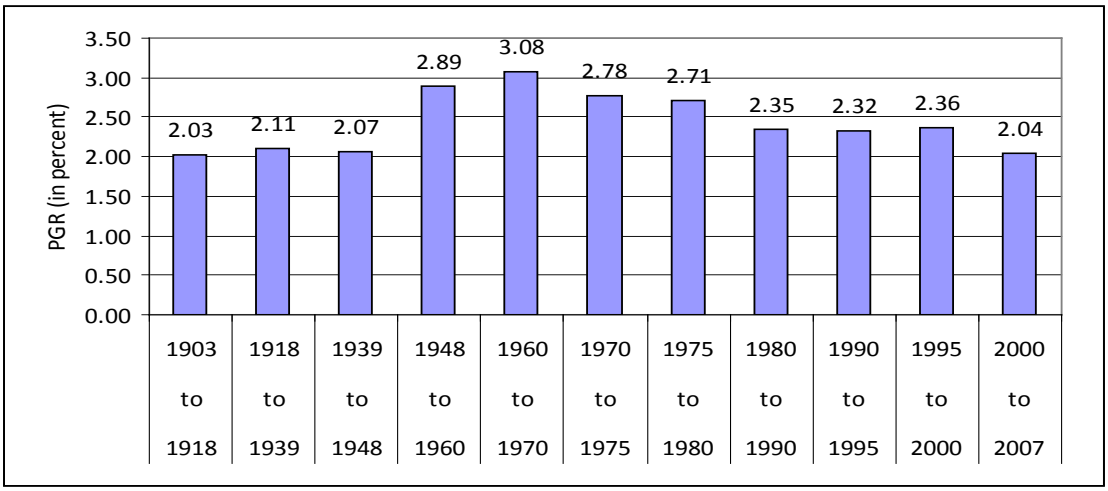
Year	1903	1918	1939	1948	1960	1970	1975	1980	1990	1995	2000	2007
Population (in million)	7.6	10.3	16.0	19.2	27.1	36.7	42.1	48.1	60.7	68.6	76.5	88.6

Source: Census data from NSO as reported in the NSCB website (http://nscb.gov.ph/secstat/d_popn.asp) on 15 March 2010.

High population growth

Moreover, its annual (geometric) population growth rate (PGR) increased during the first half of the 20th century and declined during the second half of the century. The PGR peaked at 3 percent per annum during the period 1960-1970 (see Figure 1). Notably, the PGRs in 1903 and in 2007 were nearly the same.

Figure 1. Annual Population Growh Rate in the Philippines: 1903-2007



Source: Census data from NSO as reported in the NSCB website (http://nscb.gov.ph/secstat/d_popn.asp) on 15 March 2010.

The PGR decline from 1970 onwards was slower in pace when compared with its neighboring Asian countries like Singapore, Thailand, Malaysia and Indonesia, among others (add citation here). It was relatively firm between 1980 and 2000 then declined to 2.04 percent per annum during the period 2000 and 2007. At this rate, the Philippine population is expected to double in 35 years due to population momentum. Population momentum is expected to persist for many more years beyond the attainment of replacement level fertility in the Philippines (Herrin and Costello 1998).

Age structural shifts. As a result of the sustained high PGR, the Philippines must deal with a large young population and a fast growing older population. The age-structure of the Philippine population remains quite young with a median age of 21 years based on the 2000 CPH. The youth (age 0-14) comprised 37 percent of the population in 2000 while senior citizens (age 60 years and over) accounted for 6 percent. Nearly six out of ten persons (57 %) were in the productive ages (15-59 years) in 2000.

Moreover, the "older population is growing faster than the total population of the Philippines and doubling time is shorter for the older population than for the total population shattering the myth that

population ageing in the Philippines is 'low and slow' "(Ogena 2007). The senior citizens in the Philippines increased from 3.19 million in1990 to 4.59 million in 2000 for a decadal average annual (exponential) growth rate of 3.64 percent, surpassing the 2.26 percent growth rate recorded during the previous decade and the country's PGR (see Figure 2).

Hence, the changing population age structure translates to higher dependency ratios than those of Thailand and Vietnam, which started at nearly similar population levels as the Philippines in the 1960s. In the Philippines, every 100 working age population in the country in 2000 supported 70 dependents, 64 of whom were youth and six, older persons. In contrast, the working age populations in Thailand and Vietnam supported only 46 and 64 dependents, respectively (UN 2009).

Sluggish Fertility Decline

The slow decline in PGR is partly due to the sluggish decline in fertility during the past four decades. Two commonly used measures of fertility are the total fertility rate (TFR) and the age-specific fertility rates (ASFRs). The TFR represents the average number of births a woman would have at the end of her reproductive years if she experienced the currently prevailing age-specific fertility rates (ASFRs) of women age 15-49 years. On the other hand, ASFRs depict the age pattern of childbearing. ASFRs are calculated as the number of live births among women in a particular age group divided by the number of woman-years in that age group during the specified period.

The TFR in the Philippines dropped from 6.0 to 3.3 births per woman in 1970 and 2006, respectively (see Table 2). The TFR decline decelerated from about one birth per decade (1970-1991) to about half a birth per decade (1991-2006). The current fertility of the Philippines is among the highest in the Southeast Asian region. At the extreme, Thailand and Singapore have TFRs that are already below 2 children per woman (UNESCAP 2009).

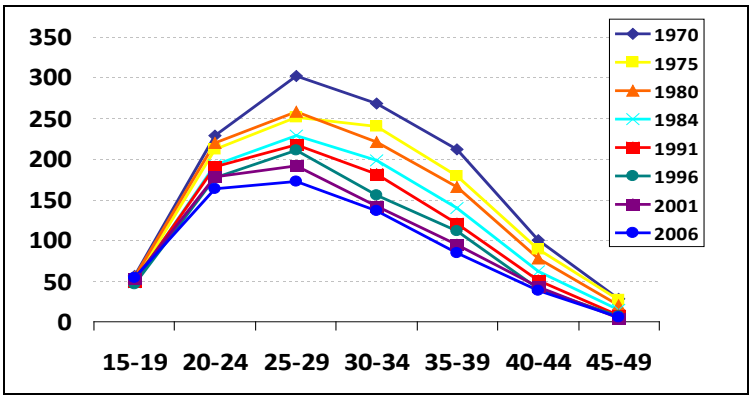
Table 2. Total Fertility Rate: Philippines, 1970-2006

Year	1970	1975	1980	1984	1991	1996	2001	2006
TFR	6.0	5.2	5.1	4.4	4.1	3.7	3.5	3.3

Source: NSO and ICF Macro (2009). *2008 National Demographic and Health Survey*

A substantive decline in fertility is documented in all age groups except among teenagers (see Figure 3). The ASFRs of women age 30 and over declined by at least 50 percent between 1970 and 2006 while the ASFRs of women age 20-30 decreased by about one-third during the same period. Hence, older women exhibited more rapid decline in fertility than younger women.

Figure 3. Age-Specific Fertility Rate: Philippines, 1970-2006



Source: NSO and ICF Macro (2009). *2008 National Demographic and Health Survey*

Results from the 2008 National Demographic and Heath Survey (NDHS) revealed that fertility varied by type of residence, education of women and socio-economic status. Women in rural and urban areas reported TFRs of 3.8 and 2.8 children, respectively, with the former producing one more child, on the average, than the latter. The TFR also differed by education of the women. Women with elementary education bore twice more children (4.5 children), on average, than women with college or higher education (2.3 children per woman). The same pattern was evident by wealth status. Women in households that belonged to the lower wealth quintiles had more children than women in households that belonged to the higher wealth quintiles.

Increasing Use of Contraception. The use of family planning methods increased remarkably over the past four decades (NSO and ICF Macro 2009). The contraceptive prevalence rate (CPR) among currently married women steadily increased from 17 percent in 1973, 40 percent in 1993 then gradually improved to 51 percent in 2008. Despite women's expressed desire to space or limit childbearing, the use of modern methods rose by only 9 percentage points, i.e., from 25 to 34 percent, in the last 15 years. About two of every three current users of family planning users use modern methods. The pill (16 percent) and female sterilization (9 percent) were the most commonly used modern methods. About 17 percent of current FP users used traditional methods, including periodic abstinence (rhythm) and withdrawal.

The main source of modern family planning methods shifted from the public to the private sector, based on data from the 2003 and 2008 NDHS rounds. In 2008, 51 percent among users of modern family planning methods obtained their supply from private medical sources, 46 percent from public (government) facilities and 2 percent from other sources (e.g., shops, friends). The private sector is currently the major source of supply for pills and male condoms, while the public sector is the main source for injectables, IUDs, and female sterilization. In contrast, the main sources of modern FP methods in 2003 were the public sector (67.2 percent), followed by the private sector sources (29.3 percent) then other sources (3 percent).

Unwanted pregnancies remain high. Interestingly, the prevalence of unplanned pregnancies remains high despite the recorded increase in the level of contraceptive use during the past 30 years. The 2008 NDHS data revealed that one in three births is either unwanted (16 percent) or mistimed and wanted later (20 percent). The corresponding figures are 20 percent and 24 percent, respectively, for the 2003 NDHS.

Increasing age at marriage and delaying risk of childbearing. The age at initial exposure to the risk of childbearing remains closely linked with the age at marriage in the Philippines. Most recent data from the 2008 NDHS shows that among women age 25-49, the median age at first sexual intercourse is 21.5 years, slightly lower than the median age at first marriage of 22.2 years, suggesting premarital exposure to the risk of childbearing. Furthermore, the 2008 NDHS data revealed that recent sexual exposure (i.e., sexual intercourse during the past 4 weeks) is associated more with women in households belonging to the poorest wealth quintile, with those living in rural areas and who have completed at most elementary education than their respective counterparts.

Alternatively, using the singulate mean age at marriage (SMAM) as an indicator of average duration of stay in "single" or unmarried status, it appears that marriage is occurring later than in the past, with women's SMAM rising slightly more than that for males (see Table 3). In addition, the gender differential appears to narrow over time. Nevertheless, increasing age at marriage does not translate to postponement of either initiation to sexual intercourse or to deferment of fertility. Table 3 further shows that the gender difference in marital timing is more pronounced in rural than in urban areas (Ogena et al. 2008). The rural differential markedly declined over the ten year period 1990-2000. Filipino women in rural areas are marrying earlier than their urban counterparts.

Table 3. Singulate Mean Age at Marriage (SMAM): Philippines, 1960-2000

SMAM	1960	1970	1980	1990	2000
Males	24.9	25.4	24.8	26.3	26.4
urban				26.7	26.4
rural				26.8	26.4
Females	22.2	22.8	22.4	23.8	23.9
urban				24.5	24.3
rural				22.9	23.5

Sources: Xenos and Gultiano (1992) for 1960-1980 SMAM estimates; and Ogena et al. (2008) for 1990 and 2000 SMAM estimates.

Low level of knowledge of fertile period. Unfortunately, recent NDHS data show that nearly two of every five women incorrectly identified the fertile period to be right after a woman's menstrual period. In contrast, only about one in three women (35 percent) correctly placed the fertile period in a woman's menstrual cycle as falling halfway between two menstrual periods. This is somewhat higher for women using ovulatory cycle-related methods (49 percent) than for women not using these methods (35 percent).

Increasing unmet need for family planning. The total demand for family planning services can be categorized into two. Women who currently use family planning methods are considered in the first category of satisfied demand for family planning. The second category is demand for family planning that is not satisfied or unmet. The second category often referred to as the unmet need for family planning is measured as the percentage of currently married women who either do not want any more children or want to wait before having their next birth, but who are not using any method of family planning.

Based on data from the last two NDHS rounds, the total demand for family planning in the Philippines increased from 68 percent to 73 percent (see Table 4). The unmet need for family planning increased from 17 to 22 percent over the five-year period. The recorded increases are markedly higher for limiting rather than for spacing births.

Table 4. Need for family planning: 2003 and 2008 NDHS

	2003 NDHS	2008 NDHS
Total demand for family planning		
For spacing	23.2	23.6
For limiting	45.3	49.4
Total	68.5	73.1
Met need for family planning (currently using)		
For spacing	13.7	14.7
For limiting	35.2	36.0
Total	48.9	50.7
Unmet need for family planning		
For spacing	7.9	9
For limiting	9.4	13.4
Total	17.3	22.3

Source: 2003 and 2008 NDHS reports

Declining mortality levels

Recent NDHS data reveal that child-related mortality indicators are declining. About one in every 30 children in the Philippines dies before his or her fifth birthday. The infant mortality rate for the five years before the survey (roughly 2004-2008) was 25 deaths per 1,000 live births and the under-five mortality rate was 34 deaths per 1,000 live births. This is lower than the 2003 respective rates of 29 and 40. The neonatal mortality rate, representing deaths in the first month of life, was 16 deaths per 1,000 live births. Under-five mortality decreases as household wealth increases; children from the poorest families are three times more likely to die before the age of five compared to those from the wealthiest families.

There is a strong association between under-five mortality and mother's education. It ranges from 47 deaths per 1,000 live births among children of women with elementary education to 18 deaths per 1,000 live births among children of women who attended college. As in the 2003 NDHS, the highest level of under-five mortality was observed in ARMM (94 deaths per 1,000 live births), while the lowest was observed in the NCR (24 deaths per 1,000 live births).

The reduction in mortality rates over the past four decades imply improvements in the overall health condition of the population, which is often articulated by the life expectancy measure. Life expectancy at birth is the average number of years that a new born infant is expected to live if health and living conditions at the time of one's birth remained the same throughout one's life. Using 2000 data on registered deaths by gender and age groups published annually by the National Statistics Office and the data from the 2000 Census of Population and Housing, Cabigon (n.d.) estimated life expectancies by gender: 70.33 years for females and 65.052 years for males. Females are expected to live about 5 years longer than males.

Sustained high labor mobility

Filipinos traditionally have been moving to areas of better economic opportunity often found in urban areas of the country. Hence, migrants are crucial to urban development. In 1990, the urban population

was 48 percent and with urbanization expected to continue, it may reach 65 percent by 2020 (POPCOM 2008)

Since the oil crisis in the 1970s, the large outflow of Filipinos for overseas jobs started; and it has not subsided. Between 2000 and 2005, the Philippine Overseas Employment Authority (POEA) deployment of Filipino workers grew at 3.2 percent per annum, i.e., from 842 thousand in 2000 to 989 thousand in 2005. The rate further increased to 7.4 percent per annum between 2005 and 2008.

In contrast, there was a slackening of the high rate of growth of Filipino emigrants or those permanently living overseas that were documented by the Commission on Filipinos Overseas (CFO). Filipino emigrants increased from 2.6 million in 2000 to 3.4 million in 2005 and 3.9 million in 2008 with the rate of change declining from 5.7 percent per annum (2000-2005) to 4.7 per annum (2005-2008).

Even so, the stock of overseas Filipinos spread in nearly all the world's countries is increasing. The stock measure includes documented (permanent and temporary) and undocumented Filipinos abroad. From 7.4 million in 2000, the number of overseas Filipinos estimated by the CFO as of December 2008 increased to 8.2 million, which represents nearly ten percent of the Philippine population.

Policy and Program Responses

Population Policy

Philippine Constitution. The 1987 Constitution lays the foundation for the Philippine Population Policy. Couples are guaranteed the right to decide freely their number of children based on their religious beliefs and demands of responsible parenthood. However, Herrin (2002), in his review of population policy in the Philippines from 1969-2002 observed that

> *".. there has been constant shifts in policy with respect to fertility/population growth from a strong commitment to reduce fertility and population growth under the Marcos administration, to a lack of commitment if not outright rejection of the policy under the Aquino administration, to a resurgence of commitment in fertility/population growth reduction under the Ramos and Estrada administrations, and to an ambiguous commitment under the Arroyo administration." (Herrin 2002: 29)*

Herrin (2002) indicated that the development plan and the first POPCOM plan under the Ramos administration had strong statements regarding problems of population growth and the need for family planning with a fertility reduction objective. The objective of reducing fertility/population growth, however, became rather unclear in the subsequent population plan (PPMP 1998-2003) as family planning formed part of the reproductive health campaign. The POPCOM PPMP plan under the Estrada administration, however, made strong policy statements on population growth and adopted a family planning program with explicit fertility reduction objectives. Herrin also noted that the development plan under the current Arroyo administration has strong statements regarding the adverse consequences of continued rapid population growth and the need to reduce fertility, but the policy objective of fertility and population growth reduction is not mentioned. The present family planning program which focuses on Natural Family Planning, aims to only help couples achieve their desired fertility and to promote maternal and child health as can be gleaned from Administrative Order No. 50-A issued by the DOH (Herrin 2003). The principles of respect for life, responsible parenthood, informed

choice and birth spacing guide the current population program focused on Responsible Parenthood and Reproductive Health, Adolescent Health and Youth Development, and Population and Development Integration.

Local Government Measures. Given these shifts and sometimes ambiguity in the national population policy and family planning program, some local governments have responded positively to population concerns in their respective administrative areas with the enactment of ordinances on responsible parenthood and reproductive health. The ordinances provide for the implementation of reproductive health programs and for the establishment of mechanisms for implementation and coordination as well as facilities and budget from the local government coffers.

The League of Municipalities (LMP) has served as a mechanism for the participation of local government units in major information and education campaigns such as the "Kung Maliit ang Pamilya, Kayang-kaya" [Small family size: Manageable) or "Less Means Progress Caravan". With assistance from donor agencies such as USAID and UNFPA, the LMP facilitates the establishment of contraceptive self-reliance (CSR) initiatives and other schemes to provide universal access to reproductive health services at the local level.

House Bill 5043 and Senate Bill 3122: Reproductive Health and Population Development Act of 2008. To improve the environment for population and RH program implementation, several editions of a comprehensive population and reproductive health policy had been proposed in Congress. The latest version is the Population Development and Reproductive Health Bill (House Bill 5043 and Senate Bill No. 3122) also known as the RH Bill is "anchored on the rationale that sustainable human development is better assured with manageable population of healthy, educated and productive citizens. The state likewise guarantees universal access to medically, safe, legal, affordable and quality reproductive health care services, methods, devices, supplies and relevant information thereon even as it prioritizes the needs of women and children, among other underprivileged sectors." This version reached the plenary deliberation in the House of Representatives with steadfast advocacy of NGOs, like the Reproductive Health Advocacy network (RHAN), Philippine Legislative Committee on Population and Development (PLCPD), Forum for Family Planning and Development (Forum), Philippine NGO Council on Population Health and Welfare (PNGOC), Democratic Socialist Women of the Philippines (DSWP) and LIKHAAN, the grassroots and champions from among legislators.

Integration of Population Concerns in Development Strategies

The Medium-Term Philippine Development Plan (MTPDP) for 2004-2010 recognizes the interrelationships between population, economic growth and sustainable development. The 1.9 percent population growth rate in 2010 serves as guide for population-related and other programs. Planning tools and guidelines have been improved to ensure integration of population and development interrelationships in local development plans such as the Comprehensive Land Use Development Plan (CLUP), Comprehensive Development Plan (CDP), Local Development Investment Program, local poverty reduction action plans and strategies, and local sustainable development plans, among others (POPCOM 2009). In addition, population and development variables are integrated in the Statistical Indicators on Philippine Development (StatDev) maintained by NSCB. StatDev is a statistical indicator system for monitoring progress towards MTPDP articulated goals.

Integration of Population Dimension in Poverty reduction strategies

The 2010 target for poverty incidence of 17 percent will not be easy to attain given the recent increase in poverty incidence in recent years. From 27.5 percent in 2000, poverty incidence went down to 24.4 percent then it went up again to 26.9 percent in 2006.

An integrated and comprehensive anti-poverty strategy has been pursued in the country through the *Kapit Bisig Laban Sa Kahirapan* (Linking Arms Against Poverty) or KALAHI. This program focuses on asset reform, human development services, employment and livelihood, social protection and participatory governance. Both KALAHI and the Comprehensive and Integrated Delivery of Social Services (CIDSS) of the Department of Social Welfare and Development account for the population factor by considering the couple's right to decide on family size as a crucial element in reducing poverty. Family planning services are included as part of the minimum basic needs to be addressed by the programs.

Two other anti-poverty strategies were initiated in 2006 --the Accelerated Hunger Mitigation Program (AHMP) and the *Pantawid Pamilyang Pilipino Program (*Subsistence of Filipino Family Program) or 4Ps (formerly *Ahon Pamilyang Pilipino* [Uplifting the Filipino family]). Responsible Parenthood-Natural Family Planning (RP-NFP) is a major component of the AHMP. On the other hand, cash grants are released to beneficiaries if they satisfy the following conditions: persistent human development bottlenecks including high infant, child and maternal mortality rates; malnutrition; low completion rates in primary education and low progression to secondary education; and high prevalence of child labor (POPCOM 2009).

Integration of Population Health and Environment Concerns

The Population Health and Environment (PHE) Integration approach rests on the premise that integration provides greater cost-effectiveness and program impact that separate/disconnected implementation. The first generation PHE projects include the Integrated Population and Coastal Resources Management (IPOPCORM) project of the PATH Foundation-Philippines in coastal areas; the PHE project of Conservation International-Philippines in forest and upland areas; and the People and Environment Coexistence Development (PESCODEV) project of Save the Children-Philippines, which are internationally acclaimed as gold standard models for PHE integration, featured integrated implementation of reproductive health, family planning, alternative livelihood, and environmental planning and monitoring.

Human Resource Development

Health. In accord with the 2000 health Sector Reform Agenda (HSRA), the FOURmula One (F1) for Health was implemented by the Department of Health in 2005. F1 is designed to improve the quality, efficiency, effectiveness and equity of the country's health system especially of underprivileged Filipinos. To make quality medicines more affordable and available, the *Botica sa Barangays* (Pharmacies in Barangays) or BsBs Program cater to marginalized, underserved critical and hard-to-reach areas. The DOH provides LGUs seed capital for the establishment of BsBs, which has reached more than 7.4 thousands, representing 67 percent of the targeted 11 thousand barangays. Related to this is the the recently enacted Universally Accessible Cheaper and Quality Medicine Act (Republic Act 9502) or the Cheaper Medicine Law, which will reduce prices of medicines through importation of patented medicines where they are cheaper. In addition, the Philippine Health Insurance Corporation (PhilHealth) has signed up an increasing number of indigents through LGUs to ensure sustainable and affordable health financing.

To alleviate hunger and malnutrition in the country, the Philippine Plan of Action for Nutrition (PPAN) for 2005-2010 was designed. Under this plan and through the coordination of local and national nutrition committees along with other national agencies, nutrition plans are formulated and implemented at the local level. Examples of such programs are *Garantisadong Pambata* (Guaranteed for Children), the Salt Iodization National Act or *Asin* (Salt) Law of 1992 (RA 8172), Food Fortification, Nutrition, Education, National Supplemental Feeding Program and Food For School Program.

Education. Education is essential in attaining human potential and accessing opportunities for development. Despite the high population growth rate in the country, the provision of basic education for everyone remains the ultimate goal. The Department of Education designed the Basic Education Reform Agenda (BESRA) in response to the Schools First Initiative (SFI) based on the Governance Act of Basic Education (RA 9155), which springs from the Education for all (EFA) 2015 Plan. BESRA covers universal access to basic education of Filipino children, encourages community-based support for effective school-based management, and provision of universal adult functional literacy alternative learning schemes.

Human Resource Productivity

The recent MTPDP calls for the provision of decent and productive employment as well as continuous improvement of workers' capabilities to be more productive. The Department of Labor and Employment (DOLE) implements the following programs and services for local employment, among others: PESO (Public Employment Service Office); PhilJOBNET; *Trabaho* (Work)…*I-text mo*; GMA (Greater Modular Access); TULAY 2000 (*Tulong Alalay sa Taong May Kapansanan* or Aid to Assist People with Disabilities); Special Programs for Employment of Students (SPES); and TVET (Technical Vocational Education and Training). For overseas employment, some of the programs and services of the DOLE are the OFW Capability Enhancement Services; Overseas Workers Welfare Agency (OWWA) Social Protection for OFWs; Referrals to other recruitment agencies for displaced OFWs; and National Reintegration Program.

Urbanization and Balanced Spatial Distribution

To maximize the benefit of rising urbanization and mitigate social costs, a more balanced spatial distribution is desirable. This can be attained through the promotion of equitable and ecologically sustainable development of major sending and receiving areas.

Some of the policies and programs under this topic are as follows: (1) The RA 7279 or the Urban Development and Housing Act (UDHA) of 1992 mandates the establishment of effective mechanisms to monitor trends in the movement of people within the country and the provision of housing particularly for those in urban areas. (2) BEAT THE ODDS: Balanced Budget; Education for All; Automated Elections; Transportation and physical infrastructure; Terminate hostilities with MILF and NPA, Heal the wounds of EDSA I, II and III; Electricity and water for all; Opportunities for livelihood; Decongestion of Metro Manila and the development of Subic and Clark.

The Migration Information Center (MIC) is another mechanism for monitoring population movements within the country. The MICs have been established in Muntinlupa, Rizal; Tagbilaran,Leyte; Calamba, Laguna; and Malvar, Batangas since 2000. Through these MICs, volunteers collect data to monitor and profile registered migrants. Data are used to identify needs of residents and migrants and to formulate policy and corresponding programs.

Protection of Filipino Migrant Workers

The current national policy on international labor migration is anchored on the protection and promotion of the rights of migrants including their development. While the government provides an enabling environment and mechanisms in support of the migration decision of Filipinos, there is no explicit policy that promotes international labor migration.

Some of the relevant legislative responses are the Migrant Workers and Overseas Filipino also known as the Magna Carta of Filipino Migrant workers (RA 8042), Anti-trafficking in Persons Act of 2003 (RA 9208) and the Overseas Absentee Voting Act of 2003.

Environmental Sustainability

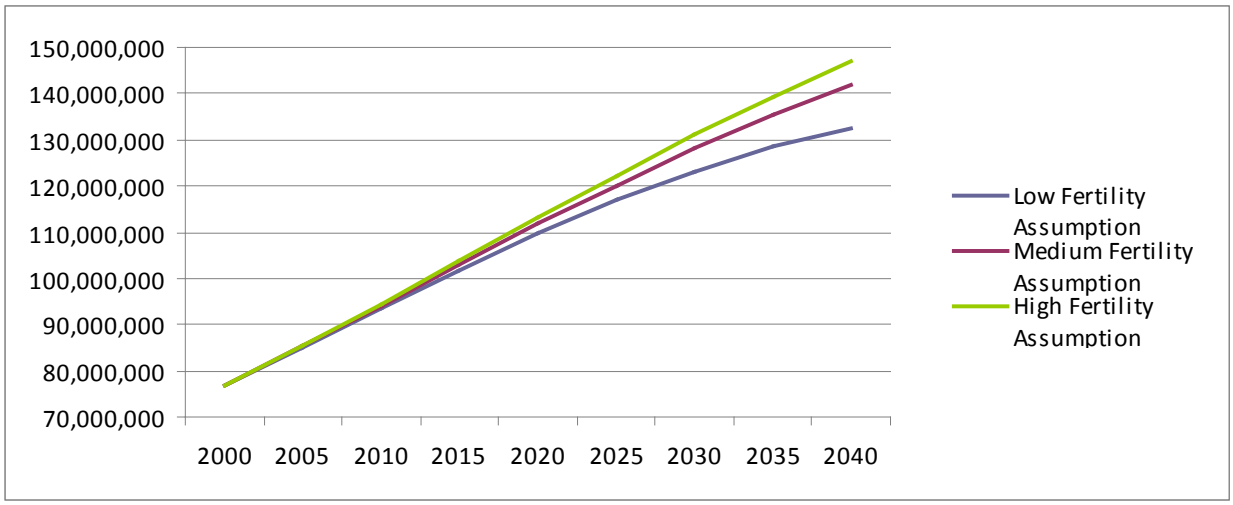
The national strategy for sustainable development is guided by the Philippine Agenda 21. This is anchored on collective choices and responsibility among different sectors of society and levels of governance. Some of the most important and recent policies enacted and programs implemented are (1) the Renewable Energy Act of 2008 (RA 9513); the National Protected Areas System (NIPAS) Act of 1992 (RA 7596) National Biodiversity Policy nationwide (EO 578); rehabilitation of the Pasig River and Manila Bay; enactment of the Clean Air Act of 1999; the "*Linis Hangin* (Clean Air) Program" in Metro Manila; and Solid Waste Management Act of 2000 (RA 9003).

Prospects for Population Stabilization

Given these population trends and responses of stakeholders, will the Philippines be able to attain population stabilization? And if so, when? The foregoing and subsequent analyses point towards the possibility of population stabilization but it could take two to three more generations after attaining replacement level fertility. This is apparent from Philippine population projections from various sources.

The 2000 census-based population projections for the country has been useful in providing planners, policy-makers and program managers with population data disaggregated by age and sex for the period 2000 to 2040. Using the cohort component method which involved careful analysis of the levels and trends of three demographic processes (fertility, mortality and migration), this official population projection accounted for three scenarios based on assumptions when the country will attain replacement level fertility. The LOW series represents a rapid pace of fertility decline, the MEDIUM series represents the moderate pace of fertility decline and the HIGH series represents the slow pace of fertility decline. The NRR=1.0 was targeted for the year 2030 in the low series, 2040 for the medium series and 2050 for the high series. Assuming the 2003 NDHS age pattern of fertility for the whole projection period, projected TFRs are assumed to follow an exponential growth curve (NSCB 2006b). As fertility declines, the projected life expectancy at birth is increasing and international migration is assumed to be zero or negligible. Figure 3 shows that in all three scenarios, the population size continues to grow with only a hint of possible stabilization of the population size beyond 2040 under the low fertility assumption.

Figure 3. Official Estimates of the Philippine Population, 2000-2040



Source: NSO 2006, Table 2.

The associated age structural changes in the past decades are also anticipated to continue. Although the young age-structure of the Philippine population is expected to remain, senior citizens will be increasing in numbers. The medium series of the population projection suggests that by around 2020, the Philippines will start to mature as the proportion of the population in ages 15-64 and 65 or older become larger (see Table 5). From 59 percent in 2000, the working-age population (age 15-64) will increase to 64 percent in 2020 and 67 percent in 2040. The older population (age 65+) will increase from 4 percent in 2000 to 6 and 10 percent in 2020 and 2040, respectively.

Table 5. Potential Support Ratio and Percentage Distribution of the Projected Philippine Population by broad age-groups, 2000-2040: Medium Series

	2000	2005	2010	2015	2020	2025	2030	2035	2040
% distribution									
0-14	37	35	33	32	30	29	27	25	24
15-64	59	61	63	63	64	65	66	66	67
65+	4	4	4	5	6	7	8	9	10
All ages	100	100	100	100	100	100	100	100	100
Potential Support Ratio	15	15	14	13	12	10	9	8	7

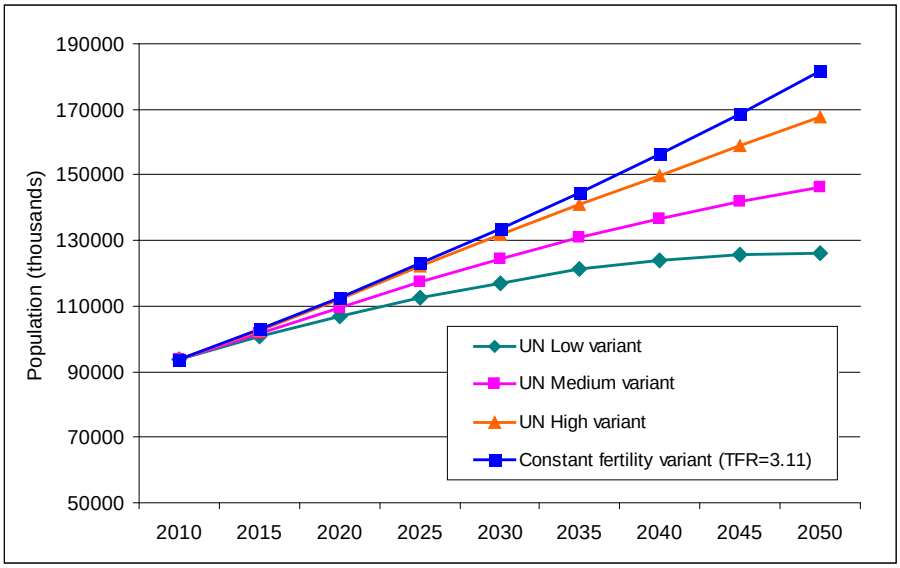
Source: NSO (2006). Population Projections (Medium Assumption, NRR=1 by 2040)

The impact of demographic ageing is discernible in the Potential Support Ratio (PSR), which is expected to decline. The PSR is the number of persons aged 15-64 years per one older person aged 65 years or over. It is an indicator of the dependency burden on potential workers, i.e., the inverse of the old-age dependency burden. In 2000, there were 15 working-age persons for each person aged 65 years or over. PSR is expected to decline to 12 by 2020 and to 7 by 2040. These imply a heavier burden in the future on working age persons who provide support to older persons. This underscores the importance of social security schemes that not only benefit retirees but all senior citizens as well. Despite the expected slow declines in the PGR and fertility rates and the increasing longevity in all three series of the official

population projections for the Philippines, the population size of the Philippines is expected to further increase.

The *2008 Revision* of the official United Nations population estimates and projections for the Philippines for the period 2010 to 2050 also demonstrate changing fertility and mortality rates during the next forty years. As in the official Philippine population projections discussed above, future population growth is contingent on the future trajectory of fertility. Of the four projection series, only the Low Variant indicates possible leveling of the population size starting 2040. All three other projection series assume slightly decreasing fertility rates over the projection period, hence population size is expected to continue to grow (see Figure 4)..

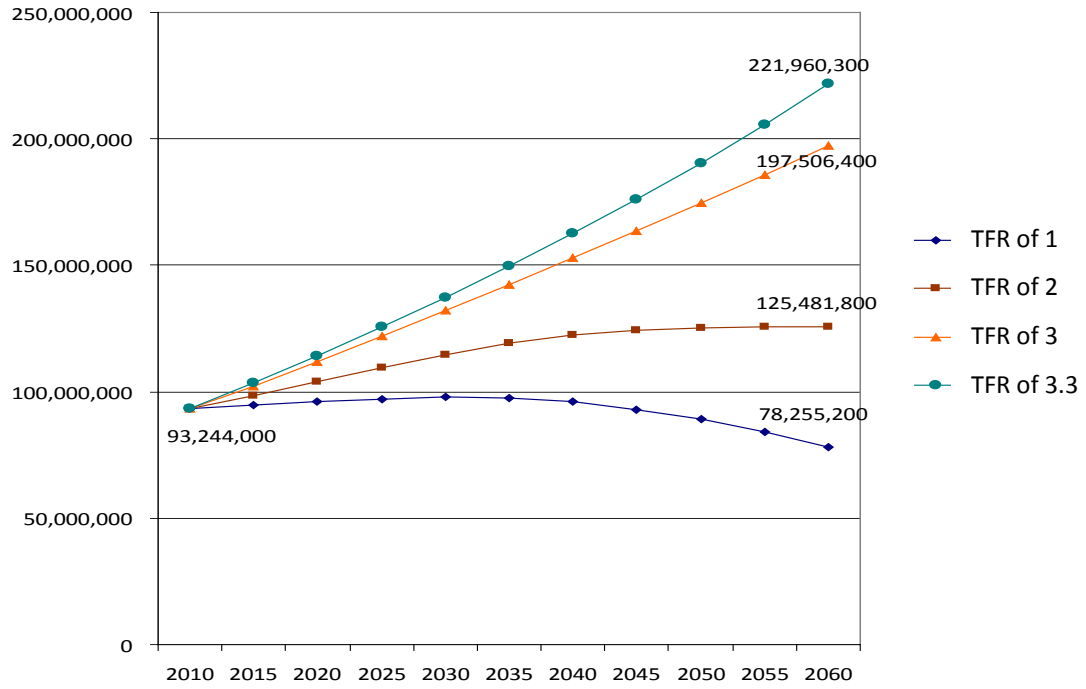
Figure 4. Philippines Population Projection, 2010-2060



Source: United Nations, Department of Economic and Social Affairs, Population Division. 2009. *World Population Prospects: The 2008 Revision***.** Population Database. **Accessed on 27 June 2010 from** http://esa.un.org/unpp/index.asp?panel=2

This is further corroborated by another projection of the Philippine population from 2010-2060 by Elizabeth Hughes of the Population Communications International. Using the FIVFIV program, which is available on line from HPN Technologies, she projected Philippine population using the latest initial population data from the United Nations World Population Prospects (2006 Edition), the TFR from the United Nations Fertility Patterns Chart for 2007, mortality for males and females from the PRB World Population Data Sheet for 2009, and the desired family size from the latest NDHS report on the Philippines. By fine-tuning TFR levels, she found that when the number of births simply replaces the current population (TFR=2), the population size of the Philippines could stabilize at about 125 million from 2040 onward. Higher values of TFR will likely lead to further escalation of the population size. Using the most recent estimate of TFR of 3.3 based on the 2008 NDHS data when held constant through the projection period, Hughes estimated the Philippine population to more than double within the next 50 years (2010-2060).

Figure 5. Philippines Population Projection, 2010-2060



Source: Elizabeth Hughes (n.d.)

Conclusion

All three population projections for the Philippines consistently show that the upward swing of the population size is dependent on the country's expected future fertility path. Prospects of fast fertility decline are reflected in the low series of all three population projections. Therefore, the earlier the country approaches replacement level fertility (NRR of 1 or TFR of 2), the more likely will the Philippines move towards stable fertility rates considering that much lower fertility levels are not socially desirable. But the medium scenarios of these projections are more likely to come about than the low scenarios. Hence, the longer replacement level fertility is attained in the Philippines, prospects for a stable population condition will be further delayed. If the main objective at the interim is for the population size to level off (i.e., population growth is constrained to zero) to provide an enabling environment for faster economic development that would aid in improving the status of living of the Philippine population, then a stationary population, which is a special case of stable population as discussed earlier, is the preferred target.

The foregoing data further suggest that achieving either a stable population or stationary population condition would be a long term goal due to population momentum. With many people already born, the momentum builds into the population because of the relatively high concentration of people in childbearing years. Hence, there is a tendency of the population to continue to grow even after the number of births simply replaces the current population. At the current length of a generation of 29 years in the Philippines, it may therefore take more than two generations for the country to attain a stable population condition since the initial NRR attainment could lead to a further decline in fertility until it bounces back and finally settles at replacement level on a longer term.

References

Cabigon, Josefina V. No date. 2000 *Life Table Estimates for the Philippines, Its Regions and Provinces By Sex.*

Commission on Filipinos Overseas (CFO). 2010. *Stock Estimate of Overseas Filipinos, 2000-2008*. Viewed on 19 March 2010 from http://cfo.gov.ph/index.php?option=com_content&view=article&id=282&Itemid=85.

Commission on Population (POPCOM). 2009. "People and Development: Upholding Rights, Enabling Choices." *ICPD at 15 Philippines Country Report 2009*.

Commission on Population (POPCOM). 2008. Filipinos Beyond Borders: Population and Development Dimensions of Overseas Labor Migration. State of the Philippine Population Report 4 (SPPR4).

Herrin, Alejandro N. 2002. Population Policy in the Philippines, 1969-2002. Philippine Institute of Development Studies Discussion Paper Series No. 2002-08.

Herrin, Alejandro N. 2003. Lack of Consensus Characterizes Philippine Population Policy. *PIDS Policy Notes,* No. 2003-03

Herrin, A. and M. Costello. 1998. Policy Responses to Future Population Growth. *Journal of Philippine Development* 25(1):127-146.

Hughes, Elizabeth. No date. Philippines Population Projection, 2010 - 2060

NSCB. 2006b. A Brief Description of the Methodology for the 2000 Census-Based Population Projections. NSCB Resolution No. 7, Annex BR-07-2006-01, pp 1-15. Accessed from http://www.nscb.gov.ph/resolutions/2006/7Annex.pdf on 16 April 2010

NSCB. 2006a. Statistics. Population Projections. Accessed from http://www.nscb.gov.ph/secstat/d_popnProj.asp viewed on 16 April 2010

National Statistics Office (NSO) [Philippines], and ORC Macro. 2004. *National Demographic and Health Survey 2003.* Calverton, Maryland: NSO and ORC Macro.

National Statistics Office (NSO) [Philippines], and ICF Macro. 2009. *National Demographic and Health Survey 2008.* Calverton, Maryland: National Statistics Office and ICF Macro.

NSO 2006. Table 2. Summary of Projected Population by Sex and by Five-Calendar Year Interval, Philippines: 2000 – 2040. 2000 Census-based Population Projection in collaboration with the Inter-Agency Working Group on Population Projections

Nimfa B. Ogena. 2007. The Low and Slow Ageing in the Philippines: Auspicious or Challenging? In Gabriele Sinigoj, Gavin Jones, Katsuiku Hirokawa, Sepp Linhart (Eds.). *The Impact of Ageing: A Common Challenge for Europe and Asia*. Vienna*:* LIT Publishing international. 410p.

Nimfa B. Ogena, Maria Midea Kabamalan, and Randolf Se Sasota. 2008. Changing Patterns and Correlates of Marriage in the Philippines Paper presented at the 8th International Conference on Philippine Studies (ICOPHIL) held on 23-26 July 2008 at the Philippine Social Science Center

Population Reference Bureau (PRB). 2009. *2009 World Population Data Sheet.*

UN ESCAP 2009. *2009 ESCAP Population Data Sheet*.

United Nations, Department of Economic and Social Affairs, Population Division. 2009. *World Population Prospects: The 2008 Revision***.** Population Database. **Accessed on 27 June 2010 from** http://esa.un.org/unpp/index.asp?panel=2

World Bank. 2008. *World Development Indicators Database*. World Bank, 1 July 2008.

Xenos, Peter and Socorro A. Gultiano. 1992. Trends in Female and Male Age at Marriage and Celibacy in Asia in *Papers of the Program on Population, East-West Center, Honolulu, Hawaii,* Number 120, September 1992.