
UN/POP/PFD/2001/14

18 June 2001

ENGLISH: ONLY

**WORKSHOP ON PROSPECTS FOR FERTILITY
DECLINE IN HIGH FERTILITY COUNTRIES**

Population Division

Department of Economic and Social Affairs

United Nations Secretariat

New York, 9-11 July 2001

FERTILITY IN PAKISTAN: PAST, PRESENT AND FUTURE*

Zeba A. Sathar**

*This document was reproduced without formal editing.

**Population Council of Pakistan, Pakistan.

The views expressed in this paper are those of the author and do not imply the expression of any opinion on the part of the United Nations Secretariat.

INTRODUCTION

Fertility in Pakistan has shown a widely acknowledged resistance to change. Because of sharp declines in mortality in the post-World War II period, the population of Pakistan was growing at the rate of 2.7 percent per annum around 1960. In response to concern about rapid growth, a national policy of slowing population growth was articulated in the 1960s, with a program of family planning services as the main tool. During its first two decades, however, the program appeared to have had hardly any impact on fertility: the total fertility rate (TFR) continued to hover between six and seven births per woman throughout the 1970s and 1980s, and the population growth rate approached and possibly exceeded 3 percent per annum.

Finally at the turn of the Century, there is definite evidence of fertility decline in Pakistan. Significantly, all estimates for the 1990s for the first time fall below 6.0 births per woman to a little less than 5. This is in contrast to numerous surveys that indicated that the TFR remained above six births per woman in the 1980s. Furthermore the latest Census held finally in 1998, whose provisional results were released in July 1998, indicates that the average population growth rate for the period 1981–98 was 2.6 percent per annum, a decline from previous intercensal rates and consistent with a decline in fertility in the 1990s. An Inter-Ministerial Committee on the Population growth rate reached a consensus that the population growth rate for 1998 was 2.4, placing the current growth rate in 2001 at 2.2 or even less. This paper intends to highlight the major trends in fertility and its proximate determinants and to assess the role of supporting factors such as public policy and social and economic determinants and lastly to assess prospects for further fertility change.

FERTILITY: PAST AND PRESENT TRENDS AND DETERMINANTS

With a population of 130.5 million in the 1998 Population Census, Pakistan is the world's seventh most populous country. According to UN projections, it will become the third most populous by the year 2050. It is one of only ten countries as of the 1998 with a population in excess of 100 million in combination with a TFR in excess of five births per woman (United Nations 1999). Pakistan stands apart from its populous neighbors in South Asia, all of which (with the exception of Nepal) experienced substantial declines in fertility prior to 1990 and therefore shows markedly lower fertility in 2001.

Intercensal growth rates between 1951 and 1981 indicated a rise in the population growth rate in the 60's and 70's largely attributed to the sharp declines in mortality seen in the 50's and 60's, which were not followed by any decline in fertility in those decades. Intercensal growth rates actually peaked in the 1961-72 period and continued at fairly high levels in 1972-81 after which they began to decline. The 1981-98 period records a decline to 2.6 indicating that growth rates in the last few years of the 17 years intercensal period are likely to have been lower. While the validity of the 1998 Census has generally been endorsed, a post enumeration survey was not carried out. A revised figure issued by the Census Organization places Pakistan's population in 1998 at 131.6 million and in 2001 this is likely to be closer to 140 million. Demographic surveys from the 60's until the 90's also concur that growth rates peaked in the 70 and 80's and have come down quite sharply for the first time since then. The PDS 1998 shows a rate of natural increase of 2.4, which is one of the lowest figures recorded since the 60's.

Table 1: Population Growth Rates in Pakistan (1901-1998)

Intercensal Growth Rates		Rate of Natural Increase	
Date of Census	Growth rate	Date of Survey	Growth rate
1901	1.6	1962-65 (PGE)	2.6
1911		1968-71 (PGS)	2.4
1921		1976-79 (PGS)	3.1
1931		1984-88 (PGS)	3.2
1941		1989-94 (PDS)	2.9
1951		1995-97 (PDS)	2.6
1961		1998 (PDS)	2.4
1972			
1981			
1998		3.0	
	2.6		

Sources

1. 1951, 1961, 1972, 1981, 1998 Population Censuses of Pakistan
2. PGE: Population Growth Estimation Experiment
3. PGS: Population Growth Surveys
4. PDS: Pakistan Demographic Surveys

The main contribution to rapid population growth in the recent past is most definitely high fertility. Though accepted as high by any standards, internationally and within the country, demographers continue to struggle to establish the exact level of fertility in Pakistan. Whereas in the 1960's the PGE data established fertility levels of between 6 and 7 births per woman, the Pakistan Fertility Survey of 1975 with its full reproductive histories and relatively better data collection procedures placed fertility at 6.3 births per woman for the mid-seventies. For the 70's and 80's we relied on four major surveys to establish the most recent trends in fertility. These were the Population Labour Force and Migration Survey of 1979, the Pakistan Contraceptive Prevalence Survey of 1984-85, the Pakistan Demographic and Health Survey of 1990-91 and the Pakistan Demographic surveys of 1984-90. As can be seen in Table 2, there is considerable divergence in the fertility rates presented by these various surveys: estimates for the late eighties vary from 5.4 reported by the PDHS and 6.8 reported by the PDS 1988. A more careful assessment of the latest PDHS data with scrutiny of its reproductive histories and adjustments for data errors provides a fertility rate of 6.1 for the period 1986-91 (Juarez and Sathar, forthcoming).

Data from the 90's demonstrates a distinct decline in fertility levels. Collectively, recent estimates imply a modest decline of around one birth between the 80's and 90's. The Pakistan Contraceptive Prevalence Survey, which did not collect birth histories, yielded an indirect estimate of total fertility rate of 5.6 for 1994-95 based on information about last birth. The Pakistan Fertility and Family Planning Survey (PFFPS) of 1996-97 (NIPS 1998) provides a direct estimate of 5.4 for the period 1992-96, which suggests a slightly more rapid decline during the 1990s than implied by the previous surveys. The extrapolated total fertility rate in 2000 is around 4.8 births per woman or less. Finally the PIHS of 1998 suggests that fertility in Pakistan may have fallen to levels below a TFR of 5.

Table 2: Trends in Total Fertility Rates Depicted by Various Data Sources

1960's		1970's		1980's		1990's	
Source	TFR	Source	TFR	Source	TFR	Source	TFR
PGE 1962-65(CD)	7.95	PLM 1975-79	6.50	PCPS 1984-85	6.0	PCPS 1994-95	5.6
PGE 1962-65(LR)	6.09	PLM 1970-75	7.10	PDS 1984-88	6.9	PFFPS 1992-96	5.4
NIS 1968-69	5.02	PFS 1970-74	6.28	PDHS 1986-91	5.5	PIHS 1994-96	4.5
PGS 1968-71	6.04	PFS 1965-69	7.07	PIHS 1987-91	6.3		
		PGS 1976-79	6.90				
Average	6.3		6.8		6.2		5.1

Sources: PGE (1962-65) CD: Population Growth Experiment Rates Adjusted by Chandra - Deeming Formula

PGE (1962-65) LR: Population Growth Experiment – Rates Based on Longitudinal Registration

NIS (1968-69): National Impact Survey

PGS (1968-71): Population Growth Survey, 1968,1969,1971

PLM (1970-74 & 1975-79): Population Labour Force and Migration Survey 1979

PFS (1965-69 &1970-74): Pakistan Fertility Survey 1975

PGS (1976-79): Population Growth Survey, 1976,1977, 1978, and 1979

PCPS (1984-85): Pakistan Contraceptive Prevalence Survey 1984-85

PDS (1984-88): Pakistan Demographic Surveys 1984,1985, 1986, 1987, and 1988

PDHS (1986-91) Pakistan Demographic and Health Survey 1990-91

PIHS (1987-91): Pakistan Integrated Household Survey 1991

PCPS 1994-95 Pakistan Contraceptive Prevalence Survey

PFFPS 1996-7 Pakistan Fertility and Family Planning Survey

PIHS 1994-96: PIHS 1998 Pakistan Integrated Household survey

Contraceptive use rates had hardly risen in the period 1975-91 (Table 3) and supported the argument that marital fertility could not have declined by very much until the late eighties when the survey data indicate a modest decline. A rise in the contraceptive prevalence rate from 5 percent in 1975 to 9 percent in 1985, to 12 percent in 1991 was hardly support for any fertility control within marriage. However, the 1990's were a period of distinct departure from this trend with a sharp rise in contraceptive prevalence rates. Prevalence among currently married women rose from 12 to 18 percent according to the Pakistan Contraceptive Prevalence Survey of 1994-95 and to 24 percent in the Pakistan Fertility and Family Planning survey of 1996-97. It is currently projected to be 30 percent, rising at about 2 percent a year. Thus while earlier, any change in fertility was attributed to factors other than contraceptive use, it is now a major contributor to the lower levels of fertility seen in the 1990's. As high as almost 38 percent of currently married women in 1997 had ever used a contraceptive method.

Table 3: Contraceptive Use Amongst Currently Married Women 1968-97

	National Impact Survey	Pakistan Fertility Survey	Population Labour Force and Migration Survey	Pakistan Contraceptive Prevalence Survey	Pakistan Demographic and Health Survey	Pakistan Contraceptive Prevalence Survey	Pakistan Fertility & Family Planning Survey
	1968-69	1975	1979	1984-85	1990-91	1994-95	1996-97
Current use of contraception	5.5	5.2	3.3	9.1	11.9	17.8	23.9
Ever use of contraception	12.1	10.5	4.6	11.8	20.7	28.0	35.7

As already pointed out, until recently any hints of a fertility transition appeared to be largely a result of the rising age at marriage of females from 1961 until 1991 (Table 4) and only a very moderate rise in contraceptive prevalence. Between 1981 and 1998, the proportion of women aged 15-19 who were never married increased from 70.6 to 79.4 percent, while the singulate mean age at marriage increased from 20.2 to 21.7 years. While there was less of a change in marriage patterns of males their singulate mean age at marriage has also risen to 25.8 from 25.1 thereby reducing the spousal age gap to 4.1 years. These changes in marriage patterns are fairly dramatic. Notably, the higher mean age at marriage in Pakistan (attributable mainly to the “marriage squeeze “ and availability of partners) as compared to India and Bangladesh is incongruous with its later fertility decline.

Table 4: Changes in Marriage Patterns 1961-1998

Various Censuses	Singulate Mean Age at marriage			Proportions Never Married at 15-19
	Male	Female	Males-Females	Females
1951	22.3	16.9	5.4	27.1
1961	23.3	16.7	6.6	25.4
1972	25.7	19.7	6.0	65.6
1981	25.1	20.2	4.9	70.6
1998	25.8	21.7	4.1	79.4

Another interesting feature of Pakistan's demographic situation is the much more rapid rate of urbanization than in India. In the 1981 Census 28 percent of the population resided in urban areas. This proportion had risen to 32 percent in the 1998 Census. This increasing share of urban population is largely a result of migration from rural to urban areas. But to a large extent urban fertility has also continued to be high with hardly any differential between urban and rural areas. (Yusuf and Retherford 1981, Sathar 1979).

The pattern of urban-rural fertility differentials has been changing since 1985 when in the PCPS 1984-85 found considerably lower fertility rates in the major urban areas of Karachi, Lahore etc. (Population Welfare Division 1986) (Table 5). Data from the 1980's showed urban total fertility rates to be between 0.7 and 1.2 points below rural levels (Juarez and Sathar, Forthcoming). The rural –urban fertility differential seems to have widened since the 80's. While fertility has begun to decline in rural areas, the change appears to be more gradual than in urban areas. For instance the total fertility rate in major cities according to the PFFPS is 3.9 compared to 5.9 in rural areas. Interestingly, provincial fertility

differentials have been small, despite considerable differences in levels of development across the regions. Sindh emerged as having the lowest fertility, but this is primarily due to the large population of Karachi.

Table 5: Trends in Fertility by Place of Residence: Total Fertility Rates, by Survey

Survey	Period	Urban	Rural
Pakistan Fertility Survey (1975)	1970-74	6.2	6.4
Pakistan Labour Force and Migration Survey (1979)	1975-79	6.2	6.6
Pakistan Contraceptive Prevalence Survey (1984–85)	1984-85	5.5/6.1 ^a	6.2
Pakistan Demographic Survey (1992)	1992	6.2	7.3
Pakistan Demographic and Health Survey (1991)	1986-91	4.7/5.2 ^a	5.6
Pakistan Contraceptive Prevalence Survey (1994–95)	1994-95	4.5	6.3
Pakistan Fertility and Family Planning Survey (1996–97)	1996-7	3.8	5.8

^aThe PCPS and the PDHS divided urban areas into major urban areas and “other” urban areas; TFRs were higher in the latter category.

Three of the four fertility surveys also collected data on infant and child mortality. As with fertility, the rates from different sources present a conflicting story with considerably higher infant mortality from the PDS than from the PDHS. Not only are the levels different, but also the downward trend evident in the PDHS data is not seen in the PDS data. A re-interview round of some of the PDHS respondents indicated considerable omission of infant deaths and cast doubt on the PDHS estimates (IRD 1994). Based on the re-interviews, the PDHS estimate of the IMR for nine years before the survey is 107. Thus even with a downward trend in mortality, the IMR is likely to have been at least 100 in 1990. Infant and under five mortality of males exceeds female mortality by about 15 percent and 10 percent, respectively. Recent surveys indicate a decline in infant mortality to a little less than 90 per 1000 live births at the turn of the Century. However, these rates represent quite comparatively high and resilient levels of infant mortality

Since mortality rates at other than very young ages are largely unknown, mortality indicators such as life expectancy at birth are usually derived from model life tables: such model life tables indicate that life expectancy at birth was around 59 years for both men and women in 1990 and had risen to 63 years by the late 90’s. This equalization of life expectancy by gender is a recent phenomenon. Until recently female life expectancy in Pakistan was lower than male life expectancy. This was largely due to higher female childhood mortality in the past and high mortality in reproductive ages of women. Estimates of the maternal mortality ratio cover a broad range from 227 to 756 maternal deaths per 100,000 live births, which is one of the highest estimated in the world (Fikree et al. 1994).

The Role of Public Policy

Pakistan recognized several decades ago that its population growth was extremely rapid and that it would soon be faced with a doubling and trebling of its population. It has had an official anti-natalist population policy since 1965. However, official efforts at reducing population growth have met with little success. Again this is in contrast with Bangladesh, which was in fact a part of Pakistan until 1971 and has since then managed to curb its rapid population growth rate much more effectively despite its dire

economic circumstances. India, too has achieved relatively more success in recent years. Though not all success in bringing about fertility decline is due to public efforts, certainly with the exception of four large states in Northern India, fertility rates have experienced sharp declines.

Pakistan has had an official policy to curb population growth from 1965 until the present day. The content of the Population Program, which is almost the sole organ through which population policy is expressed and executed, has taken many turns in this period. Several approaches have been utilized towards extending service delivery. By and large the population program has only changed in the specifics about how it ought to deliver services but has remained focused towards women and has been based on the model where women themselves are expected to seek services. The Program has lacked firm political commitment, and at many points it has lacked funds and was even shelved under the Zia regime for two or three years. Its checkered history and rather fragile base have rendered it a practically non-effective status.

There has been a distinct revival of interest in population policy starting in the mid-nineties. The last two Prime Ministers have both addressed the issue of population growth as a national priority in important public platforms. Benazir Bhutto also attended the ICPD Conference despite fear of religious backlash. But more importantly funding for the Program has been rising, albeit slightly. In the 1980's the focus of the Program was on providing a multisectoral approach to family planning by combining it with other forms of information and advice through the 1250 Family Welfare Centers set up by the Government. Though these were to be supplemented by NGO efforts, by hospitals and clinic based services, through doctors and hakeems, the coverage remained very limited especially in rural areas. In preparing for the Eighth Five Year Development plan a new scheme was proposed of community based delivery of family planning services and advice under the aegis of the Village Based Family Planning Worker Scheme. Several thousands of these workers are to be recruited, trained and put in place to provide services in their own villages by the end of the Plan period in 1998. Health outlets have also been asked to provide family planning services and the Ministry of Health has launched a scheme of its own to provide 40,000 Lady Health Workers.

If the services are effectively delivered to the doorsteps of women under these initiatives and are in fact of acceptable quality, presumably a large proportion of them will begin to adopt contraception. This assumption is based on the large figure of unmet demand as expressed by women themselves. Almost 40 percent of currently married women aged 15-49 wanted no more children and the estimated figure for those who experienced an unmet need for family planning services to space or curtail their families were 28 percent (NIPS 1992). Family planning awareness has increased substantially in recent years and the majority of men and women of reproductive age know of some method of controlling fertility. Fewer of them know of a source of obtaining family planning services. Also encouraging is the acceptability of family planning in Pakistan: among currently married women who were non-sterilized and who knew a contraceptive method, 61.6% approve of family planning (NIPS 1992). However, unmet need remains high even in the 90's at about 38 percent, indicating a continuing rise in the proportion of women who want to space or limit births but continue to face obstacles to adopting contraceptive use (NIPS 1998).

While the shift in focus has been made to attempt to provide women who are especially secluded with family planning services through community based delivery, up to now the majority of women who are using or have ever used contraception are located in urban areas, especially large cities. They are also likely to be educated and working in the formal sector. Thus the impact of population policy or related efforts to curb fertility, which have met with any success, are greatly influenced by where educated women reside and their individual characteristics.

The post-ICPD period marks an even greater active interest in population policies and issues of reproductive health. While reducing population growth rates remains the primary concern of the

Government of Pakistan, there is greater emphasis on providing accessible and better quality services to meet the needs of individuals. Furthermore the need to collaborate with other public institutions on the part of the Ministry of Population Welfare, and with the private sector and NGO's now appears in all documents such as the Ninth Five Year Plan (1998-2003) and the Population and Reproductive Health policies formulated in 2000. In an atmosphere where major donors such as USAID are not operating in Pakistan, the Government is still committing scarce resources to family planning and reproductive health. The ministries of Population Welfare and Health have jointly evolved a Reproductive Health Package to be administered in public facilities. By the end of this year the Ministry of Health will be taking over most of the service delivery functions in this area. Increasingly the private sector through social marketing is taking on responsibility of dispensing, advertising and training in reproductive health.

The Role of Socio-Cultural and Economic Factors

The lion's share of reasons as to why fertility transition has not occurred in Pakistan probably lies in the ineffectiveness of population policy and the failure of the state or the private sector to absorb the demand for good quality family planning services. However, a strong counter argument can be made that the socio-cultural and economic conditions of Pakistan are quite distinctly different from its neighbors and have hindered fertility decline. Although the economy has prospered in the 80's with acceptable rates of growth, rises in per capita income and even a slight recorded decline in poverty incidence, it became increasingly apparent that social change has not been commensurate with economic progress in those years. In the 90's Pakistan has experienced a sharp deterioration in its growth rates and a rise in poverty levels. This has negative consequences for any efforts being made to remedy the past record in social development.

The lack of progress in education and health has obvious direct implications for fertility. The majority of the population (above 70 percent) continues to be illiterate and resides in rural areas where illiteracy is even more severe. Education has been a largely neglected sector in past decades and few resources have been allocated to it until recently. Also the demand for schooling has also been weak in this largely uneducated, rural population engaged mostly in agriculture. Female education continues to be a greater eye sore with even higher illiteracy and hardly 10 percent of females has beyond primary education. While the situation is improving and the Government through the Social Action Program is giving special emphasis to primary schooling for girls, it will be several years before this affects cohorts of married women who continue to be mostly uneducated. Only some slight change in this regard has been recorded: whereas only 10 percent of married women aged 15-49 had any education in 1975 this proportion had increased to 22 percent in 1992 (NIPS). The recent 1998 Census records a rise in literacy levels to 45 percent overall and about 33 percent for women. However, there continues to be severe under investment in the health sector and related areas such as provision of sanitation and potable water.

The cultural milieu has changed only slightly in the last two decades. In most respects, Pakistan remains a feudal and agricultural society with strong bonds of caste and family. In particular, the position of women has hardly changed in terms of both their educational opportunities and enhancement of remunerated work outside of the family farm or enterprise. In certain respects, particularly legal rights, their position may have even deteriorated. Thus, the combination of low educational expansion, lingeringly high infant mortality, and weak women's power within households and society are all factors which would impede rapid changes in fertility desires and in women's motivation to control their fertility.

The rapid rate of urbanization in recent decades must be singled out as an instance of social change of any serious magnitude. As more and more Pakistanis move from rural bases to the urban areas, even though many might move to squatter settlements and slums in big cities, they are exposed to the 'urban influence'. This mainly consists of greater exposure to the media and a modern way of life, greater non-

agricultural work opportunities, weakening of ties with rural roots. The proportion of Pakistanis living in urban areas has risen from 18% in 1951 to 28% in 1981 and to 32% in 1998. Unlike the case of other developing countries urban fertility has only very recently recorded to be lower than rural fertility. In fact the change in the 90's is because urban fertility has departed from national trends and demonstrated that urban values are reflective of greater contraceptive adoption and in favour of smaller families. While certainly social change has always preceded in urban areas, the difference was not as drastic as found in many African societies. This is because even when rural Pakistanis move to cities and towns they may do so without their extended and even sometimes their nuclear families. Ties with natal kinsmen and feudal linkages continue to extend their influence despite changes in residence. Certainly social patronage and control continues to influence values and family size norms though to a much lesser extent. However, this may be beginning to change in the 90's with a rise in the proportions of nuclear families residing in almost half of all households.

The position and status of women has hardly changed as already expressed through low female educational attainment, but also in their being confined to the sphere of the home. When women do engage in economic work, they do this much less so than men, and are even less likely to be remunerated for it. Women's economic work is hardly acknowledged in official statistics. Though an increasing proportion of women are entering the labour force especially in the informal sector, it is questionable whether this is likely to lead to an increase in their status within the household and within society. Research has shown strong linkages between lower fertility and post-primary education and formal sector employment (Sathar and Kazi, 1989). In rural areas the link is stronger between women's autonomy and paid employment outside the home than that with educational attainment (Sathar and Kazi 1997). However, the proportions of women who are educated and engaged in economic activity remains small and therefore this is not likely to be an important influence on fertility change.

Another way in which the low status of women in Pakistan impacts directly on fertility is through the strong preference for male progeny. It could be argued that in a low contraceptive use society, parents are hardly making choices about the number of children they want to have and therefore are unlikely to be vastly influenced by the gender of children in making decisions about fertility control. However, the majority of current contraceptive users do have two living sons, and the number of living sons is strongly positively associated with the desire not to have any more children (Ali 1989). Thus the strong preference for male children is likely to influence the adoption of fertility control and may become a more contentious factor as fertility does begin to decline more notably and parents make more confined choices about numbers of children. This is the case in other Asian societies with strong son preference like India, Korea, and Taiwan and of course China.

PROSPECTS FOR THE FUTURE

We now turn to the final section about prospects for fertility decline post the transition. There is considerable conflict among various data sources and subsequently in the projections based on varying sources of information. Differences in population projections for the year 2020 vary from 244 (medium variant) and 232 million (low variant) according to the United Nations to just over 200 million according to the Pakistan Government (Ministry of Population Welfare 1999, United Nations 1999). To some extent the difference in the projections is based on when each of the agencies dates the beginning of fertility transition in Pakistan and subsequently the levels of fertility used for the projections. Undoubtedly, the most important factor in determining which trajectory of projections emerges as realistic for Pakistan will depend on the actual speed of fertility decline in the next two decades. In particular, for fertility to decline from its current levels of 4.8 to about 4 in the next couple of years will be possible only when the fertility transition diffuses to the rural areas. At the moment fertility has hardly begun its transition

in rural areas, which is not surprising given the vast differences in service delivery and in social development between urban and rural areas.

The fertility transition is argued to have occurred largely as a result of ‘crystallization of existing desires for smaller families along with a decline in family size desires and a reduction in the social, cultural and psychic costs of contraception’ (Sathar and Casterline 1998). However, a large proportion of fertility is unwanted even in the 90’s. In theory reducing fertility in the immediate future depends very much on existing unmet need to be satisfied because of the large proportion of currently married women who have unmet need for contraception. These levels are notably high in both urban and rural areas i.e. 38 percent in 1996-7 as reported by the PFFPS. Contraceptive uptake could be fairly rapid if the service delivery environment were to improve. This would require a spread of service delivery networks such as the community-based workers to be sustained and expanded as is currently planned. It would also require the private sector, which is presently concentrated in urban Pakistan to penetrate into rural areas. However, one of the major reasons behind unmet need for family planning services goes beyond the availability and quality of services to the issue of men and women’s subordinate status which are an important obstacle to family planning adoption (Casterline et al 2001). For overcoming this obstacle and others such as social disapproval, it is recommended and the Government of Pakistan is proposing addressing men, religious leaders and political representatives through advocacy to enable women to overcome strong resistance at the family and community levels which currently inhibits their adoption of contraception.

The Government’s own objectives are for the total fertility rate to be about 4.0 in five years and to reach replacement levels by the year 2020 as proposed. While these levels of fertility are certainly possible, the expected decline of two births in a period of fifteen years (2005-2020) is based on the desire of most women curtail family size much below the current stated ideal of about 4 or even 3 children. It is also based on the expectation that unmet demand for family planning will be bridged by the combined efforts of the private and public sectors initiatives to provide family planning services. However, if reproductive intentions remain stagnant, then, family planning programs can only reduce fertility to its current wanted levels of about four children. To expect fertility to decline much below about four children would also require the demand for children to change from its fairly constant levels of about four. This change would not occur without more profound and rapid changes in Pakistani society, which clearly do not emerge from this appraisal of the current situation. An effort to reduce fertility preferences from their current levels requires strong investments in social and economic development (Bongaarts and Amin, Forthcoming). The demand for radically smaller families requires parents to want to voluntarily make stronger investments in their children. To expect a rapid increase in educational attainment rates (especially of girls), an induction of a huge proportion of women in to the paid labour force and rapid improvements in health seem unlikely but will need to occur for such a change in fertility behaviour in Pakistan. Such changes can of course occur quite rapidly and quite independently of public policy and deliberate efforts to control fertility. Yet their influence can have immense impact in a short period of time, as seen in the case of Bangladesh in recent years.

To some extent the dynamic of increasing awareness that marital fertility *can* be controlled and the increased acceptability of contraception will act as pressure on an increasing number of couples to adopt a smaller family size. Coupled with that dynamic is the response to trends in economic aspirations and increasing constraints of costs of rearing children (particularly schooling and health). The impact of the media particularly electronic media will be an important factor in this regard. These factors will certainly ensure the continuation of the fertility transition in Pakistan.

In conclusion, while most of South Asia had similarly high levels of mortality and fertility about four decades ago, few would have predicted the demographic diversity, which ensued. Most of Southern

India, Sri Lanka led the fertility transition, but most other areas followed especially surprisingly Bangladesh (previously a part of Pakistan) experienced fertility declines by the 80's. Pakistan was the largest block in South Asia to begin its fertility transition as late as the early 90's. The burning question for Pakistan's demographic history is whether it will converge rapidly to the lower fertility patterns of neighbouring South Asia or whether it will continue to lag behind by a couple of decades. For Pakistan to 'catch up' it will have to experience a major departure from its previous and current trends of low schooling enrollments, low literacy, high infant mortality and weak autonomy of women amounting to fairly major transitions in its social sector record and policies. The demands for this are fairly daunting. However if this does not occur then its very likely that Pakistan will continue to lag behind its South Asian neighbours.

REFERENCES

- Ali, Mubashir (1989) Does Son Preference Matter? *Journal of Biosocial Sciences*; Vol 21, No. 4.
- Bongaarts , John and Sajeda Amin (Forthcoming) Prospects for fertility decline and implications for population growth in South Asia in *Fertility transition in South Asia* Eds. Sathar,Z and Phillips, J. London:Oxford University Press
- Casterline, John, Zeba Sathar and Minhaj ul Haque (2001) Obsatacles to Contraceptive Use in Pakistan: A Study of Punjab *Policy Research Division working paper* No.145, New York: Population Council
- Fikree, F, Jafarey, S and Pal J.A (1994) Maternal Mortality Background Paper for Workshop on Maternal and Infant Mortality , organized by Aga Khan University, Karachi, February 1994.
- Government of Pakistan (1992) Report of the Sub-Committee on Population Projections, Targets and Contraceptive Needs for the Eighth Plan, Islamabad, January 1992.
- IRD (1994) An Evaluation of the Pakistan Demographic and Health Survey Based on the Reinterview Survey, *Occasional Papers* No. 1, Macro International, Columbia, Maryland.
- Juarez, Fatima and Zeba Sathar (forthcoming) Changes in family formation in Pakistan. In *Brass Tacks*, Eds. B.Zaba and J. Blacker. London: Oxford University Press.
- Ministry of Population Welfare (1992) Report of the Working Committee on Population Welfare - Programme for the Eighth Five Year Plan 1993-1988. Islamabad, January 1992.
- Ministry of Population Welfare (1999) *Population and Development: Pakistan Country Report for ICPD+5*, Islamabad
- NIPS/IRD (1992) *Pakistan Demographic and Health Survey 1990-91*: Columbia, Maryland.
- NIPS (1998) *Pakistan Fertility and Family Planning Survey 1996-97*: Islamabad.
- Population Welfare Division (1986) *Pakistan Contraceptive Prevalence Survey 1984-85*, Islamabad.
- Population Council (1995) *The Pakistan Contraceptive Prevalence Survey 1994-95*, Islamabad.
- Sathar, Zeba (1979) Rural-urban fertility differentials in Pakistan *Pakistan Development Review*, Vol.

18, No. 3.

Sathar, Zeba and Shahnaz Kazi (1990) Women, work and reproduction in Karachi *International Family Planning Perspectives*, Vol. 16, (June)

Sathar, Zeba and Shahnaz Kazi (1997). *Women's Autonomy, Livelihood and Fertility: A study of Rural Punjab*. Pakistan Institute of Development Economics. Islamabad.

Sathar , Zeba and John Casterline (1998) The onset of fertility transition in Pakistan *Population Development Review*, Vol 24: (4).

United Nations (1999) *World Population Prospects: The 1998 Revision*, Department for Economic and Social Affairs, New York : Population Division,.

Yusuf, Farhat and Robert P. Retherford (1981) Urban-rural fertility differentials in Pakistan *Journal of Biosocial Sciences*, Vol 13, No. 4

World Bank (1989) *Rapid Population Growth in Pakistan: Causes and Consequences*, EMENA Regional Office, Washington D.C.