

PHILIPPINE DEMOGRAPHIC DEVELOPMENT: PROBLEMS AND PROSPECTS

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1. Introduction

The population of the Philippines grew from 7.6 million in 1903 to 48.1 million in 1980, an increase of more than sixfold in eight decades. From 1903 to 1939, the average annual intercensal growth rate was around two percent. In the postwar period from 1948 to 1970, the average annual intercensal growth rate rose to three percent. The rapid growth in the 1950s and 1960s was unprecedented, arising largely from the rapid decline in mortality without a compensating decline in fertility. Fertility, however, began to decline in the 1970s, so that between 1970 and 1980, the average annual intercensal growth rate declined to 2.7 percent. This rate, however, is still high by international standards.

The increased concern regarding the adverse consequences of uncontrolled population growth on economic and social development has led the government at the turn of the 1970s to adopt an official population policy whose main focus was the control of the rapid population growth through fertility reduction. The main population program was the family planning program. In 1978, a Special Committee to Review the Philippine Population Program recommended that the role of the family planning program be broadened to emphasize not only fertility reduction but also the overall welfare of the family, and that the population program be designed on a broader scale and be fully integrated in the

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development plans of the country. The recommendations of the Committee provided the basis for the thrust of the national population program since then, as reflected for example in the Philippine Population Program Medium Term Plan 1981-1985.

In more recent months, however, questions were raised regarding the performance of the population program with respect to fertility reduction, as well as the future role of the family planning program in the overall development strategy. The glaring omission of a description of the family planning program in the recently prepared national development plan (1983-1987) has led to questions as to whether there has been a shift in population policy especially with respect to fertility reduction. The recent announcement by the President to review population planning in the Philippines perhaps also suggests some ambivalence among planners regarding population policy, strategy and program emphases.

These recent developments suggest a need to review Philippine demographic development as a basis for identifying issues in population planning for the 1980s. This paper reviews the trends in the basic demographic processes of fertility, mortality and population movement. Space limitations preclude presentation of the basic data described in this paper. These data, however, are compiled and presented in Herrin (1981) and Concepcion and Smith (1977). If the volume of past and current Philippine demographic research is an indication, it would appear that issues related to mortality and population movement have been neglected in favor of fertility and family planning. Hence, it is essential to put these two processes back into the population picture if population planning is to involve more than just fertility reduction. As will be evident in the subsequent discussions, there still exist serious information gaps regarding demographic trends in the Philippines.

The next three sections of this paper examine the trends in mortality, fertility and population mobility and attempt to identify emerging problems as well as prospects for the 1980s. The last section concludes.

2. Mortality

National Trends

Analysis of available mortality estimates in the Philippines reveals a historical pattern of (a) gradually declining mortality during the

ity part of the century up to the beginning of the Second World War; (b) rapid decline during the early postwar years up to 1960; and (c) slackening of the decline thereafter up to the mid-1970s. The dimensions of these mortality changes can be described as follows. The crude death rate decline from the 1904-1905 level of 36.3 deaths per 1,000 population to 23.3 in the 1936-1941 period. This represented a decline of 13 percent in 34 years or 0.10 deaths per 1,000 per year. From 1948-1950 to 1960, the crude death rate declined by 41 percent, that is from 21.6 to 12.8 per 1,000, or 0.8 deaths per 1,000 per year. In this period of rapid mortality decline, life expectancy at birth rose from 42.5 to 52.8 years, a difference of 10.3 years in a little over a decade. From 1960 to 1975, however, the crude death rate decline from 12.8 to 8.7 per 1,000, representing a decline of 32 percent or only 0.27 deaths per 1,000 per year. Life expectancy at birth, on the other hand, rose to 59.4 years or only 6.6 years annually over the 15-year period, compared to 0.94 years annually during the 1950s. Thus, there appears to be a slackening of the rate of mortality decline in the more recent period. Moreover, during this 15-year period, infant mortality declined from 113 infant deaths per 1,000 births to 76 in 1975. Overall, the levels of life expectancy achieved in the Philippines in 1975 is still about 10 years less than that achieved by the industrialized countries in 1960, while the Philippine infant mortality rate in 1975 is still some 2.6 times higher than the average found in industrialized countries in 1960. These rough orders of magnitudes suggests that the Philippine mortality conditions still leave much to be desired.

Regional and Social Group Differentials

The decline in mortality during the postwar period was not uniform throughout the regions and provinces of the Philippines nor among various social groups. The 1970 estimates provided by Flieger, Borroja and Lim (1981), (the most recent estimates available for regions and provinces!) reveal that between regions, the age-standardized crude death rates varied from close to 10 per 1,000 in the more economically advanced and urbanized regions of Central Luzon and Southern Tagalog (including Metro Manila) to as high as 16 per 1,000 in Western Mindanao. Infant mortality rates varied from 75 in Southern Tagalog (including Metro Manila) to 135 in Northern Mindanao. Finally, life expectancy varied from a low of 47.5 years in Western Mindanao to a high of 60.2 in Central Luzon. In view of the

lack of comparable up-to-date data on mortality differentials by areas, it is difficult to determine the extent to which such differentials have narrowed in the 1970s. In view of the relatively slower pace of mortality decline in the more recent period, it is unlikely that such differentials have narrowed considerably by 1980.

Data on mortality differentials by social groups are also hard to come by. In a recent study of infant mortality by selected socioeconomic characteristics of parents based on the 1978 Republic of the Philippines Fertility Survey (RPFS), Esclamad, de Guzman and Engracia (1982) reveal large infant mortality differentials by mother's education. Infant mortality for the period 1973-1977 ranged from 105 for women with no schooling, 73 for women with primary schooling, 54 for women with intermediate schooling, 41 for women with high school, and 37 for women with college education. Rural-urban differential was also noted: 45 versus 66 infant deaths per 1000 births. Additionally, infant mortality was higher for higher parity women and for women with closely spaced births.

Slackening of the Rate of Mortality Decline

A disturbing aspect of the historical mortality trend noted earlier is the slackening of the rate of mortality declines in the more recent period, i.e., from the 1960s on. An earlier study (Zablan, 1971) suggested that a threshold level of mortality may have been prematurely reached at a life expectancy at birth of less than 45 years. The slackening of the rate of mortality decline, however, is not unique to the Philippines. A recent international study revealed that in many developing countries, there has been a discernible slowing down of progress in mortality reduction relative to what would have been expected on the basis of European experience. (Gwatkin, 1980). Gwatkin suggests that, in general, this worldwide slackening in mortality gains may be due to the diminishing capacity of public health and medical care program to deal with the evolving disease patterns and to the general slackening of socioeconomic development in the 1960s and 1970s relative to that of the early postwar period.

In the Philippines, one may specifically associate the rapid mortality declines in the immediate postwar period on the one hand to the development of the rural health program in the mid-1950s, notably the establishment of the Rural Health Units as the vehicle for the introduction of modern health technology and the construction of potable water supply systems in the rural areas; and on the

other hand, to the generally rapid economic growth during the 1950s. The impact of these two broad sources of mortality decline, however, appears to have lost their force by the 1960s as the data on mortality trends suggest. Several reasons may be advanced. First, in the health field, problems of staffing the health units, lack of medicine and supplies, and inadequate travel funds for rural health personnel increasingly imposed severe limits to rural outreach efforts. (Ichino, 1969). Public health expenditures tended instead to increasingly concentrate in urban areas emphasizing curative rather than preventive medicine. As a result, further mortality reduction in the rural areas especially among infants tended to slow down leading to a slower improvement in life expectancy. Second, the rapid economic growth in the 1950s generated by the narrowly-based export substitution industrialization began to lose steam in the 1960s. The concomitant relative neglect of domestic agriculture and the consequent lag in food production contributed to the slowing down of overall growth. Real per capita consumption expenditures, which grew by 3.9 percent during the 1940-1960 period, rose by only 1.5 percent in the 1960-1970 period, and 2.0 percent from 1970 to 1979. In addition to this slowing down of per capita growth of personal consumption expenditures, income distribution has either worsened or at least has not significantly improved. Under these circumstances, the momentum of rapid mortality declines in the 1950s could simply not be sustained. In addition, the unevenness in the distribution of health services and the differential access to such services by households have not been conducive to reducing rural and household mortality differentials.

Problems and Prospects

In spite of the rapid gains in mortality reduction during the postwar era, infant mortality is still high and life expectancy at birth is still low compared with the levels achieved by developed countries. Moreover, significant mortality differentials still exist between regions and provinces and between social groups, reflecting both inequalities in the distribution of income on the one hand, and of health facilities and services on the other. In addition, progress towards mortality reduction appears to have prematurely slowed down in the more recent periods.

In view of the fact that freedom from premature death is a direct component of human welfare, steady improvements in life expect-

ancy up to levels approximating those found in the more developed countries should be a major concern of any development strategy. Because future mortality trends are going to be tied up more closely with socioeconomic development than in the past, programs now being implemented to increase employment, food production and incomes especially among the poorest segments of society can be expected to have substantial impact on future mortality reduction. But progress along these lines can be rather slow. In the meantime can the potential for further mortality reduction be enlarged through selective health interventions at a cost not much greater than is currently allocated to the health sector? Past experience with "direct interventions" provide cause for guarded optimism (Gwatkin, Wilcox and Wray, 1980; Williamson, 1982).

The potential contribution to mortality reduction of selective health interventions will invariably depend on the nature of the intervention and on its coverage. The nature of such interventions in turn will depend on what is known about the prevailing mortality patterns in specific areas and of the determinants of these patterns. Unfortunately, this is one area of mortality studies in which information is most unreliable in view of the inherent difficulty of assessing the precise cause of death and of incomplete coverage of the current monitoring system. Nevertheless, it may be instructive to look at the evolving mortality pattern from cause of death statistics compiled by the Health Ministry for what they suggest in terms of demographically significant health problems. Data at the national level, for example, reveal that the percentage of all deaths due to pneumonia and tuberculosis are still the highest in 1977 as they were in 1946, both accounting for 26 percent of all reported deaths. Gastroenteritis, nutritional deficiencies, bronchitis and related respiratory diseases accounted for another 11 percent of all reported deaths in 1977. With respect to infant deaths, pneumonia accounted for 26 percent of all reported deaths in 1977 with gastroenteritis, nutritional deficiencies, bronchitis and related respiratory diseases accounting for another 22 percent. Progress along these lines within the context of a restructured and expanded health care delivery system can be expected to provide added impetus towards further mortality reduction in the future.

At the local level, there is need to determine the demographically significant health problems, and to determine whether the health services currently in place effectively address these problems.

For example, can current programs focused on certain causes of death such as neonatal tetanus and maternal mortality be justified on the basis of the demographic significance of these causes of death? Should not the same resources be applied more efficiently through programs that will address the more significant causes of deaths such as respiratory diseases via a curative program at the village level (since these diseases are difficult to prevent), e.g., through greater availability of antibiotics? (See Williamson, 1982).

Needless to say, population planning in the area of mortality reduction requires much more information on trends in mortality, on changing patterns of cause of death, and on the impact and cost-effectiveness of current health interventions than has so far been available.

3. Fertility

Fertility Trends

Data on long-term fertility trends reveal that the moderate decline occurring since the 1950s has accelerated in the 1970s. From a level of 50 or more births per thousand population at the turn of the century, the crude birth rate remained fairly constant during the first half of the century. Since the 1950s, fertility began to decline, gradually reaching around 46 births per 1,000 in 1960 and to around 40 per 1,000 in 1970. A somewhat faster decline occurred in the 1970s. The National Census and Statistics Office estimated the crude birth rate to be 35 per 1,000 in 1975 and 33 per 1,000 in 1980. This rate for 1980 is still about twice that of the average for industrialized countries.

Estimates of total fertility rates based on survey data further reveal the decline in fertility for the most recent period. Total fertility rates declined from 6.5 births per woman in 1958-62 to 6.3 in 1963-67 to 5.9 in 1968-72 and 5.2 in 1973-77. Estimates for 1980 show the total fertility rate at 4.5. (Engracia, 1982).

Data constraints limit attempts to map out the incidence of fertility decline in the Philippines. Nevertheless, a broad view of the pattern of fertility transition can be obtained from an analysis of the available cross-section information, specifically the data on areal fertility differentials and fertility differentials by individual and household socioeconomic characteristics.

Total fertility rates by broad geographic areas in 1973-77 reveal

increasing fertility as one moves from Metro Manila to other urban areas and to rural areas: 3.9, 5.6 and 5.3, respectively, after the rates were standardized for marital status. The time trend in total marital fertility rates from 1958-62 to 1973-77 reveal that the fastest decline occurred in Metro Manila and other urban areas: 21 and 12 percent declines, respectively. In contrast, fertility decline in the rural areas was relatively small (6 percent over the 15-year period), all of it occurring only in the last five-year period.

Total fertility rates by region suggest that the most rapid fertility decline occurred in the more highly developing and urbanizing regions. Although regional fertility differentials have narrowed somewhat in the more recent period, significant differentials still exist. At around 1975, five regions had total fertility rates less than 5.0 births per woman, ranging from 3.1 to 4.9. The top three regions with the lowest fertility are the urbanized regions of Metro Manila, Central Luzon and Southern Tagalog, together accounting for 14 percent of the national population in 1975. The two other relatively low fertility regions are Ilocos and Central Visayas. In contrast, the remaining seven regions (all of the 4 Mindanao regions, two of the Visayas and two of Luzon) still exhibit high fertility in 1973-77, ranging from 5.0 births per woman in Western Visayas to 6.0 in Bicol. These regions include those among the least urbanized (Cagayan, Bicol, Eastern Visayas, Western and Central Mindanao), having the highest incidence of poverty (Cagayan, Bicol, Eastern Visayas and Northern Mindanao), and the highest infant mortality rates.

Within regions, the incidence of fertility change can be gleaned from cross-section evidence on children ever born to ever-married women age 45-49 by individual and household characteristics obtained from the 1978 Republic of the Philippines Fertility Survey (RPFSS). The data show that, after standardizing for age at first marriage, lower fertility tends to be associated with women of higher educational attainment, living in urban areas and whose husbands are engaged in non-agricultural skilled or semi-skilled occupations.

The major proximate determinants of fertility change in the Philippines are changes in nuptiality patterns and changes in marital fertility, the latter mainly through contraception. Although induced abortion is known to be resorted to by both single and married women as a means of fertility control, the extent of its use is not accurately known.

Changing Nuptiality and Its Correlates

Marital status distribution by age obtained from census data from 1903 to 1975 and from the 1978 RPFSS reveals a significant trend in delayed marriage for females. The percentage single increased steadily especially among younger women ages 15-19 and 20-24 years over the seven decades, i.e., from 74 and 33 percent, respectively, in 1903 to 87 and 51 percent, respectively, in 1975. The singulate mean age at marriage (SMAM) has risen from 20.9 years in 1903 to 23.2 years in 1975. The recent data from the 1978 RPFSS showed a mean of 24.4 years. With the exception of Sri Lanka and Singapore, the 1970 level is the highest reached in South and Southeast Asia at the corresponding period, while the 1975 level is slightly lower than Taiwan (23.3), South Korea (23.7) and Japan (23.3), at the corresponding period (See Smith, 1980).

The timing of changes in nuptiality patterns can be described as follows. Of the total change in SMAM from 1903 to 1975, 61 percent occurred by 1960, another 22 percent occurred during the 1960s, and 17 percent occurred during the 1970-75 period. The accelerating trend in age at marriage is evident from the implied average annual increase during the various periods, i.e., 0.02 year during 1903-60, 0.05 year during 1960-70, and 0.08 year during 1970-75. The data for 1978, based on the 1978 RPFSS, suggest that the trend in marriage patterns is continuing.

An interesting aspect of Philippine marriage pattern is the high proportion of women (around 6 percent) who remained single at age 50 or so, which has remained more or less constant over the seven decades. Similar proportions in South, Southeast and East Asia are much lower (See Smith, 1980).

Cross-section data for 1973 and 1978 on socioeconomic differentials of age at marriage suggest that increasing age at marriage is associated with urban residence, higher education of the woman, non-agricultural employment of women and female work participation before marriage.

A recent analysis of the sources of nuptiality change conducted by Smith (1978) concludes that: (1) the traditional dimensions of Filipino social structure — ethnolinguistic and religious — do not seem to have induced nuptiality differentials of any moment; (b) some of the most sizable nuptiality differentials in the past are areal differentials growing out of regional histories, especially with respect to age, sex and marital status selective migration; many of these

differentials have diminished sharply and are likely to disappear in the future; and (c) in the more recent period, overall nuptiality patterns are related to the expanding role of females in the three important interrelated social processes of urbanization, the rise of mass education, and growth of the non-agricultural force.

How much of the observed fertility decline can be attributed to changes in the marriage pattern?

A standard decomposition applied by Concepcion (1980) to the crude birth rate change between 1960 and 1975 reveal that of the crude birth rate decline of 24 percent, only 16 percent was accounted for by nuptiality change, while marital fertility change accounted for 78 percent. Changes in the age structure accounted for the remaining 6 percent. In absolute terms the decline in the crude birth rate during the 1960-75 period attributable to nuptiality change was only 1.8 births per 1,000 compared to 8.7 births per 1,000 attributable to marital fertility change. On an annual basis, the average decline in crude birth rate during the 15-year period due to nuptiality was only 0.12 births per 1,000. It will take a drastic change in nuptiality patterns to produce a much larger impact on fertility than what has been observed during the past one and a half decades. In view of the already late age at marriage among Filipino women, such drastic change is not likely. Hence, future fertility declines must necessarily rely on significant changes in marital fertility through contraception, given society's views regarding abortion.

Contraceptive Prevalence and Its Correlates

On the basis of accumulating data on contraceptive prevalence, the following broad trends can be noted: from a rate of 16 percent in 1968, it rose to 24 percent in 1973, then to 37 percent in 1978. In 1980, contraceptive prevalence is estimated at 42 percent. What is noteworthy in the data is the increased use of the "less use-effective" methods (rhythm, condoms, withdrawal), relative to the "highly use-effective" clinical methods (pills, IUDs and sterilizations). In the 1978 and 1980 estimates, only one-third of current users were using the more effective methods. By way of comparison, in Thailand, which had approximately the same level of contraceptive prevalence in 1975 as the Philippines had in 1978, 85 percent of current users were using the more effective methods (Knodel and Nibhon, 1978).

The proximate determinants of contraceptive use include such

demand-related factors as family size preferences and attitudes toward contraception, on the one hand, and of supply-related factors such as knowledge of contraception and access to contraceptive services and supplies, on the other. These demand and supply factors are in turn determined by socioeconomic, cultural and environmental factors, and by the direct effects of family planning program efforts. The evidences on the trends in the proximate determinants of contraceptive use are described below.

First, using data from the 1978 and 1980 Community Outreach Surveys (COS), Herrin and Pullum (1981) found that at least in areas where concentrated family planning program efforts are being implemented, there is evidence of a decline in family size preferences as measured by the percentage of currently married, non-pregnant and fecund women aged 15-49 of given parity who stated they wanted no more children. Furthermore, this decline in family size preferences is clearly associated with the increased use of contraception in general, and of modern contraception in particular, i.e., pills, IUDs and sterilization.

The changing demand for children, as inferred from these data is understandable in terms of the changing structure of costs and benefits of children, at least as perceived by parents. Data on these are fragmentary. However, the value of children studies, notably those conducted by Bulatao (1975; 1978; 1979a; and 1979b) for the Philippines reveal that among the various value domains within which children are considered, the "instrumental-assistance value," which includes financial help expected from children, old age security, help with household chores, and caring for other children, are found to be highly salient as well as among the most central values. On the other hand, financial cost, though less salient than worries of child rearing, appeared more central and ranked first in importance among the values. In addition, differential value patterns appear to be associated with fertility control. Parents who were categorized as "low parity limiters" in contrast to the "high parity nonlimiters" tend to (a) place less value on "help in housework" and "financial, practical help" as advantages of children, (b) consider cost of education as among the disadvantages of children, (c) consider three children to be of some financial burden, and (d) think less of an only child as undesirable because of mortality risk. Both sets of parents, however, tend to equally value children for their help in old age (Bulatao, 1979a).

Data limitation does not allow a mapping out of the incidence of "low parity limiter" parents by residence and socioeconomic characteristics. Nevertheless, one can reasonably infer that socioeconomic change associated with greater opportunities for education, alternative satisfactions and roles, and declining mortality affects the demand for children, and hence for effective contraception leading to actual changed fertility. The basis for such inference is the accumulating results of multivariate analyses which find that critical levels of education, income, female labor force participation, and child survival significantly influence completed fertility (e.g., Encarnacion, 1973; 1975; Canlas and Encarnacion, 1977; Harman, 1979; Paqueo and Angeles, 1979; Paqueo and Fernandez, 1979).

Secondly, although the measures used are not strictly comparable, data on approval of contraception suggest a favorable trend. The percentage of married women of reproductive age 15-44, (MWRA) who said they approve of doing "something to avoid getting pregnant too often or to plan the number of children they have" was 58 percent in 1968 and 63 percent in 1973 (Laing, 1979, p. 5). In the 1978 Community Outreach Surveys (COS), the question was reworded to refer specifically to "the use of modern family planning methods like pills, IUDs, or condom," while in the 1980 COS, the reference to condoms was changed to sterilization (Laing, 1979; Laing, 1981b, p. 81). The corresponding percentages for the respective periods were 67 and 72. In spite of the favorable trend, 37 percent of MWRA still disapproved of modern family planning methods in 1980, of which half said they disapproved strongly. Approval of modern family planning methods was clearly associated among other things, with increasing educational attainment, urban residence, and exposure to communications about family planning either through interpersonal sources, through mass media or through field workers.

Thirdly, awareness of specific contraceptive methods has risen markedly since the population program began. By 1980, practically all (99 percent) of MWRA have heard of at least one method of contraception. Additionally, awareness levels for modern contraception (i.e., pills, IUDs and ligation) are above 90 percent (Laing, 1981b, Table 9, p. 12). Data from the 1978 RPFS reveal almost uniformly high levels of awareness by age of woman and by family size (NCSO, *et al.*, 1979, p. 124).

Finally, it is obvious that the availability of contraceptive

prevalence has significantly improved with the program than without it. Nevertheless, there are problems of increasing access to contraceptive supplies and services due to cost and logistical considerations.

Relative Impact of Socioeconomic Factors and Family Planning Efforts on Contraceptive Prevalence.

How well do the above changes explain the observed increase in contraceptive prevalence? Laing (1981a) has recently conducted a multivariate analysis of the correlates of contraceptive prevalence in the outreach areas in 1980. This is a very important study for the Philippines because it attempts to disentangle the effects of "demand" or socioeconomic variables and the "supply" of family planning methods, precisely the kind of information that is needed to clarify the relative importance of general development and specific interventions on contraceptive prevalence, and by extension on fertility rates. His results suggest that while socioeconomic variables accounted for a large proportion of the variation in clinical contraceptive prevalence in the Barangay Supply Point (BSP) areas, program variables also accounted for a significant portion of the total variation. The percentage of variance explained by the selected variables was 43 percent, of which 63 percent was explained by socioeconomic factors, and 37 percent by program factors. With respect to overall prevalence, the percentage of variance explained by the selected independent variables was 39 percent, of which 70 percent was explained by socioeconomic factors, and 30 percent by program (both clinic and outreach) factors. These results can readily be interpreted in the following light. The socioeconomic variables are expected to be related to such demand factors as family size preference and attitudes toward contraception. BSPs with high proportions of household heads having high levels of education, on farm or urban occupations and high incomes are expected to be those which have high proportions of households having smaller family size preferences and more favorable attitudes toward contraception. Mass media exposure would also tend to be higher among these areas, and hence, awareness and knowledge of contraception would tend on the average to be greater. Program variables, on the other hand, can be interpreted as supply-related factors which increase the flow of information and the accessibility of couples to contraceptive supplies and services, and hence reduce the effective

cost of contraception, thereby leading to increased contraceptive prevalence.

Problems and Prospects

On the basis of the foregoing analysis, one may summarize the forces underlying the observed fertility trends. Fertility levels remained high from the early part of the century up to the 1950s. Whatever fertility decline was evident, it was due mostly to the changing marriage patterns, first associated with the effects of selective migration, and later associated with the effects of increased education, urbanization and female participation in the labor force. The fertility decline that became perceptible in the 1960s accelerated in the mid-1970s, and was due almost entirely to the decline in marital fertility. Fertility declined more rapidly among highly educated parents with high incomes and living in the urbanized areas of Metro Manila, Southern Tagalog and Central Luzon. This rapid decline in fertility is understandable in terms of the responses of parents to the changing perceived costs and benefits of children associated with urbanization, industrialization, educational advancement, etc., and to their locational advantage in terms of access to contraceptive information and supplies provided by both program and non-program outlets. Further fertility decline in these areas can be expected from the impact of development and family planning programs already in place through some diffusion process, perhaps along the Western-type demographic transition. But what are the prospects for fertility decline for the rest of the population? Are high levels of Western-type modernization a necessary condition for fertility decline? If so, then nothing needs to be done in terms of selective interventions. But can the extent and pace of broad-based socioeconomic development expected in the decades ahead sufficient to depress fertility of the magnitude necessary for replacement fertility levels be achieved by the year 2000 or thereabouts, the level implied by current population projections upon which the present development plan (1983-1987) is based? Most likely not.

Recent experience and thinking, however, provide some cause for optimism. While Western-type modernization may be a sufficient condition for sustained fertility decline, it need not be a necessary condition. In a recent reappraisal of theories of fertility decline, Freedman (1979) suggested hypotheses that have important policy significance for population planning in less developed countries, and

in the Philippines. These hypotheses are: "(1) that subsets of objective development alterations, much smaller than those that characterized the West, can provide motivations for lower fertility today; and (2) that under modern conditions, ideas and aspirations for a different way of life transcending what is actually available are also important in motivating lower fertility" (Freedman, 1979, p. 48). The experience of several countries cited by Freedman, as well as some evidence in the Philippines (Herrin, 1979) suggest that the above hypotheses merit serious consideration by policy makers and development planners. They suggest that "the idea and practice of family planning can sweep an LDC population far more quickly than was previously imagined possible." What is clearly needed are more information on the demographic impact of current development interventions to provide the basis for selective development interventions in the future.

That the family planning program accelerated the fertility decline since the mid-1970s is inferred from the increased use of effective contraception in areas where program efforts have been more intensive, thus demonstrating the strategic role of the family planning program in fertility reduction. Further, progress may be expected from the program already in place. However, there are concerns regarding the extent to which the program can expand its reach and outreach. Logistics, organization, availability of supplies and cost figure prominently in these concerns (Lieberman and Herrin, 1981). In addition, the rapid growth of population in the 1950s and 1960s is now being reflected in increased numbers of women of reproductive ages who are now exposed to child-bearing risks. The quickened tempo of urbanization in the postwar period as will be described later, means that a large proportion of these women are to be found in the less accessible rural areas than in the urban areas. Program efforts to provide contraceptive supplies and services will, therefore, be expected to be much greater in the 1980s than in the 1970s decade.

A final concern is with regards the pattern of contraceptive use. Although contraceptive prevalence has reached as high as 42 percent in 1980, two-thirds of this is due to the use of less effective methods (i.e. condom, rhythm, and withdrawal). An issue arises as to whether the program needs to exert greater efforts to push the use of the more effective methods" (i.e. pill, IUD, sterilization) or to accept the prevailing use patterns and simply accommodate to the actual

demand for various types of contraceptive methods. Pushing the "more effective methods" however entails greater costs and requires greater organizational capacity. If the current method mix is to be accepted, then efforts must be made to make these "less effective methods" more use-effective. Such efforts may require changes in the structure and programming efforts of the family planning program (e.g., more intensive instruction in the use of the more efficient rhythm methods).

5. Population Movement

Internal Migration

That substantial population movements have occurred in the Philippines is evidenced by the fact that in 1960, 13 percent of the population of all ages (representing 3.4 million persons) were living in a region different from the one in which they were born, and in 1970, this lifetime migration figure was 13.2 percent or 4.8 million persons. During the period between 1960 and 1970, 5.0 million persons or 14 percent of the population of 1970 resided in municipalities different from those they had lived in 1960. Of these 51 percent crossed regional boundaries, 14 percent crossed provincial boundaries within their region, while 34 percent crossed municipalities within their provinces.

Information on lifetime interregional migration up to 1960 points to the predominance of long distance frontierward movements. The major streams include those from Ilocos and Central Luzon to the Cagayan Valley, and from Ilocos, Western and Central Visayas to Mindanao. Relatively smaller in volume but significant nonetheless are the rural-to-urban streams, namely those from the Ilocos, Western and Eastern Visayas to Metro Manila. During the period 1960 to 1970, while long distance flows continued to be a major component of the total migration pattern, movement to the metropolitan region has replaced migration to the frontiers. Thus, of 11 major streams (migration of 50,000 or more people), 7 went to Metro Manila. The regional origins of these major streams are Ilocos, Central Luzon, Southern Tagalog, Bicol, Western Visayas, Eastern Visayas and Southern Mindanao. The other major streams include the counterstreams from Metro Manila to Central Luzon and Southern Tagalog, and the movement from Central Visayas to Northern Mindanao and Southern Mindanao. Between 1970 and

1978, interregional migration followed more or less the same pattern observed in the 1960-1970 period, with the predominance of migration into Metro Manila.

The changing pattern of interregional migration is further illustrated in the sex composition of the migrants. The early outward movements were male-dominated, while the later metropolitanward movements tended to be female-dominated. The predominance of female migrants in the more recent period is supported by data from 1970-75. Of the total interregional migrants (87,910), 53 percent were females; while of the total migrants to the metropolitan region (263,058), 60 percent were females.

Of the demographic processes, migration is perhaps more sensitive to changes in social and economic opportunities. The historical migration pattern is therefore understandable in terms of the opportunities that were available in particular periods of Philippine economic history. These opportunities first took the form of land availability in the frontier areas of Cagayan Valley and Mindanao. Migration into the frontier came largely from areas with a relatively poor agricultural resource base such as the Ilocos and the Visayas, and from areas with high agricultural densities and agrarian unrest such as Central Luzon. In the more recent period, economic and social opportunities took the form of urban jobs and education, and the predominance of rural-to-urban migration especially to Metro Manila. The concentration of wage employment in urban areas, especially in Metro Manila can be traced to the effect of industrialization policies of the early postwar period and the relative neglect of subsistence agriculture in that same period. The rapid industrialization in the early postwar period, however, did not lead to significant labor absorption in modern sector jobs due to the increasing capital-intensity of production techniques being used. This in turn was a result of the capital-intensity bias in the structure of incentives provided by the early industrialization program. This limited employment absorptive capacity of the modern sector contributed to the recent outflow of temporary workers abroad, as described below.

International Migration

As a component of population growth, international migration is of minor significance compared to fertility and mortality. However,

there is increasing concern regarding the recent international flow. This has involved large numbers of skilled and semi-skilled workers.

By piecing together several studies of international migration, one can characterize the dominant patterns of Filipino emigration that follows. The first is the outflow of migrant workers in the early part of the century, especially to the United States to work in the plantations in Hawaii and California. This flow involved large numbers of males coming mostly from the Ilocos region. Subsequent migrations up to the 1950s have been small in magnitude involving mostly women and others the migration of relatives of both sexes after the war.

The second major pattern is the heavy outflow of Filipinos from various regions of the Philippines and of all ages (migration of whole families) after 1965, significantly associated with the U.S. Immigration and Nationality Act of 1965 which abolished the old national origins quota system. A large part of these emigrants were professionals, technical and allied workers together with their families.

The third major pattern of emigration involves the outflow of workers or temporary migrant workers whose destinations have recently to be the Middle East, Europe and Asia. The growth of temporary migration of workers has outstripped that of permanent migrants, with seamen accounting for around two-thirds of the number from 1972 to 1977. This recent migration is mainly in response to the great demand for skilled and semi-skilled manpower in the international labor market, as well as to the limited employment absorptive capacity of the modern sector in the country. Observes Abella (1977): "The overseas labor market has been a very significant absorber of Filipino manpower. The number of Filipinos who found jobs overseas during the period 1972-1976 is present about ten percent of the additions to the labor force during that period. The manufacturing sector managed to absorb only an additional 240,000 workers between February 1972 and August 1976, whereas the overseas labor market absorbed 169,321 workers during the same period from January 1972 to December 1976, including permanent emigrant workers." (p. 98).

Urbanization: A Note

A recent study suggests that compared to the historical experience of Western countries as well as the contemporary experience of Southeast and East Asian countries, Philippine urbanization proceeded slowly (Pernia and Paderanga, 1980). The urban population

grew from 13 percent in 1903 to 33 percent in 1975 while the gap (urban-rural growth difference) has slowed down from 3.4 percent during the 1918-1939 period to 0.45 percent during the 1970-75 period. Philippine urbanization, however, has been marked by increasing primacy. In 1975, the population of Metro Manila, consisting of four chartered cities and 13 municipalities, has 5.8 times the population of the next three largest cities. This pattern of urbanization is understandable in terms of the rapid growth of the total and rural population during the postwar era and the differential development of regions arising from the spatial biases of public policies, especially those associated with the early narrowly-based export substitution policies.

Patterns and Prospects

The broad overview of the historical patterns of Philippine population movements suggests several policy questions for which there is yet very little information. First, the emerging female-dominated urbanward migration suggests questions regarding the implication of this trend for the economic and social status of the female migrants. Evidence showing the most common urban occupations of migrant and urban-born men and women based on the 1973 National Demographic Survey data suggest a pattern of "extreme occupational differentiation" by migrant status and sex (Eviota and Smith, 1979). Native working women tend to occupy the high prestige occupations, while working female migrants occupy the service occupations, mostly housekeepers, cooks, maids, etc. The segregation is sharper in the Metropolitan area among in-migrants than rural areas, and among recent migrants. This differentiation is even sharper when compared with males. Educated male migrants tend to occupy white collar and craftsmen occupations, while relatively educated women migrants are still predominantly in the service sectors. The picture improves among female migrants with some exposure to college or university — 75 percent of female working migrants are in white collar employment; however, these are mainly in clerical and sales categories, and still 20 percent with college education are in the service sectors.

Secondly, the old issue of balanced regional development takes on an important new twist, namely, unbalanced urbanization. This refers to the slow pace of urbanization on one hand, but of increasing primacy on the other. This raises the old question

regarding the implications of rapid urban growth in one or very few places for the adequate provision of social and economic services including employment and housing. In addition, it raises questions regarding implications for the development potentials of the emigration regions.

Thirdly, the old issue regarding the implication for Philippine development of the brain drain, i.e., of the emigration of skilled professionals to the advanced countries, acquires a new twist in the more recent temporary outflow of workers. Questions regarding the implication for the national economy, on the one hand, and on the adequacy of protection and welfare services of these workers in the area of destination require more systematic studies.

One may expect increased population mobility as development proceeds. However, the type of development pursued with its implicit and explicit spatial biases, can be expected to have significant impact on where people will move. In spite of the rural development efforts in the 1970s, one can expect continued and heavy movement of the population in Metro Manila, its environs and in a few selected industrializing regions of the country in search for wage employment, educational opportunities and occupational mobility. This is so because with the vanishing of the frontiers, these areas will continue to be the centers of economic activities in the 1980s and partly because the effects of the rural development thrust and of the program of industrial dispersal in the 1970s will not be strongly felt until a few decades in many regions of the country. The rapid population growth in the postwar period is now being translated into a rapidly growing labor force, as children born in the 1950s and 1960s now seek a more permanent place in the labor force. The continued limited labor absorption capacity of the modern industrial sector, and the increased availability of employment abroad are expected to increase the flow of temporary migrants so noticeable in the recent period.

6. Conclusion

Demographic trends and development efforts will be more closely interrelated in the 1980s than in the past decades. The simple transfer of health and medical technology from the advanced countries can no longer be relied upon to effect significant declines in mortality as it did in the early postwar era without concomitant economic and social change in the rural areas and among the poor.

and without adaptive innovations in technology and organization in effectively addressing emerging patterns of demographically significant health problems in specific areas. Likewise, short of massive socioeconomic transformation, further fertility declines will now have to increasingly rely on strategic aspects of development that can lead to changes in the perception of parents regarding the costs and benefits of children on the one hand, and on the reduction of the relative cost of contraceptive methods through an energetic family planning program, on the other. Finally, with the disappearance of the agricultural frontier, population movements will now be increasingly tied to the differential industrial activity between regions. All these factors suggest a greater need for integrating population factors into development planning. Needless to say, great effort will be needed to operationalize such integration. Evaluation of current programs as well as pilot-testing of alternative schemes will be needed to determine the most cost-effective means of reducing fertility and mortality. Similarly, the spatial implications of development programs needs to be more explicitly taken into account in future planning. How all these can be done is the challenge for policy makers, planners and social science researchers in the years ahead.

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