Population Poverty Connections In South Asia: Implications For Policy Makers In Pakistan

Shakeel Ahmed[*] & Imran Ahmed Sajjid[**]

Abstract

This is part-II of our study on population and poverty in Pakistan. The purpose of this study was to empirically test the population and poverty connection in the case of Pakistan and recommend policy options. The connection was discussed in part-I of this paper (Sajid, Ahmed, and Khattak, 2014). This paper conducts a regional comparison of population and poverty of South Asia from Pakistan's perspective. Many researchers have extensively debated over population and its links to poverty and development. Some argid for a positive association between the two while others found a negative association. In the case of Pakistan, population is usually presented as a menace, a root cause of many a social problems including poverty and under development. However, in part-I of this study (Sajid, Ahmed, and Khattak, 2014), the case studies found that for a rural family, increased number of family members has never caused the problem of poverty. In this paper, we present the comparison of Pakistan and other countries in the region with respect to population indicators and poverty. This paper is based on secondary data. It utilizes the time-series data of past thirty years. The data has been obtained from UNDP's Human Development Statistics being published in Human Development Reports. Further, the data from the Ministry of Population, Pakistan has also been utilized. The data from 1990 to 2010 has been analyzed using comparative analysis methods. We conclude that fertility control policy in the past has failed to a large extent. We recommend investment in education (technical), availability of health services including reproductive health services, rural development and all aspects of human resources development as a more practical solution to poverty in Pakistan.

Keywords: Pakistan, Population, Poverty, Policy, Development, South Asia.

Introduction

This is the second part of the paper previously published in *Journal of Research Society of Pakistan* (Sajid, Ahmed, & Khattak, 2014). In part I of this paper, it was concluded that poverty has no positive relationship with population growth or family size. Furthermore, population and huge family size are not considered as problem in rural areas in Pakistan. Family control and smaller family size is neither desirable nor first option to reduce pressure on family food supply in rural Pakistan. This paper takes into account the regional comparison of poverty and population and presents the policy

[*] Assistant Professor, Department of Social Work, University of Peshawar.
[**] Lecturer, Institute of Peace and Conflict Studies, University of Peshawar.

implications for all the countries in South Asia. The countries in South Asia have more similarity in terms of poverty and population. As stated in part I, this paper is presented with the theoretical framework that poverty cannot be solved by eliminating the people (Ishaq, n.d.).

Methodology

Part-I of this paper was based on meta-analysis. This paper is based on secondary data. It utilizes the time-series data of past thirty years. The data has been obtained from UNDP's Human Development Statistics being published in *Human Development Reports*. Further, the data from the Ministry of Population, Pakistan has also been utilized. The data from 1990 to 2010 has been analyzed using comparative analysis methods.

Regional Comparison: Demographics

As compared to the other South Asian countries, Pakistan has the highest population growth rate. It was 2.4 during 1990-95 and declined slightly to 2.1 per cent in 2010. According to Table 1, Pakistan has the second highest population in the region. It can also be noted from Table 1 that although most of the regional countries have higher growth rate during 90s but their growth rate has now sharply declined, below is Pakistan's present growth rate (See Figure 1).

Table 1: Demographics-Regional Comparison-I

Country	POPULATION									
	Total (millions)			Average annual growth (%)		Urban (%of total) a		Density	Dependency ratio	
	(millions)			(%)		(%of total)		KM²	(per 100 people ages 15–64)	
	1990	2010	2030	1990–1995	2010–2015	1990	2010	2010	1990	2010
Bangladesh	115.6	164.4	203.2	2.0	1.3	19.8	28.1	1114	85.4	53.4
Bhutan	0.55	0.7	0.9	-1.5	1.7	16.4	34.7	18	85.2	53.2
India	862.2	1,214.5	1,484.6	2.0	1.3	25.6	30.0	369	71.5	55.6
Maldives	0.2	0.3	0.4	2.8	1.5	25.8	40.1	1007	99.3	46.0
Nepal	19.1	29.9	40.6	2.5	1.7	8.9	18.6	203	84.0	66.6
Pakistan	**115.8**	**173.5[a]**	**265.7**	**2.4**	**2.1**	**30.6**	**35.9**	**217.13**	**89.2**	**68.6**
Sri Lanka	17.3	20.4	22.2	1.1	0.7	18.6	14.3	311	59.9	47.1

Source: UNDP Human Development Report 2010
[a:] Ministry of Population Welfare, Government of Pakistan.

In respect of population density, Bangladesh has a lead over all other regional countries with a density of more than a thousand persons per square kilometer. Maldives has the second highest population density followed by India and Sri Lanka. In regional comparison, the population density of Pakistan is below all the regional countries except Nepal and Bhutan.

Furthermore, Pakistan has one of the highest dependency ratios in the region. It was 89.2 per 100 people between ages 15-64. Even though a very healthy decline in dependency ratio occurred during past 20 years, it declined to 68.6 per 100 people between the ages 15-14, it is still one of the highest dependency ratio in the region. In contrast to Pakistan, dependency ratio in Bangladesh and India was 89.4 and 71.5 in 90s respectively; it sharply declined to 53.4 and 55.6 for both the countries respectively. A very healthy decline in dependency ratio can be noted for Bangladesh, 37.5 per cent, and Maldives, 53.7 per cent, whereas it decreased only 23.1 per cent in Pakistan and 22.2 per cent in India over past twenty years. In any case, the decline in dependency ratio is a healthy incidence for South Asian countries.
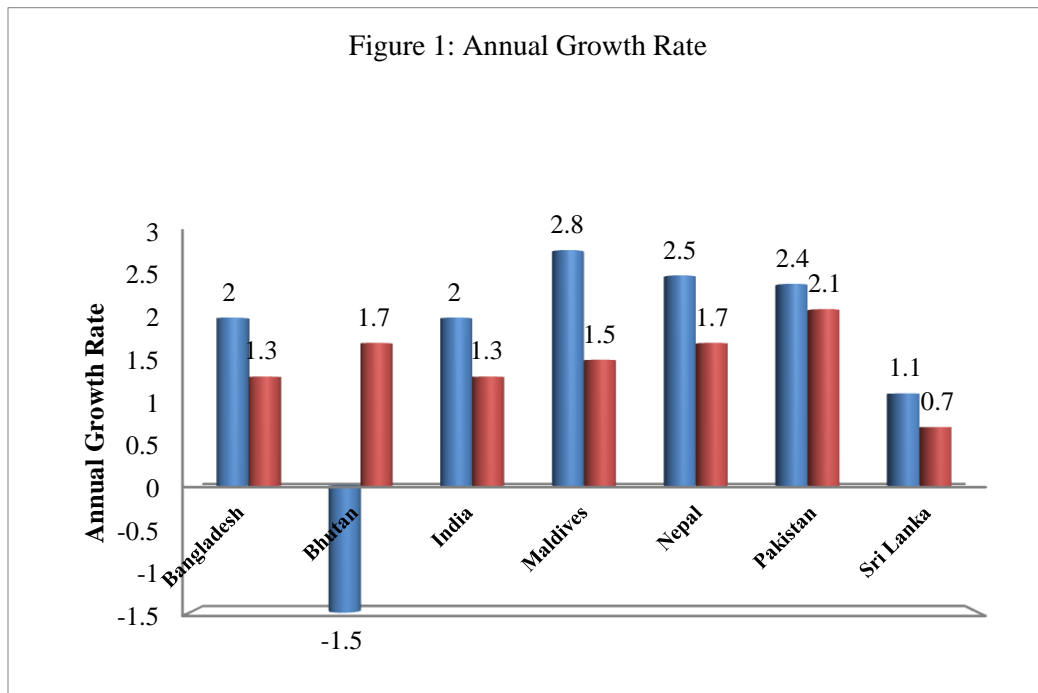
Source: UNDP Human Development Report 2010; Ministry of Population Welfare, Government of Pakistan**.**

Table 2 shows fertility and mortality comparison in South Asian countries. Fertility in Pakistan was highest during 90s, 5.7 births per woman and it is still the highest in the region with a total fertility rate of 3.6 (births per woman). In contrast to Pakistan, Bangladesh and India started with a fertility rate of 4 and 3.9 births per woman in 90s which decreased to 2.2 and 2.5 births per woman in 2010 (See Figure 2).

CBR and CDR for Bangladesh, India, and Pakistan are not that much variant. There is not much difference in life expectancy in the region as well. The only abnormal life expectancy is for Sri Lanka and Maldives, no wonder Sri Lanka is placed in the medium HDIs in 2010 Human Development Report by the UNDP.

As far as the Sex Ratio is concerned, India has the highest number of males per one hundred women, 108/100. In Pakistan, sex ratio is similar to the global standards, 105. Astonishingly, sex ratio in Bangladesh is one of the lowest, 103 men for each 100 women. This may be one of the factors which are resulting in large number of women being trafficked from Bangladesh for prostitution to India, Pakistan, the Middle East, and Europe.

Table 2: Demographics-Regional Comparison-II

Country	Fertility				Mortality				Sex ratio at birth	
	TFR(births per woman)		CBR		CDR		Life Expectancy At Birth			
	1990–1995	2010–2015	1995	2010	1995	2010	1995	2010	1995	2010
Bangladesh	4.0	2.2	32	23	9	6	67	69	103.2	103.6
Bhutan	5.4	2.4	30	20	11	7	58	67	102.3	103.0
India	3.9	2.5	28	21	10	8	60	66	107.7	108.5
Maldives	5.3	1.9	30	15	5	4	69	74	104.0	103.0
Nepal	4.9	2.7	39	22	11	7	58	66	106.0	105.2
Pakistan	**5.7**	**3.6**	**38**	**25**	**11**	**7**	**60**	**66**	**105.9**	**105.8**
Sri Lanka	2.5	2.2	19	18	6	6	72	75	103.5	103.7

Source: TFR& Sex Ratio from UNDP Human Development Report 2010: U.S. Census Bureau, International Data Base.

Figure 2: Total Fertility Rate
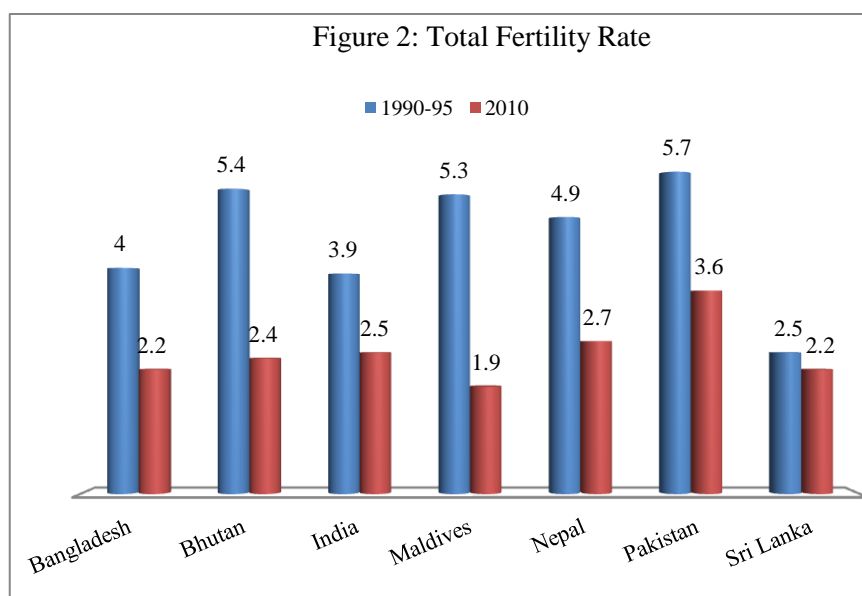
Overall, Pakistan has one of the highest fertility, and highest growth rate in the region. Pakistan, Bangladesh and India are the three most populace countries of the region where family planning programmes have been initiated during 50s. The fertility and mortality declines in these three countries are also indicating to a demographic transition in the next few decades. It also brings to the mind that if Kingslay Davis theory of demographic transition has to come true, Pakistan, India and Bangladesh will be counted in the category of developed countries in next few decades.

In conclusion, fertility, mortality, infant mortality, and growth rate have considerably declined over last fifteen years. Fertility declined more than 50 per cent. Life expectancy at birth increased dependency ratio decreased by more than 15 per cent. Growth rate came around 2 per cent, which is a substitution level. Despite all these positive indicators, Pakistan's performance is slightly lower than the neighboring India and Bangladesh in the same fifteen years.

Regional Comparison: Poverty

The latest Human Development Report acknowledges that the world has gained many things during past two decades (for example in literacy). However, poverty and deprivation to inequality and insecurity remained undone. This is the area which needs concentrated efforts (UNDP, 2010: iv). Poverty definition changed over past few decades. For most of the later half of 20th century, poverty was measured in terms of per capita income. Since the introduction of Human Development Index by Dr. Mahboob-ul-Haq of Pakistan, poverty is measured in terms of Human Development Index (HDI) globally. Poverty does not mean only low income; it has numerous facets, manifested in the form of low income, lack of access to resources, few opportunities for participation in the political process and high vulnerability to risk and shocks (Planning Commission of Pakistan, 2005). Except Sri Lanka, South Asia as a region is placed in Lower HDI category by the UNDP. Poverty is a mutual problem of all the South Asian countries, not only South Asian but of all the third world countries.

Comparatively, poverty in Pakistan is lower than neighboring India and Bangladesh (See Figure 3). However, Table 3 shows that Gross National Income (GNI) per capita measured on purchasing power parity (PPP) in Pakistan is less than many of the regional competitive countries. The table further shows that poverty incidence in accordance with definition of $ 1.25 is relatively lower for the country, 22.6 per cent. However, for $ 2 definition the head count ratio (HCR), percentage of population below poverty line, more than doubles (See Table 3). This shows that HCR is sensitive to poverty line definition as a slight modification in it is likely to bring significant change in the percentage of population below poverty line. It means that a major portion of the population in Pakistan lives around poverty line. Any economic shock can either move them above or below the poverty line, depending upon the nature of the shock (State Bank of Pakistan, 2010:171). The recent political and economic trends have severely affected this segment of the society in negative terms.

Table 3: HDI and National Income Comparison

Country	HDI		PPP US$1.25 a day	National poverty line	GNI Per capita
	Ranking	Improvement Rank	(per cent)	(per cent)	PPP US$
	2010	1980-2010	2000–2008	2000–2008	2008
Bangladesh	129	3	49.6	40.0	1,587
Bhutan	--	-	26.3	..	5,607
India	119	6	41.6	28.6	3,337
Maldives	--	-	-	-	5,408
Nepal	138	1	55.1	30.9	1,201
Pakistan	125	10	22.6	36.1	2,678
Sri Lanka	91	51	14	22.7	4,886

Source: UNDP Human Development Report 2010

Figure 3: GNI Per Capita (PPP)$
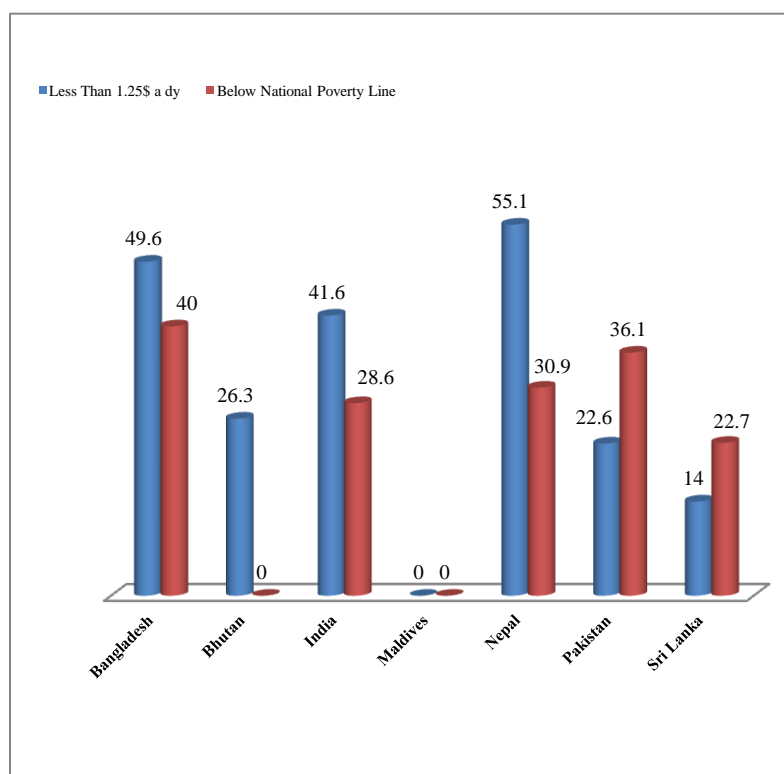
On the other hand, Pakistan made significant improvement in HDI ranking in the last thirty years. There has been an improvement of ten (10) ranks in for Pakistan, which is comparatively better in the region. Still, eradicating poverty is a big challenge.

Poverty, as mentioned earlier, is a multidimensional phenomenon. Owing to this fact, the UN developed a new measure for poverty, 'Multidimensional Poverty Index (MPI)'. As given in Table 4, MPI identifies overlapping deprivations suffered by households in health, education and living standards. As reported by UNDP, an estimated one-third of the population in 104 developing countries, or about 1.75 billion people, experience multidimensional poverty. More than half live in South Asia, though rates are highest in Sub-Saharan Africa, with significant variation across regions, groups and indigenous peoples (UNDP, 2010: 85).

To conclude in regional poverty comparison of South Asian countries reveals that Sri Lanka is the only country in South Asia which has been categorized in the Medium Developed countries by the Human Development Report 2010. It ranks 91 in the latest HDI ranking. Pakistan, on the other hand, is ranked 125 while India is slightly above Pakistan, 119 and Bangladesh slightly below, 129 (See Table 4).

Table 4: Poverty Comparison

Country	HDI Ranking	Multidimensional Poverty Index	Population in multidimensional poverty		Population at risk of multidimensional poverty	Population with at least one severe deprivation in		
			Headcount	Intensity of deprivation		Education	Health	Living standards
			(%)	(%)	(%)	(%)	(%)	(%)
		2000–2008	2000–2008	2000–2008	2000–2008	2000–2008	2000–2008	2000–2008
Bangladesh	129	0.291	57.8	50.4	21.2	31.4	53.1	76.3
Bhutan	--	..	..	..	..	..	..	..
India	119	0.296	55.4	53.5	16.1	37.5	56.5	58.5
Maldives	--	-	-	-	-	-	-	-
Nepal	138	0.350	64.7	54.1	15.6	38.0	58.3	77.2
Pakistan	**125**	**0.275**	**51.0**	**54.0**	**11.8**	**51.2**	**29.2**	**42.9**
Sri Lanka	91	0.021	5.3	38.7	14.4	0.5	9.8	26.4

Source: UNDP Human Development Report 2010

Figure 4: Regional Poverty Comparison
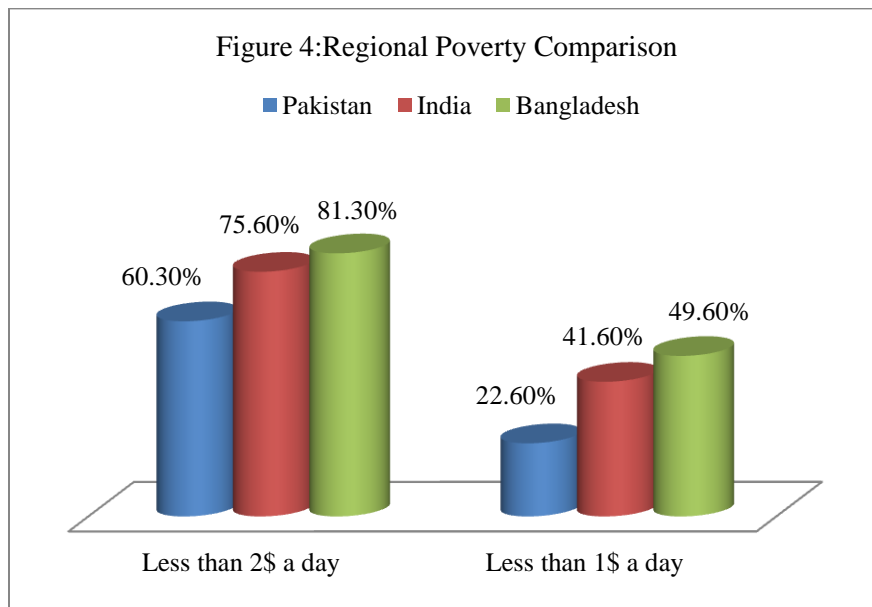
Source: UNDP Human Development Report 2009

Multidimensional Poverty Index is the lowest in Sri Lanka in the region while it is 0.286, 0.275 and 0.291 for India, Pakistan and Bangladesh respectively, showing a comparatively better condition for Pakistan. Table 4 shows that 51per cent population (on headcount measure) in Pakistan lives in multidimensional poverty. Apart from Sri Lanka, the situation is healthy for Pakistan in regional comparison. Population below poverty line is 57.8 per cent for Bangladesh, 55.4 per cent for India and 64 per cent for Nepal. The entire situation is not better for the region. More than half of the entire region lives below poverty line and a quarter of those above poverty line are very much vulnerable to poverty (See Fig 4).Deprivation in Education is the highest in pakistan, more than 50 per cent. Health indicators, however, are much better than the entire region. Similarly, living standard deprivation is also much lower than India and Bangladesh. About 43 per cent population in pakistan have some kind of deprivation in living standard but it is more than 55 per cent in India and more than 75 per cent in Bngladesh.

In conclusion, to regional poverty-population comparison, Pakistan is showing a more rapidly rising population than India and Bangladesh. At the same time, the poverty indicators, health, and living standard particularly in the country are also better than India and Bangladesh. However, the fact remains that Pakistan is a country which is ranked 144th in terms of GDP (nominal) per capita, where more than 60 per cent population lives on less than $2 a day, more than 35 per cent population lives below the national poverty line, dependency ratio of about 70 per 100 population, and deprivation of more than 50 per cent of population in education implies that Pakistan is in the category of one of the poorest countries. Rise in population and poverty simultaneously raises concern for appropriate policy. Population cannot be ignored in poverty reduction strategies and other development policies.

The empirical research findings—e.g. Shahzad et.al., and Imran A. Sajid, mentioned above, and the historical and field data indicates a positive relationship between population and development, on the other hand, the population policies in Pakistan seem to be focusing entirely on birth control in order to reduce population growth and thereby reduce poverty. Over-all, poverty reduction, economic development and population policies in Pakistan seem to be driven by neo-Malthusian alarmist prediction. So far, there is no integrated poverty reduction and population policy in the country.

Since the beginning of population programmes, population policies in Pakistan remained anti-natalist in approach. Population policies are largely directed towards family planning, or recently, towards reproductive health. Policies are largely influenced by MDGs set by the United Nations and other international declarations like ICDP. The tone of our previous approaches to population and poverty phenomena largely remained Malthusian.

Policy Recommendations

A population policy, in general, is a deliberate attempt to bring a desired change in population characteristics, viz, growth rate, fertility, mortality, age-sex composition etc. While framing a population policy, policy makers have the following options at their disposal, as given in Table 5:

Table 5: Population Policies Focus

S.#	Policy Focus	
1.	Natural Change	Fertility and Reproductive Health
		Mortality
2.	Population Distribution	Rural Development
		Urbanization
3.	Migration Policies	Immigration
		Emigration
4.	Population Resource Policies	Education
		Knowledge
		Health

Source: W T Gould. (2009). Population and Development. London: Routledge Publishers.

Fig 5: Below Poverty Line and at Risk Population
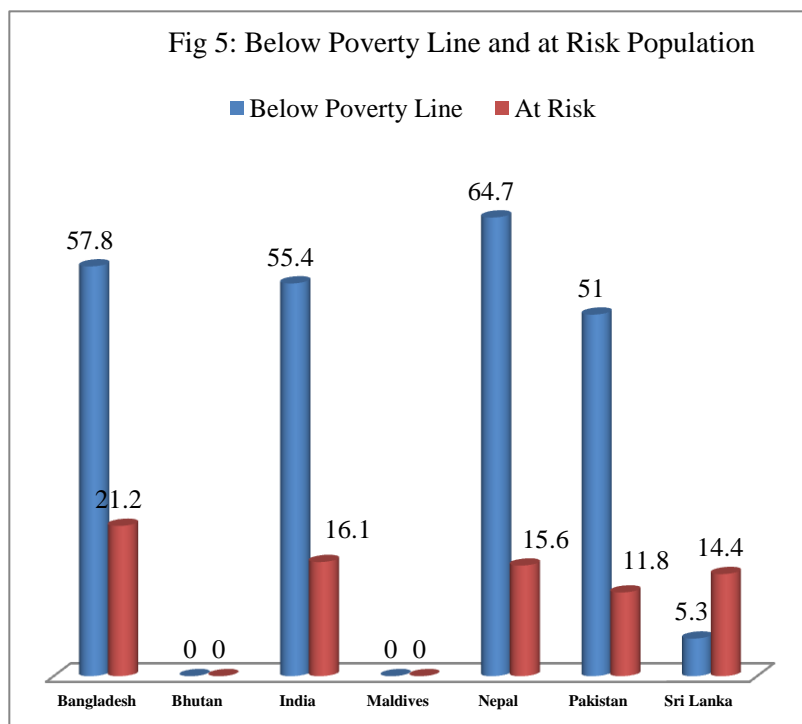
Internal Migration

As indicated by the data, rural-urban migration is on the rise in Pakistan. Urban population increased from28 per cent in 1998 to 35 per cent in 2010. This increasing population of urban centers, although not posing a threat in the long run, does increase pressure on the available urban resources. Further, the new migrants to the urban centers live in extremely poor conditions, poorly ventilated houses, and poor communities. It implies an increasing poverty in urban centers. The push and pull factors of rural-urban migration indicates a policy implication for urban management. In a democratic state like Pakistan, there cannot be direct control on rural-urban migration, as it is the constitutional right of every citizen of Pakistan to live in any part of the country. People can buy or sell their property in rural areas and can migrate to urban areas as per constitutional order.

This urbanization is, in one sense, a healthy phenomenon for Pakistan. In urban areas the resources are utilized intensively, i.e., emphasis on intensive use of resources, whereas in rural areas the emphasis is on extensive utilization of resources. So, if the rural urban migration cannot be discouraged then at least it can be planned for it is clear that economic advantage for families in modern societies lies strongly with urban areas. More than 80 per cent of the developed world lives in urban areas. And no case can be presented where an urban migration has led to more poverty for the family.

For a population policy, rural-urban migration should not be left to be driven by market process, rather proper planning must be made for new migrants. Establishment of new colonies and townships is a better option.

External Migration

As mentioned in the study of GharKhoi and GarhiBalcoh in Part-I of this paper (Sajid, Ahmad, and Khattak, 2014), one of the possible response to population pressure is migration, rural-rural, rural-urban, and urban-urban. In the same analogy, for a nation at broader level, one possible response to population pressure is migration-external migration. Immigration and emigration both play equally important role in population change. Pakistan is a labour exporting country. Majority of the labour emigrate to Middle East and Europe. As a result of introducing new technology to the agriculture, majority of rural population migrate to urban areas. The next option, for a more economically strong family, is to migrate across borders.

Cross border migration not only proved helpful for the families in Pakistan but the entire country benefited from it during 1970s and 1980s. However, exporting unskilled, ignorant, and illiterate work force to other countries results in negative or a very low level of remittances to the country. Human Resource Development should precede external migration.

Human Resource Development

Pakistan has a large population, which can be categorized under the definition of youth. Youth, as defined by UN, is the population between the ages 15-25. Accordingly, an estimated 103 million Pakistanis, or 63 per cent of the population, fall under the age of 25 years. Such a larger youth base is a healthy sign for any population structure. However, the youth literacy Rate, according to UNFPA, is estimated to be 53 per cent. This implies 47 per cent illiteracy for the youth with lesser job opportunities, lesser knowledge, lesser skills level, and more vulnerable to poverty (UNDP, 2010). At the moment, Pakistan has been unable to frame a proper policy for a larger youth base, a catalyst for economic development and poverty eradication.

The calculus of 63 per cent youth, more than 60 per cent dependency ratio needs a policy focus-more appropriately an integrated policy focus. A proper human resource development policy is essential focusing on the following human resource development components:

Education

Basic Schooling
Economic and social advantages of schooling are obvious both at individual level and nationally. For most of the part, education is an economic demand of our country. As a

common rule, an educated person has more employment opportunities than an illiterate. Primary education has been made compulsory by the state, and there is a high prevalence of primary enrollment in schooling. Along with high prevalence of primary enrollment, the dropout ratio too is very high. Indepth studies are required to find out the root causes of high prevalence of dropouts from primary schools. Generally, it is the economic constraints of the parents for meeting the expenses of further education, which results in dropouts between primary to middle and among other levels.

In all education policies and UN programmes of Education for All (EFA), the most focused and emphasized area of education is the primary schooling. As mentioned before, primary enrollment in Pakistan is more than 90 per cent, but the dropout ratio is too very high. It implies a policy focusing more on secondary and higher education.

The curriculum is one big problem. The curriculum is designed to teach children reading and writing but not the skills of thinking and logical interpretation. Logic is not a subject, neither compulsory nor optional at any level. It is taught only to the students of philosophy, that too at higher levels, whereas logic is the measuring rod of thoughts.

The Draft National Population Policy of 2010 emphasized on reproductive health education (sex education) but also acknowledges that there are extreme social, cultural and religious hurdles in implementing sex education in schooling curriculum. Contrary to the populace belief, the curriculum of *Madrassa Education* system (Traditional Islamic Education) does include sex education as a compulsory subject. There is a need to integrate both the education systems in the country. Integrating the subject or syllabus of sex education from the *Madrassa Curriculum* may reduce problems and biases.

Technical Education
Technical education is the least emphasized and the most essential form of education for Pakistan. It is least common for a certified student from a technical institute to remain unemployed. Majority of the certified technical students get consumed in local industries. It is also the technical educated youth who immigrate to Middle East and other countries for better employment and add remittances of national income. It implies that technical education can generate more job and employment opportunities for the youth.

The migration of youth to the Middle East and other oversees countries not only add to remittances but reduce at home pressure. Furthermore, it is very common for the immigrated youth to experience late marriages thereby contributing to a reduced period of fertility.

Technological advancement cannot be attained by setting up a few high level institutes in isolation. It is essential to visualize the need for vocational and Technical Training as not meeting market demand, but as responding to the need for a long term change in the technological level of the society. The private sector should take the lead in vocational and technical training with government playing an actively supportive role in

developing a coordinated national system of vocational training. Thrust of policies in vocational and technical training to break away from the low technical competence trap should be as follows.

Rural Development

As it is the rural area of Pakistan which has majority of the poor and poorest population, therefore a well thought population policy must take into account the rural settings. The rural population is largely settled in scattered farmsteads and lives in scattered households. For a scatterely populated rural area, a large family is much desirable and advantageous than a smaller family.

A rural development programme may include, along with reproductive health package, land tenure reforms, introduction of green technologies, rural roads, rural electrification, rural schools and health services, nutrition programme, and off-farm self-employment programmes. The possible effects of these measures on rural population are lower fertility, lower infant and maternal mortality, increased life expectancy, increased rural production, increased incomes, lesser dependence on agriculture, increased commercialization of rural economy, better education and health, and increase in productivity (Gould, 2009: 165).

Moreover, the labour policy 2002 completely neglected the role of rural workers in national development. It only emphasizes worker-employer relationship (bilateral relationships) in the country. The new labour policies must take into account the rural labour force who makes almost one-third of the national labour force.

Health – Availability and Access to Reproductive Health Services

Health sector has a major role to play in fertility control but it does not imply a leading role for health sector. For the health sector, the essential element is to ensure access to safer means of reproductive health services and facilities. However, the health situation at large, in rural areas particularly, is very bleak. The basic health units (BHUs) in rural communities lack skilled doctors and nurses. Not only the staff but also the infrastructure and facilities are not up to the mark.

The National Population Policies and programmes time and again emphasized on the availability of reproductive health services. Availability of such services must be made an essential service like first aid. If a family feels like needing an abortion or limiting its size from growing any further, in such case the abortion and contraception service must be available for them. It will reduce maternal mortalities, particularly in rural Pakistan, infant mortality and will be helpful in controlling unwanted fertility by the women.

Investment in Capital

Investment in capital for poverty reduction, reduction in unemployment and over-all development is *quid qua non*. Pakistan is considered as consumption oriented society. The economy of Pakistan is oriented towards generating primary material, i.e. raw material. Instead of exporting raw material, investment in capital goods will turn Pakistan to produce and export finishing goods, which generate much more income to the country than the raw material.

Conclusion

In the past, population policies have been seen in terms of 'family planning' and fertility reduction but now it is clear from our previous discussion made in this paper that population polices must take into account all aspects of growth and change, viz, fertility, mortality, and migration. Fertility control policy in the past has failed to a large extent. Further, there are social and cultural barriers to direct fertility control programme in Pakistan. Therefore, direct fertility control programme, for poverty reduction or reducing pressure on resources, is by no means an option here. Controlled fertility should be a voluntary option for the families. Instead of setting targets for family size, the women should be given access to reproductive health services.

As the paper established the rule that a growing population, by no mean, is counter to national interest or development, and as the empirical study of Hussain, Shahnawaz, & Hayat (2006) found that population growth in short-run is causing unemployment but asserts that over-all population growth has a positive relationship with development and reducing poverty, and they *conclude that rapid population growth and increasing population density stimulate technical change and institutional innovations*, and as the study of GarhiBaloch and GharKhoi (Sajid, Ahmed, and Khattak, 2014) found the larger families to be desirable in rural Pakistan and migration to be the more likely and preferable option for responding to population pressure, and a broader base of young population in Pakistan as evident from the age structure, and as the GDP growth has been found to be two times higher than population growth over past 40 years, therefore our policy addresses the issue of unemployment, rural development, rural-urban migration and human resource development. Addressing these issues will surely lead to curbing poverty.

References

Abbasi, A. B. (1978). Country statement-Pakistan population planning for national welfare and development. *International conference on population planning for national welfare and development*. Lahore: Family Planning Association of Pakistan.

Adlakha, A. (1997). *Population trends in India*. New York: U.S. Department of Commerce Economics and Statistics Administration: Bureau of The Census. (No. IB/97-1).

Anwar, T., & Qureshi, K. S. (2002, Winter). Trends in absolute poverty in Pakistan-1990-91 and 2001. *Pakistan Development Review, .41*(4), 859-878 Part II

Asad, A.(2006). Population growth: A gloom or boom for Pakistan. *Journal of Law and Society*, XXXV(48), 51-72.

Bloom, D. E., & Freeman, R.B. (1986).The effects of rapid population growth on labour supply and employment in developing countries. *Population and Development Review*, 12(3), 381-414.

Boserup, E. (1981).*Population and technological change: A study of long term trends*. : Chicago: University of Chicago Press.

Brown, L. (2008). The population challenge. In *Encarta Reference Library 2009* [DVD]. Radmond WA: Microsoft Corporation Inc.

Bukhari, H., & Haq, I. (May 4, 2008). For the rich only Income and wealth disparities galore in our society. Islamabad: *The News International*. Retrieved on November 05, 2010 from http://jang.com.pk/thenews/may2008-weekly/nos-04-05-2008/pol1.htm

Sharif, C.I. (2003). *An empirical analysis of the determinants of rural poverty in Pakistan*. [Unpublished PhD Thesis]. Bahawalpur: Department of Economics/ Islamia University of Bahawalpur.

Clark, C. (1967). *Population growth and land use*. New York: St. Martin's Press.

Dawson, P.J., & Tiffin, R.. (1998). Is there a long-run relationship between population growth and living standards? The case of India: *Journal of Development Studies.* Retrieved on November 03, 2010 from http://www.highbeam.com/doc/1G1-20916020.html

Government of Pakistan. (2011). *Draft National Population Policy 2010*. Ministry of Population Welfare, Islamabad, Pakistan. Retrieved, April 12, 2013 from https://www.scribd.com/document/276729198/Pakistan-Population-Policy-2010

Glennerster, H., Hills, J., Piachaud, D., & Webb, J. (2004). *On the hundred years of poverty and policy*. York, UK: Joseph Rowntree Foundation.

Gould, T. W. (2009). *Population and development.* London: Routledge Publishers.

Henry, L. Tischler. (2002). *Introduction to Sociology*. [8[th]ed]. New York: Thomson Publishing Company.

Hussain, S., Malik, S., & Hayat, K. M. (2009). Demographic trends and economic growth in Pakistan: *European Journal of Scientific Research*, *31*(3), 491-499.

Hustchinson, E.P. (1967). *The population debate.* New York: Houghton Mifflin Publishing Company.

Inam, S. (2010). Rising population in Pakistan. *GEO TV*. Pakistan.

Jacqueline, H. (1987). Johann Sussmilch: A German prophet in foreign countries. *Population Studies, 41*(1), 31-58.

Lucian, L. A., & Tiberiu, D. (2010). Long term correlation between demographic variables and economic growth: *Studies in Business Economics*, *4*(4), 5-28.

Macionis, J. J. (1991). *Sociology*. [4[th]ed.]. New Jersey: Prentice Hall Publishing Company.

Malthus, T. R. (1798,1965). *An essay on population.* New York: Augustus Kelley Publishing Company.

McNicoll, G. (2003). *Population and development: An introductory view.* New York: Population Research Division, Population Council (No.174).

Meadows, D. (2010). Poverty causes population growth causes poverty. *Sustainability Institute.* Retrieved on October 31, 2010 from http://www.sustainer.org/?page_id=90&display_article=vn126manupured

Mehmood, M. (2009).*Population and development: Demographic research At PIDE.* History of PIDE Series-4. Islamabad: Pakistan Institute of Development Economics.

Ministry of Finance.(2009). *Economic Survey of Pakistan 2008-09.* Islamabad: Ministry of Finance, Government of Pakistan.

Ministry of Finance.(2010). *Economic Survey of Pakistan 2009-10.*Islamabad: Government of Pakistan.

Ministry of Labour. (2002). *Labour Policy 2002*. Islamabad: Ministry of Labour, Manpower, And Overseas Pakistanis, Government of Pakistan.

Ministry of Population Welfare. (2002). *National Population Policy 2002.* Islamabad: Government of Pakistan.

Ministry of Population Welfare. (2010). Draft National Population Policy 2010. *Ministry of Population Welfare: Government of Pakistan.* Retrieved on July 02, 2010 from www.mopw.gov.pk

Ministry of Population Welfare. (2010). Province wise population. *Ministry of Population Welfare: Government of Pakistan*. Retrieved on November 02, 2010 from http://www.mopw.gov.pk/PopulationDynamicsByProvince.aspx

O'Neill, B. (July 3, 2009). Who is afraid of billions of people. *Spiked.com.* Retrieved on October 28, 2010 from http://www.spiked-online.com/index.php/site/

Pakistan GDP at constant prices. (2010). *Trading Economics*. Retrieved on November 03, 2010 from http://www.tradingeconomics.com/pakistan/gdp-at-constant-prices-imf-data.html

Ehrlich, P.R., & Ehrlich, A.H. (1968, 2009). The Population Bomb Revisited. *Electronic Journal of Sustainable Development*, *I*(3), 63-71

Planning Commission of Pakistan. (2010). *Annual Development Plan 2010-11*. Islamabad: Planning Commission of Pakistan, Government of Pakistan.

Planning Commission of Pakistan. (2010). *Pakistan Millennium Development Goals Report 2010).* Islamabad: Centre for Poverty Reduction and Social Policy Development. Government of Pakistan.

Planning Commission. (2005). Medium Term Development Framework (MTDF) 2005.Planning Commission of Pakistan, Government of Pakistan. Retrieved on November 01, 2010 from www.planningcommission.gov.pk

Simons, J. (1981). *The ultimate resource*. New Jersey: Princeton University Press.

Sirageldin, I. (1984). *Lecture on population, policies and development in 80's.* Islamabad: Pakistan Institute of Development Economics (PIDE).

Spengler, J. J. (1972). *Population economics*. Carolina: Duke University Press.

Stangeland, E. C. (1904). *Pre-Malthusian doctrines of population.* New York: Columbia University Press.

Stark, R. (1989). *Sociology.* [3rd ed.]. Belmont, California: Wadsworth Publishing Company.

State Bank of Pakistan. (2010). *Annual Report 2010*. Islamabad: State Bank of Pakistan.

Statistics division. (2005). *Pakistan Social and Living Standards Measurement Survey (2004-05)*. Islamabad: Government of Pakistan, Statistics Division, Federal Bureau of Statistics.

Statistics Division. (2010). Official Population Clock. *Population Census Organization*. Ministry of Economic Affairs and Statistics, Government of Pakistan. Retrieved on November 2, 2010 from http://www.statpak.gov.pk/depts/pco/

Thompson, S. W.,& Lewis, T. D. (1965). *Population problems*. New Dehli: Tata McGraw-Hill Publishing Company Ltd.

UN Department of Economic and Social Affairs. (2007). *World Population Prospects: The 2006 Revision*. [ESA/P/WP.202]. New York: UN Population Division, Department of Economic and Social Affairs..

UN Department of Economic and Social Affairs/Population Division. (2004*). World Population at 2300*. (ST/ESA/SER.A/236). New York: UN Population Division.

UN Department of Economics and Social Affairs. (2001). *World Population Monitoring Report 2001*. (ST/ESA/SER.A/203). (UN Sales No.E.01.XIII.17). New York: UN Population Division

UNDP. (2010). *UNDP Human Development Report 2009*. Retrieved on November 05, 2010 from http://hdrstats.undp.org/en/indicators/103.html

UNDP. (2011). *UNDP Human Development Report 2010*. Retrieved on November 05, 2010 from http://hdr.undp.org/en/media/HDR_2010_EN_Tables.pdf

UNDP Pakistan. (2010). *UNDP and the Youth*. Retrieved on November 10, 2010 from http://undp.org.pk/undp-and-the-youth.html

United Nations Population Division.(1994). *World population growth from 0 to stabilization (mimeograph, 7 June 1994)*. New York: United Nations.

Weeks, J. R. (2002).*Population: An introduction to concepts and issues.* [8th Ed.]. New York: Wadsworth Publishers.

Wilson, C. A.,& Cann, R. L. (1922). The recent African genesis of humans: *Scientific American*, *266*(4), 266:68.

Zaman, K., Ikram, W., & Ahmad, M. (2008). The impact of demographic trends on economic growth/productivity in Pakistan (1980 - 2007): *Sunwa Academic Journal*, *72*(1), 133-146

Zanden, V., & Wilfrid, J. (1990). *An introduction to Sociology*. [2nded.]. New York: McGraw-Hill Publishing Company.