The Mahbub ul Haq Memorial Lecture

Importance of a Population Policy in Pakistan

FAKHARI A. SIDDIQUI

The primary purpose of this lecture is to make a case for an integrated and effective population policy in Pakistan. An effective population policy is critical in its own right. It is also essential for maximising the positive outcome of all of Pakistan's development efforts. Despite some very modest progress, the overall population growth rate is still so high that it warrants serious concern. Among the top ten contributors to world population growth during 1995–2000, Pakistan stood third in absolute number, and was Number One in rate of growth. The average total fertility rate per woman of 5.2 in Pakistan, as compared to 2.4 in Indonesia, 2.9 in Iran, and 3.1 in India, is indeed problematic and requires an appropriate policy response.

A broader view of population growth and economic development is suggested instead of a narrow family planning focus. Thus family planning programmes (supply-side) would be effective only when the population at large has the desire or motivation for smaller families (demand-side). It is shown that the demand-side of the equation is influenced by a host of social, cultural, religious, educational, and other factors. For purposes of this paper, all these are taken together and termed the *knowledge factor*. It is suggested that a successful population policy must have a clear focus on increasing the *knowledge factor* in the country through education and advocacy.

Based on the policy experiences of other developing countries and the recent demographic realities in Pakistan, an effective population policy must address the following three objectives: (a) reduction in the rate and incidence of unwanted fertility; (b) reduction in demand for large-size families; and (c) greater investment in adolescents to tackle the population momentum problem. The lecture concludes that Pakistan still has a population problem that it must deal with by a comprehensive and effective population programme. Failure to do so would magnify the current problems which are a result of previous policy neglect.

INTRODUCTION

This paper is a modest attempt at understanding the importance of population growth and its relationship to economic development in Pakistan. A

summary of the recent approaches to economic development is provided at the outset. Population growth is discussed with a view to understanding the economic and socio-cultural determinants of fertility behaviour. This is based on the experience of other developing countries. The issues of unwanted fertility, demand for large family size and population momentum are discussed in the context of Pakistan's past population growth and the potential demographic changes in the future.

The basic message here is a simple one: Pakistan's experience with population issues and economic development has been a case of many missed opportunities and its deteriorating economic performance in the 1990s poses serious impediments for the future outlook and a daunting challenge to the leadership. It is argued that an integrated population policy is critical in its own right but is also essential for maximising the positive outcome of whatever development efforts are contemplated. This is work in progress. It is presented here to stimulate further discussion and debate.

ECONOMIC DEVELOPMENT

> "In the midst of this age of plenty, the standard of living for much of the world is declining, their poverty and economic backwardness are increasing, and their share of the world's population is growing. In the world community of nations, the rich are getting richer while the poor are getting poorer… First among causes is the rapid, over whelming and utterly unprecedented world population explosion".

The above statement was made by John F. Kennedy in 1958 when he was a junior senator [*Facing the Future* (1998), p. 1]. At that time, world population was less than 3 billion, the income gap between rich and poor nations was about 30 to 1. Now the population has doubled and so has this gap moved to 60 to 1. More than 40 years later, the following quote sums up the current situation [Earth Summit (2002), p. 6].

> "Despite decades of development efforts, both the gap between rich and poor nations and the inequalities within nations have widened. Serious economic, social, gender and other inequities persist and hamper efforts to improve the quality of life for hundreds of millions of people. The number of people living in poverty stands at approximately 1 billion and continues to mount".

The early post World War II view of development primarily in terms of economic growth and increase in per capita income was gradually replaced over the last few decades with a broader view of development. This view in its simplest form places greater emphasis on the reduction or elimination of poverty, inequality, and unemployment within the context of a growing economy. Dudley Seers saw the meaning of development as [Seers (1969), p. 3]:

> "The questions to ask about a country's development are therefore: What has been happening to poverty? What has been happening to unemployment? What has been happening to inequality? If all three have declined from high levels, then beyond doubt this has been a period of development for the country concerned. If one or two of these central problems have been growing worse, especially if all three have, it would be strange to call the result 'development' even if per capita income doubled".

The experience of many developing countries in the 1960s and 1970s, including Pakistan, proved Seers correct. High growth rates and rising per capita income did not show much improvement in other measures. In some cases there was an actual decline in employment, equality and the real incomes of the lower 40 percent of the population.

In the 1990s the momentum towards this broader view continued and was also recognised by the World Bank whose policies in 1980s were clearly focused on economic growth as the goal of development. This new found broader perspective of the World Bank is illustrated in their statement in *1991 World Development Report* (p. 4).

> "The Challenge of development… is to improve the quality of life. Especially in the world's poor countries, a better quality of life generally calls for higher incomes—but it involves much more. It encompasses as ends in themselves better education, higher standards of health and nutrition, less poverty, a cleaner environment, more equality of opportunity, greater individual freedom, and a richer cultural life".

In these terms economic growth is a necessary condition for development but not sufficient unless one incorporates the human development factors. It is argued that improvements in education, for example, would also contribute towards growth through increase in human capital [Klasen (1999) and Jones (1999)].

Pakistan's experience with economic growth and almost all development indicators, particularly over the last fifteen years, has been disappointing. From

the 1960s to 1985, Pakistan experienced respectable economic growth rates averaging above 6 percent with a reduction in poverty. Since the early 1990s, the growth rate declined to less than 4 percent and population growth continued at a rate of over 2.5 percent, resulting in a per capita income increase of just over 1 percent. The positive and high economic growth of the 1960s, 1970s and early 1980s was driven primarily by external factors of aid, remittances and green revolution technology without due attention paid to reforming the domestic climate for growth. As the inward inflow of aid and remittances began to dry up since the late 1980s along with the maturation of the green revolution, growth also declined [Stern (2001)].

Failure to undertake the necessary reform in the socio-economic and political arena led not only to slowing economic growth, but aggravated the human development indicators such as poverty, literacy rate, school enrollment, and gender equality, as well as continued high fertility. The lesson from this experience is that economic growth is not sustainable without due regard to education, gender equality, poverty reduction, good governance and other social development indicators. These factors are important in and of themselves for economic development but they are equally important for a positive investment climate which drives economic growth. A comparison of Pakistan and India during the 1990s provides a good example.

In the 1980s Pakistan's growth rate was higher than India's. Since the 1990s India's growth rate has been almost twice (6 percent) that of Pakistan (3.7 percent).

> "What made India's rapid growth possible was a reform programme that increased openness and competitiveness while improving major elements of its investment climate. India also took steps to increase the inclusiveness of growth, by expanding education, including education of girls. As a result, India's literacy rate has risen over the past decade, with significant increase in the female literacy rate… and yet Pakistan has failed to take similar steps to overcome those problems". [Stern (2001)].

Unlike the policies of the past, explicit integration of populations into economic and development policies is a necessary prerequisite for development and poverty alleviation. These further reinforce achievement of population objectives as well as the improved quality of life of the population.

POPULATION GROWTH

The debate on population growth is not new. It was the Malthusian population trap that gave economics its name as a "dismal science". Malthus'

dismal outlook for the future of mankind was based on the basic principle of diminishing returns when one considers the land-labour ratios where increasing population to fixed land would eventually result in a chronic low level standard of living. His contention was that the only way to avoid such a fate was to practice "moral restraint" thereby limiting the number of births. Some might, therefore, consider Malthus as the father of the birth control movement.

The Malthusian population trap model is a simple and crude theory of the relationship between economic progress and population growth. As a theory it is subject to serious criticism on analytic and empirical grounds. Analytically, its failure to account for technical change over time and the assumption of the relationship of increased population growth and national income are unacceptable given the long run historical experience of advanced economies and in light of the more recent cases of many developing countries.

The evidence on the relationship between the fertility rate and per capita income in aggregate in developing countries is not supportive of this model. Fertility rates varied between 2.5 and over 7.0 with an average per capita income of under $1000. This demonstrates that per capita income fails to explain variations in population growth. Household income, or the distribution of income may be better predictors of population growth [Todaro (2001)]. See Fig.1.

A microeconomic approach by economists uses the application of standard consumer behaviour models (utility maximisation) by explicitly recognising desired number of children as a rational economic response relative to other goods. Such utility maximising economic models of fertility explain fertility behaviour in advanced economies and with some modifications can provide a good guide for developing countries too. The issue can be simplified by asking whether the people in the developing countries respond to changes in price or cost of children in the same manner as in advanced countries. For example, when these costs rise (opportunity costs) as a result of increased educational and employment opportunities for women or rise in school fees etc., and if parents respond by reducing their desire for more children, then one would accept such a model. Empirical evidence, though not conclusive, from a number of international studies support the basic premise of such models. The works of Schultz (1974); Birdsall (1988) and Dasgupta (1995) among others, are some of the examples of such an approach providing empirical evidence. Lant Pritchett (1994) offers strong empirical evidence that low fertility is determined mostly by economic, social, cultural, and educational improvements in a population and less so from the availability of family planning programmes.

Fig. 1.

The above is a brief account of the possible explanations or determinants of population growth. Like anything else in development economics, the relative importance of each of these many factors may vary from country to country. Nevertheless it offers a good guide for a country specific analysis and some implications for development and fertility. A simple implication is that family planning programmes (supply side) would be effective only when the population at large has the desire or motivation (demand side) for smaller families. This demand-side is determined by a host of economic, social, cultural, educational and other factors. It is important to note that many of these factors are not only important in understanding fertility behaviour (population growth) but are equally significant determinants of economic development. Thus the linkage between population growth and development.

The existence of this linkage is generally accepted, but the precise nature or causal direction between the two is a subject of continuing debate. The questions such as, 'Does population growth cause poverty?' or 'Does poverty cause population growth?' must be addressed in formulating effective population policy as well as development programme strategies. One aspect of this debate involves the opposing views of the North and South particularly when the population growth and environmental concerns are added to the equation. An excellent survey of this debate is provided by Najam (2001) in a recent paper. Important and interesting as some dimension of this broader debate may be, it is beyond the scope and the main purpose of this paper. The questions that are relevant for this paper, deal with the impact and importance of population growth to economic development in Pakistan, where population growth has been and continues to pose a serious problem along with other adverse development indicators *Population Growth in Pakistan*. (See Table 4.)

The overall record of Pakistan in terms of the usual population issues, both in absolute and relative terms, is a matter that deserves serious attention and analysis. Since Pakistan's inception, it has distinguished itself by a rapid rate of growth of its population. In 1950 it ranked the 13th largest country by population size but graduated to the 7th ranked country by 1996 and according to one UN projection will become the 3rd most populated country (after India and China) by the middle of this century if the recent growth is maintained (Table 1).

Among the projected top ten contributors to world population growth during 1995–2000, Pakistan stood third in absolute numbers and number one in rate of growth (Table 2). It is important to note that statistics provided here, and the projections derived from these numbers indicate a rate of growth of population in Pakistan to be 300 percent faster than China and 170 percent faster than India. Some would argue that in light of Pakistan's 1998 census, my numbers are over estimates. Regardless of statistical discrepancy, the point is that whatever set of numbers, are

Table 1

The 13 Largest Countries Ranked According to Population Size*

1950			1996			2050		
Rank	Country	Population (Million)	Rank	Country	Population (Million)	Rank	Country	Population (Million)
1	China	555	1	China	1,232	1	India	1,533
2	India	358	2	India	945	2	China	1,517
3	U.S.A.	158	3	U.S.A.	269	3	Pakistan	357
4	Russian Federation	102	4	Indonesia	200	4	U.S.A.	348
5	Japan	84	5	Brazil	161	5	Nigeria	339
6	Indonesia	80	6	Russian Federation	148	6	Indonesia	318
7	Germany	68	7	Pakistan	140	7	Brazil	243
8	Brazil	54	8	Japan	125	8	Bangladesh	218
9	United Kingdom	51	9	Bangladesh	120	9	Ethiopia	213
10	Italy	47	10	Nigeria	115	10	Iran	170
11	France	42	11	Mexico	93	11	Zaire	165
12	Bangladesh	42	12	Germany	82	12	Mexico	154
13	Pakistan	40	13	Viet Nam	75	13	Philippines	131

Source: United Nations, Population Division, Popin Web Site, p.1, 1998.

Table 2

Top Ten Contributors to World Population Growth, 1995-2000

No.	Country	Net Addition (in Thousands)	Percent of World Pop. Growth	Cumulative Percent
1	India	15,999	20.6	20.6
2	China	11,408	14.7	35.3
3	Pakistan	4,048	5.2	40.5
4	Indonesia	2,929	3.8	44.2
5	Nigeria	2,511	3.2	47.5
6	U.S.A.	2,267	2.9	50.4
7	Brazil	2,154	2.8	53.1
8	Bangladesh	2,108	2.7	55.9
9	Mexico	1,547	2.0	57.9
10	Philippines	1,522	2.0	59.8
	Sub-total	46,494	59.8	59.8
	World total	77,738	100	100

Source: United Nations, Population Division, *World Population Prospects: The 1998 Revision*, (forthcoming).

used, in both absolute and relative terms, Pakistan's population growth rate is still higher than desired by any definition. This is not to say that no progress has been made towards reducing the growth rate. What is significant is the fact that the current population growth rate is high (shown in Table 3), and so is the average total fertility rate per woman of 5.2 in Pakistan compared to 2.4 in Indonesia, 2.9 in Iran and 3.1 in India. [Population Reports (1996), p. 1]. This necessitates urgent attention for a comprehensive population policy.

An effective policy formulation has to be based on a thorough understanding of key determinants of population growth. Here one can draw on the experience of other countries, as well as to see if there are some special factors peculiar to the situation in Pakistan. Recent empirical evidence clearly shows that it is a combination of economic, social cultural (religious) and institutional factors which are important determinants of desired family size. Equally important are the related factors such as level of poverty, educational levels, gender equality and health services which interact in a complex manner to influence family size and population growth. [Todaro (2000).]

The idea that fertility decline must be viewed beyond the narrow vision of family planning services and in conjunction with improvements in social and economic development has received wide acceptance since the 1994 ICPD at Cairo. The south Commission in its report, stressed similar views, well before ICPD, as stated in the following quote [South Commission (1990)]:

Table 3

Demographic Indictors for Selected Asian Countries, 2001

Country	Mid-2001 Population (Thousands)	Annual Growth Rate	Population Projected to 2025 (Thousands)	Crude Birth Rate per 1000	Crude Death Rate per 1000	Total Fertility Rate per Women
1. Indonesia	214,840	1.3	272,911	20.8	7.2	2.4
2. Malaysia	23,639	2.0	31,326	24.4	4.4	3.1
3. Bangladesh	140,369	2.1	210,823	26.8	8.9	3.7
4. India	1,025,096	1.6	1,351,801	24.5	8.6	3.1
5. Iran	66,475	1.5	99,343	22.5	5.1	2.9
6. Pakistan	142,326	2.4	250,981	36.8	10.0	5.2

Taken from UN Web Site: http://www.unescap.org/pop/data_sheet/2001/table2.htm.

Table 4

Key Demographic Indicators, 10 Selected Asian Countries*

Country	Population (Thousands)	Annual Population Growth Rate	Crude Birth Rate per 1000	Crude Death Rate per 1000	Total Fertility per Woman	Population Under 14 (%)	Infant Mortality (per 1000)	Per Capita GNP (US$)	Per Capita Real GDP ** (PPP$)
China	1,253,567	0.9	16.0	7.1	1.8	25	37	620	2,604
Japan	126,380	0.2	9.6	7.1	1.4	15	4	39,640	21,581
South Korea	46,444	0.8	14.9	6.4	1.7	22	9	9,700	10,656
Indonesia	204,336	1.4	21.8	7.8	2.5	31	49	980	3,740
Malaysia	22,174	2.3	25.8	4.5	3.3	36	11	3,890	8,865
Bangladesh	124,178	1.6	26.8	9.6	3.1	38	77	240	1,331
India	974,912	1.6	25.0	9.0	3.0	34	71	340	1,348
Iran	63,471	1.5	21.0	6.0	3.1	40	39	1,648	5,768
Pakistan	141,680	2.7 [a]	35.8	7.7	5.0	42	73	460	2,154
Turkey	64,747	1.5	21.7	6.5	2.5	29	43	2,780	5,193
Avg. for the group	302,189	1.45	21.8	7.17	2.7	30.7	45.7	6,030	6,324

Source: *UN, ESCAP DATASHEET (1998). UNDP, Popin Website.

[a]This is the figure quoted, Actual difference between crude birth and death rates gives a higher rate of 2.8.

**UNDP, Human Development Index, 1997.

"While family planning measures are vitally necessary, they are more effective as security and living standards improve. Poverty must be eradicated, for only then will it be possible to create the conditions in which people are more likely to see virtue in smaller families".

Pakistan's renowned development economist, late Mahbub-ul-Haq vigorously expressed this view that the solution to the problem of population is to be found in the solution to the problem of poverty. In his view,

> "Population growth is a developmental issue, not a clinical problem. No one denies today that top priority must be given to reducing high rates of population growth in the developing world. The differences are on strategies, not on objectives. Family planning must be regarded as an integral part of new models of sustainable human development. Divorced from such development models, and pursued as condom-distribution programmes with single-minded zeal to meet 'unmet demand' they will fail… We cannot slip a condom on poverty." (1994.)

The implications of this broader view of population growth and economic development are indeed far reaching. In terms of policy formulation it is imperative to interpret this carefully and precisely. Otherwise the temptation might be to ignore the population problem until, for example, the poverty question is resolved. It is true that the experience of advanced countries clearly demonstrates that economic improvement took care of the population growth problem and now in many western countries the problem is too low birth rates. Similarly there is clear evidence that despite continuing poverty, India and Bangladesh have experienced a much lower population growth rate than Pakistan.

It is, therefore, a question of an appropriate population policy that would also help simultaneously economic development objectives. This requires a closer look at the demographic dynamics by decomposing aggregate population growth rates.

POPULATION DYNAMICS

The overall population growth rate can be decomposed into three components: (a) unwanted fertility (unmet need), (b) high desired family size, and (c) population momentum. Population momentum refers to the tendency of population to continue growing after the replacement-level-fertility has been achieved due to a large proportion of young persons in the population.

A recent Population Council and Overseas Development Council Conference report provides an excellent source of material on this issue. In addressing global population growth, they report that,

> "Disaggregated projections of global population growth show that population momentum alone will account for an increase in less

developed countries from 4.5 billion (1995 level) to 7.3 billion, by the year 2100; high desired fertility will raise the total an additional one billion to 8.3 billion; and unwanted fertility will increase it to 10.2 billion. By the year 2040, virtually all of the global population growth could be due to momentum alone." [Population Council (1998), p. 3]

Such a disaggregation exercise is important for better understanding of population growth issues. To the degree that the composition of population growth can vary substantially across countries and overtime for a given country, specific evaluation of different components is of vital importance. For example, in India, the Philippines, and Kenya the population momentum alone will account for 61 percent, 66 percent and 68 percent of the future growth respectively. In the case of Sub-Sahara Africa, this factor's contribution to the future growth is less than 50 percent and the most significant factor remains high desired family size. Thus a given policy for India will not be appropriate for Sub-Sahara Africa. One must therefore avoid "one-size fits all" approaches in dealing with population growth issues.

The following discussion examines each of the three components with respect to their relative importance and some suggested policy responses for Pakistan.

Unwanted Fertility

A measure of unwanted fertility is an important dimension of population growth in many developing countries. It is a good indicator of the gap between desired family size and the actual size. The size of the gap equals unmet need and is determined by a host of socio-economic factors and is usually estimated through surveys of women of childbearing age. For example, in Population Report (1996), the total for the developing countries was estimated to be 100 million women who had unmet needs. According to this source, the unmet need for Pakistan was 5.7 million, 31 million for India, 4.4 million for Bangladesh and Indonesia and 3.9 for Nigeria [Population Reports (1996), p. 1]:

If 5.7 million women had an unmet need for contraception in the 1990s, and assuming this number has been reduced considerably since then, to say 4 million, it is still a very significant indicator for the potential to reduce this component of fertility. Even if 50 percent of this group ends up with one unwanted child born it would add 2 million more to the population.

An appropriate policy response to deal with this problem must be based on the reasons for not using contraception, despite expressed desire. Table 5, lists the relative importance of some of the factors. It is worth noting that neither availability nor expense were prominent reasons. Husband's preferences, religious reasons and lack of knowledge were the main motives. In light of this, it is obvious that the simple supply side response (i.e. family planning services) would prove ineffective in absence of increased education and improvement in other development indicators.

Table 5

Distribution of Ever Married Women Who Are Non-users of Contraception*
by Reason for Never Using Contraception by Expenditure Quintile

	First Quintile	Second Quintile	Fifth Quintile	Overall
Husbands Prefer Not to	38.9	38.8	30.9	35.6
Bad Side Effects	4.5	9.6	8.5	7.0
Expensive	5.9	6.0	1.7	4.3
Not Available	0.6	4.6	3.1	3.1
Did not Know Enough	18.7	10.3	9.8	12.6
Ineffective Methods	4.3	0.5	3.6	2.3
Religious Reasons	18.9	17.0	16.9	17.7
Husband Ill or Away	2.1	4.1	2.7	2.3
Other	5.9	8.2	22.8	14.9
Total	100.0	100.0	100.0	100.0

Source: World Bank tabulations from PIHS (1991). (Reproduced from Pakistan 2010, 1997).
    * Excluding those who state they wanted more children.

This task is neither easy nor simple as ultimately it would require reducing the impact of all such forces which in their totality act as a wall of resistance toward adopting reproductive behaviour conducive to lowering fertility. For lack of a better term, we can denote all these forces taken together as the *knowledge factor* which may be conceived as an index.[1] These three factors: husband's preferences, religious reasons, and lack of contraception knowledge can be measured in terms of this index. In these terms, education defined in broad terms, is the answer as it would raise the numerical value of this index. The impact of religion and the role of religious leaders are discussed in the next section.

High Desired Family Size

High desired family size still remains an important component of the population growth in Pakistan. It too is determined by socio-economic factors. Conceptually, and based on the historic experience of advanced countries, this can be completely eliminated over time. Developing Islamic countries, like Bangladesh, Iran and Indonesia have successfully reduced their total fertility rates to 3.1, 2.8 and 2.6 respectively, compared to Pakistan where it is still about 5. How can this be explained? In addition to the generally accepted socio-economic determinants of high fertility, it can be argued that in the case of Pakistan the high desired family size might be explained in terms of lack of effective action to enhance the *knowledge factor*.

The *knowledge factor* in Pakistan manifests itself as a result of the complex interacting forces of strong conservative traditions, the role of woman, the level of

[1]Conceptually, such an index can be viewed as similar to the Human Development Index.

poverty, the level of education and the perceived notions of religious dictates regarding reproductive behaviour. The relative sustained strength of these factors in Pakistan, in contrast to say Iran, is partly a reflection of a failure of effective population policy due to the lack of strong commitment on the part of (i) political leadership, (ii) religious leadership, (iii) intellectual leadership, and (iv) neglect of women's education. These four factors alone stand out in Iranian experience as instruments of significant fertility reduction and offer a good example for Pakistan to follow [Aghajanian (1995)].

In the western media, Iran has been viewed as an Islamic extremist state where the government itself is dominated by religious leaders. It offers an excellent example of the power of state in both increasing and reducing fertility. After the 1979 revolution, Iran's rulers urged Iranians to produce more children and they lowered the legal age of marriage to nine. The response was an unprecedented natural increase in population growth of 3.9 percent, the highest ever recorded. Then in 1989, there was a complete turn around and new population stabilisation efforts and promotion of reproductive health received top priority with the blessings of the religious leaders. The policies were so successful that population growth rates declined to 1.4 percent and Iran was the proud recipient of the UN Population Award in 1999.

Aghajanian and Mehryar (1999) provide an interesting and useful analysis of the fertility transition experience of Iran. The statistics in Table 6 are indicative of an impressive decline in the population growth rate, total fertility rate and age at marriage. The positive improvements were particularity significant in the 1990s when the population stabilisation policies were actively pursued with full support of religious leadership and a strong and sustained commitment of government leaders.

Table 6

Fertility Transition in Iran, 1966-1996

Year	Population in Millions	Average Annual Growth Rate Percent	Urban Crude Birth Rate per 1000	Rural Crude Rate per 1000	Percent Ever Married 15–19	20–24	Total Fertility Rates Children per Women
1966	25-7	3.1	45.0	52.0	46.5	86.6	
1976	33.7	2.7	32.7	49.1	78.6	78.6	63
1986	49.4[a]	3.8[b]	37.5	50.7	33.5	76.6	7.0
1991	55.8	2.5	34.8	45.2	25.5	67.1	5.5
1996	60.1	1.5	25.1	33.1	18.6	66.7	3.4

*Derived from Aghajanian Mehryar (1999).
[a]Includes 1.8 million Afghan refugees.
[b]Excluding Afghan refugees.

Additional factors which were also significant include expansion of the network of rural health workers (behvars), dramatic increase in school enrollment of the female population (from 54.7 percent to 83.2 percent for 10-14 age from 1976 to 1995), and substantial progress in the female literacy rate (by 1996, over 80 percent of woman age 15-29 were literate).

The Iranian experience of unprecedented decline in total fertility from 8.4 children to 4.6 children per woman (a 45 percent decline) during a period of only 10 years is explained by two group of factors [Aghajanian and Mehryar (1999), p. 12]

> "One group includes all the changes which led to the socio-structural precursors for fertility decline and motivation for a smaller family size. The other group of factors include direct policy changes by the government regarding population and birth control during this period".
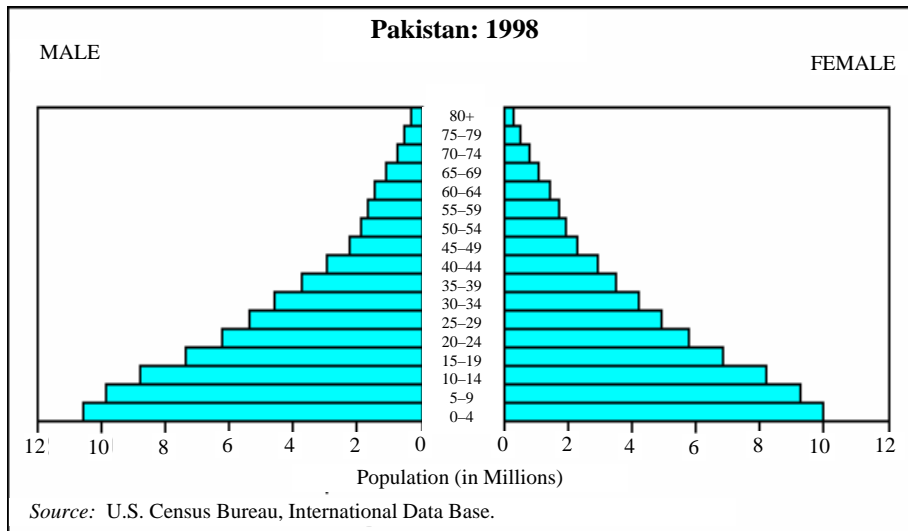
The first group of these factors were mainly reduced infant mortality (through a better network of health workers), increased female enrollment in schools with the accompanying prevalence of working outside the home and economic factors such as the increased costs of raising children and increased costs of marriage (which led to a higher age of marriage). The importance of the governmental and the religious leadership role is best summed up by the authors (p. 11).

> "It is clear that family planning within a sound reproductive health policy can be acceptable and supported and encouraged by religious and political leaders in a Muslim country… Once the educated technocrats described the issue of rapid population growth and the problems faced by the government, the religious leaders gave their complete support. In any Muslim country, interaction between religious leaders and government technocrats must be considered a vital part of programme implementation. Such interaction brings about political expressions by the clergy and religious politicians and creates an environment of acceptability among the common people with respect to the issues of birth control and family size limitations. Such a supportive environment makes the idea of smaller family size legitimate and acceptable for couples of all classes and all areas".

Population Momentum

This component of population growth is very significant for Pakistan as it has a very large (over 40 percent) proportion of its population under age 15. Even if the country achieves a fertility rate equaling replacement level, the population will continue to grow because of the large size of these young age cohorts. A look at the population pyramid, shown in Figure 2, clearly illustrates the scope and magnitude

Pakistan: 1998

MALE

FEMALE

80+	
75–79	
70–74	
65–69	
60–64	
55–59	
50–54	
45–49	
40–44	
35–39	
30–34	
25–29	
20–24	
15–19	
10–14	
5–9	
0–4	

12   10   8   6   4   2   0   0   2   4   6   8   10   12

Population (in Millions)

Source: U.S. Census Bureau, International Data Base.

Fig. 2. Population Pyramid for Pakistan.

of this component for potential population growth. Since the size of this group is known, simple extrapolation into the future, holding the current socio-economic determinants constant, provides a scary scenario of population growth. By the same token, it points to the urgency to devise an appropriate set of population and development policies to minimise this potential growth.

Addressing the population momentum problem may require delaying the age at marriage and childbearing and promoting birth spacing through expanding education and improving women's socio-economic opportunities. Here again, Iran's example is a good model. Delay in age at marriage is a powerful instrument. For example, in the case of Bangladesh it is estimated that by year 2100 its population will be 253 million. Momentum alone will produce a population of 244 million, but his number will be 223 million and 206 million if the median age of marriage is delayed by 2.5 year and 5 years respectively [Population Council (1998), p. 5].

The age at marriage in Pakistan is considerably lower in comparison to other countries with similar socio-economic indicators. In a recent study [Mahmood (2001)], it is shown that (i) the median age at marriage is 18.3, (ii) education of women is the only factor contributing to an increase in age at marriage (age at marriage with secondary education is 22 years vs. 17.7 with no education) and (iii) the socio-economic norm of marrying early is still strong and prevalent in Pakistan. Commenting on teenage mothers the authors state, "A substantial proportion of women get married during adolescence (13–20 years) and are under social pressure to produce an offspring"… over 10 percent of the teenaged females have begun childbearing (p. 7).

This rather high incidence of marriage at a younger age, combined with the reality that 12.9 million females are aged 15–49 (46 percent of the total 28 million females), creates a need for serious attention to the population momentum problem.

POPULATION POLICY FRAMEWORK

Despite the onset of demographic transition since the late 1990s, Pakistan still faces serious population problems, as the previous discussion has outlined. The adverse consequences of population effects on other development efforts (i.e. poverty, education, gender inequality, health and nutrition standards etc.) are obvious. Equally obvious is, therefore, the need for an effective population policy. It is suggested here that such a policy must be assigned a top priority in the overall development plans of the country. The point that a rapidly growing population is both a challenge and a constraint to development prospects in Pakistan was addressed in an earlier paper and a plea was made for action on the policy front [Siddiqui (1998)].

Based on the policy experiences of other developing countries and the recent demographic realities in Pakistan, an effective population policy must address the following three objectives:

1. Reduction in the rate and incidence of unwanted fertility.
2. Reduction in demand for large size families.
3. Greater investment in adolescents.

The issue of unwanted fertility and low level usage of contraception in Pakistan is well known and documented [Bongaart Bruce (1995); Casterline, *et al.* (2001); Mahmood (1992, 1996); Hashmi, *et al.* (1993); Robey, *et al.* (1996)]. These studies provide evidence of a considerable gap between stated fertility preference and reported contraception behaviour. The size of the gap indicates latent demand for contraception use. The larger the gap (unmet need) the greater is the potential positive benefits from programme improvements for any given set of socio-cultural determinants. The real increase in contraceptive use would require changes in the socio-cultural determinants. For example, women with expressed desire for fewer children might be prevented to achieve this desire due to husbands' preferences, religious reasons, lack of knowledge, or health reasons rather than access to family planning services. Thus, policy and programme initiatives, which reduce these barriers to contraceptive use are vital. In other words the specific objective of increased contraceptive usage requires increasing the *knowledge factor*. To increase the *knowledge factor* requires broader policy approaches dealing with formal education as well as advocacy.

The second goal, of reducing demand for high family size is still very important in the Pakistani context. If the goal is two surviving children, policy options would require creation of conditions for small families. The population

policy component may deal with advocacy issues, but the greatest long term success will be the result of better education, improving the status of women and general economic improvement of the poor. Here again, the importance of the *knowledge factor* is obvious, particularly when we consider the population growth, economic growth and human development linkages. [Ranis, *et al.* (2000)].

The third goal of investment in adolescents is an essential component of any policy formulation considering the impact of population momentum problem faced by Pakistan with over 40 percent of its current population being so young. Not only does this group impose tremendous dependency costs today, but failure to invest in their education or *knowledge factor* would make the problem worse in the future. Consequences of a successful policy would result in: (i) delay in age at marriage, (ii) reduction in size of family, and (iii) increased contraception usage.

Despite the existence of a family planning programme since 1965, Pakistan has never really had an effective population policy. As a result, this small country now has a population of over 140 million of whom over 40 million live in utter poverty. Even under the most optimistic future population growth scenario it will end up with a population of over 213 million by year 2025 (assuming a growth rate of 1.5 percent during 2010–2020 and only 1 percent from 2020 onwards).

A meaningful policy starts with a sound concept and is based on recognition of the problem. Most importantly, its success demands strong leadership, commitment and courage, widespread support and adequate resources. Experience of countries like Iran, India, Egypt and Kenya indicate that political commitment resulted after a prolonged period of national debate. A national debate has yet to occur in Pakistan, which would provide the necessary strength to the leadership at all levels and would also be an important source of information to the people. Only through strong political commitment, strategies necessary for widespread support become feasible and the adequate flow of resource availability is ensured.

Solid commitment by the leadership involves their thorough (i) understanding of the rationale for reducing population growth, and (ii) the legitimacy of the programmes used to reduce fertility. The contentious nature of the second issue may, at least, partially explain the lack of leadership as it arises from the particular socio-economic and religious factors in Pakistan (i.e. low level of *knowledge factor* index).

The value of the *knowledge factor* index will rise over time through improvements in education, particularly female education. But, in the short run, a good population policy can be a catalyst in its direct effect on increasing this index when religious leadership is part of the commitment. The role of religious leadership must be reevaluated so that instead of being a problem in reproductive behaviour it is an important part of the solution. The experience of Iran provides ample evidence of the importance of this issue and serves as a model for Pakistan. A well-conceived and implemented strategy of education and communication (IEC) must have religious leadership as a full and active partner to achieve the desired results in

altering reproductive behaviour. The role and status of women and husbands' preferences are two important determinants of contraceptive usages. Both are subject to religious beliefs. The positive attitude of religious leadership can and must play a significant role in this regard.

The development agenda of Pakistan, according to the Planning Commission includes a ten point programme of poverty elimination. By year 2025, it aims to eliminate poverty, increase per capita income from Rs 24000 to Rs 69,000, male and female adult literacy rate of 100 percent, and to provide clean water, air and universal health care for all its citizens. It also mentions population growth rate of 1 percent by year 2025. Of course many of these goals would positively impact fertility reduction. As a policy statement there is not even a mention of the need or role of population policy. Even under the most optimistic scenario, attainment of these goals would be problematic. Without an explicit and effective population policy, success on other fronts would indeed be extremely difficult.

In conclusion, Pakistan still has a population problem that it must deal with by a comprehensive and effective population programme. Failure to do this would magnify the current problems which are a result of previous policy neglect. Some modest decline of recent fertility rates should not lull the leadership into complacency because the underlying population momentum continues to pose a real and significant problem.

REFERENCES

Aghajanian, Akbar (1995) A New Direction is Population Policy and Family Planning in the Islamic Republic of Iran. *Asia Pacific Population Journal* 10:1, 3–20. March.

Aghajanian, and Mehryar Amir (1999) Fertility Transition in the Islamic Republic of Iran: 1976-1996. *Asia Pacific Population Journal* 14:1, 21–42.

Asian Development Bank (2001) Country Strategy and Programme Update (2002-2004). Pakistan, July.

Birdsoll, Nancy (1988) Economic Approaches to Population Growth. In Hollis B. Chenery and T. N. Shinwasah (eds.) *Handbook of Development Economics* Vol. 1. Amsterdam: North Holland.

Casterline J., Sathar, Z., and Hague H. (2001) Obstacles to Contraceptive Use in Pakistan: A Study in Punjab. Population Council. Population Council Web Site. (Policy Research Dirlsim Working Paper No. 145.)

Chaudry, Shahid A. (2000) Pakistan's Economy: Potential and Challenges. *The Pakistan Development Review* 39:4, 287–292.

Dasgupta, P. (1995) The Population Problem: Theory of Evidence. *Journal of Economic Literature* 33, 1879–1902.

Facing the Future, Economic and Social Impacts of Population Growth (1998). Website: www.facingthefuture.org/econ.html

Hakim, Abdul (2000) Are Status of Women and Contraceptive Prevalence Correlated in Pakistan. *The Pakistan Development Review* 39:4, 1057–1073.

Jones, Gavin W. (1999) Population and Human Resources Development. *Asia-Pacific Population Journal* 7:2, 23–49.

Klaser, Stephan (1999) Does Gender Inequality Reduce Growth and Development? Evidence from Cross Country Regressions. (World Bank PRP Working Paper Series, No. 7.)

Mahmood, Naushin and Durr-e-Nayab (2000) An Analysis of Reproductive Health Issues in Pakistan. *The Pakistan Development Review* 39:4, 675–693.

Mahbub-ul-Haq (1994) We Cannot Slip A Condom on Global Poverty. *The Earth Times* 1:29.

Najam, Adil (n.d.) A Developing Country Perspective on Population and Environment, and Development. *Population Research and Policy Review* 15:1. Website: www.mit:edu/people/anajam/pop2.html

Population Council (1998) What Can be Done to Foster Multisectoral Population Policies: A Summary Report of a Seminar. Population Council.

Population Information Programme (1996) *Population Report* 24:1. John Hopkins, Baltimore. Website: www.Thucco.org/pr/j43edsum.stm.

Siddiqui, F. A. (1998) Population Growth and Development Prospects for Pakistan. *The Pakistan Development Review* 37:4, 557–574.

Todaro, Michael P. (2000) *Economic Development, 7th Edition.* New York: Addison Wesley.

UN Population Summit (2002) Tool Kit for Women. Website: www.earthsummit 2002.org/toolkits/women/un

World Bank (2001) *Engendering Development Through Gender Equality in Rights, Resources, and Voice*. Washington, D.C.: World Bank, Website.

World Bank (1991) *World Development Report, 1991.* New York: Oxford University Press.

Comments

1.

Having been associated with the population field for over three decades and having seen the heyday of the issue in the 1960s and the 1970s, and the fatigue with which the subject is being dealt with in the 1980s and 1990s, does my heart good to see the subject put in perspective, in its relationship with human progress and development. Dr Fakhari's paper highlights the need for strong inconsistent population policy in the context of elastic development in the country to get it out of debt trap the slowing economic growth and the escalating poverty. He has succinctly examined the determinants of high population growth and its linkages with poverty, inequality as well as social in economic engender inequality. His comments on the fact that increase in per capita income does not lead to a better quality of life in the majority of the people unless other social indicators such as health, literacy, gender inequalities and high fertility are addressed. It takes the case of economic growth of 4 percent of Pakistan almost negated by the 2.5 percent population growth rate in the decades of 1990s. Drawing home the point that an inexplicit integration of population in the economic development policies is necessary for development and poverty elevation. He comments that population problem cannot be addressed only by the supply side of the population programme but must be a companied by a demand generation strategies by addressing the concerns of non-users such as perceived spousal disapproval, lack of the adequate knowledge regarding how and where of contraceptive delivery and perceived religious opposition. He sites success stories from Bangladesh, Indonesia and above all Iran, where they have a strong *pro-netalistic* culture. The states sponsored a complete turn around toward population stabilisation and reproductive health lowering the growth rate from 3.92 to 1.4. Above all Imam Khomani's '*faatwa*' in support of family planning followed by enrolling the involvement of religious leaders and an element did we in Pakistan continued to sweep under the carpet except for some very successful NGOs initiatives. These are the examples for Pakistan to illuminate. Dr Fakhari's demographic figures are not upto date as the rest of his presentation presumably because he is being out of the country for so long. He estimates TFR and PGR 5.2 and 2.7 respectively against the latest NIPS study figures of 4.8 and 2.1. However, he is right on the mark when he points out that there is room for addressing the population momentum in Pakistan. Where approximately 60 percent of our population is below 25 and likely to really rock the demographic boat in the next 20 years. Even if we succeed insignificantly lowing birth rate. Summing up the complex nature of the factors to confront debt growth and poverty alleviation, he stresses the

need for an effective and consistent population policy by reducing unwanted fertility through culturally acceptable quality services reducing demand for large families by reducing IMR, CMR and MMR. And investment in adolescent through in attitudes formation in supports for the small family norms. The significant points brought out in his paper is the need for the strong and inconsistent population policy back by political commitment at the highest level. Factors which have frequently absent from our national agenda. A case in point being his reference to the Planning Commission's 10 point programme of poverty elimination which does not include the population related issues. However, it is nice to be able to re-assure him that now at last there is an attempt to address development in holistic manner and the President his setup a task force for human development which focuses on basic health including reproductive health in family planning, basic education and income generation. Hopefully, as a result of this new inclusive development paradigm Pakistan will be able to successfully confront the issues of debt growth poverty and population exposure.

Begum Surryia Jabeen

President Task Force on Human Development,
Islamabad.

2.

First of all, I would like to appreciate Prof. Siddiqui's motivation to write about Pakistan's development concerns with a particular focus on population as an issue of special significance in the whole scenario. The debates and deliberations done on poverty, growth and development on this forum have rarely emphasised population growth as a frontline cause of the problem. In fact, population which lies at the core of all planning procedures and policy formulation is not given its due place in the national reform agenda.

Turning my attention to the contents of the paper, I could not agree more with Prof. Siddiqui's basic stance that Pakistan's population growth needs to be reduced to maximise its development outcome. In this context, the paper addresses a whole spectrum of issues pertaining to population growth, economic development, poverty and their interlinkages. While making the argument for the importance of population policy in Pakistan's development context, Prof. Siddiqui himself acknowledges the fact that the two have a cause and effect relationship and it is hard to determine whether population growth causes poverty or vice versa. He clearly contends that while family planning measures are necessary, poverty must be eradicated to create the conditions in which people are more likely to see virtue in having small families. Hence, with the limited financial resources that the country has at hand, the choice to prioritise poverty reduction strategies versus population growth reduction strategies remains a policy question. On the one hand, it is argued that social and economic conditions which constrain the use of family planning must be changed to generate more than a marginal decline in fertility. On the other hand, the emphasis on the provision and improvement of supplies of contraceptives is considered important for an increased and sustained use of family planning even with low levels of socio-economic development. It is not clearly spelled out in the paper which strategy would be more rewarding to have a stronger impact on reducing population growth and improving the quality of life of the people, because both affect and reinforce each other.

While reading through the paper, one tends to lose track of the argument made in the beginning that Pakistan's population growth is the fore runner of social and economic problems, including poverty, unemployment, low education etc. The issue becomes more challenging when we consider that other countries with lower socio-economic conditions and sustained poverty such as Bangladesh, Indonesia and India have successfully achieved high levels of contraceptive prevalence and decline in fertility. Given this, it is crucial to determine what policy prescriptions would be more effective in changing the fertility behaviour of Pakistani couples. The paper's

contents lack this analysis and the case made for a strong population policy for Pakistan remains inconclusive in this context.

Moving away from the arguments of population and development interlinkages, the author then highlights population growth problem in Pakistan in terms of unwanted fertility, high-unmet need, high desired number of children and population momentum built in the age structure. There is no dispute that all these issues merit due attention from population policy perspective. Looking at the high unmet need in Pakistan, the demand for family planning services does not appear to be a problem. This demand needs to be simply matched with the supply side factors —an efficient service delivery system. Based on the situation analysis of these demographic issues, a case is made in the paper for an integrated and effective population policy for Pakistan. Yet the paper remains silent on interpreting what an effective and integrated policy would be? What have been the successes and failures in programme interventions and what effective approach would be more viable to have the desired outcome?

If the thrust of the paper is on the importance of an effective population policy, there is a need to review the policy options and then link it with the situation at hand and the ground realities to justify the argument made in the beginning. In this context, I would like to mention that a paper on policy shifts and problems of their implementation was presented in another session on demographic issues which could provide some input for linking the population policy and programme performance issues. However, the basic message of the paper is clear and quite relevant for Pakistan's population policy concerns. However, I feel that population issues and the illustration cited for other countries need to be reorganised in a systematic way to make a strong case for an effective population policy and programme for Pakistan.

Naushin Mahmood

Pakistan Institute of Development Economics,
Islamabad.