

EDUCATION, EMPLOYMENT AND ECONOMIC DEVELOPMENT IN PAKISTAN

ISHRAT HUSAIN¹

The 'new growth theory' has been highly influential in explaining the differences in the economic performance of developing countries. Economic backwardness is highly linked to low labor efficiency and training, deficient supplies of entrepreneurship and slow growth in knowledge. The countries that have surged ahead, on the other hand, are characterized by high level of human capital accumulation where the educated labour force has raised the level of output and the rate of growth over a sustained period of time. Stern (2001) argues that Education takes center stage in any discussion of development strategy for two reasons. First, the quantity and quality of education influences strongly the labor force, governance and the workings of most institutions. Thus it is a key determinant of the investment climate. Firms, both domestic and foreign, are more eager to invest when they know that they will be able to draw on a skilled workforce to make that investment productive. Second, universal access to basic education is essential for ensuring that all segments of society will benefit from macroeconomic growth.

Studies confirm that the productivity benefits of education are large-just one additional year of education can increase productivity in wage employment by 10 percent even after controlling for other factors. Skill development through education has been identified as a key determinant of comparative advantage and manufacturing export performance. In Pakistan, it has been shown that districts with a higher literacy level have a higher level of development (SPDC 2003).

¹ Inaugural Address delivered at the Conference on Education held at Woodrow Wilson Center, Washington D.C. on April 15, 2005.

For poor people, education can serve as a bulwark against volatility: even the fundamental skills learned in primary school can make a critical difference for the survival of families when government services fall short or during times of economic crisis. The widening of educational access thus can help to eradicate poverty even before it begins to yield returns in the labor market. (Stern 2001).

Pakistan presents a paradoxical situation. The country was able to record 5 percent annual growth rate over a fairly long period of three decades: between 1960-90, bringing down the incidence of poverty to 18 percent. This happened when Pakistan's social indicators were dismally low in absolute, as well as, in relative terms. In 1990, after such impressive growth performance almost two-thirds of the country's population was illiterate, enrolment ratios were dismally low, the drop out rates were quite high, gender disparities in access to education were rampant and the quality of higher education was on a declining path. By most indicators, basic schooling investments in Pakistan were low and growing less rapidly than on the average for low income countries.

The reasons for Pakistan's low educational status are varied but one important factor is that Pakistan's educational system is highly fragmented and segmented. It has, therefore, created some intractable problems in the optimal utilization of human resources under the given labor market conditions.

Box I depicts graphically the three parallel streams that start right from the primary level. The parents have the choice to send their children either to a madrassah or to an English Medium primary school or Urdu medium primary school. The English medium schools are further divided into 'elite' schools and 'non-elite' schools. Most English medium schools are in the private and not-for-profit sector while the majority of the Urdu medium schools are run by the Government. The latter provide education to about 73 percent of the total primary school enrolment. (Table-I). This fragmentation does not end at the

primary level but persists throughout the education cycle and spills over into the labor market as well. A more detailed analysis of this segmentation and its consequences for economic development is presented elsewhere (Husain 1999)

Pakistan has suffered immensely as a result of this fragmented educational system coupled with issues of access, quality and governance. Pakistan's primary and secondary enrolment ratios in 1991 were 46 and 21 percent of the relevant age groups – only one-half the average for all low income countries. Only about half of those who enrolled in school stayed on until the fourth grade in comparison with an average of about two thirds for all low income countries. Within the South Asia region, Pakistan lags well behind its neighbors in enrolment; net primary enrolment rates are 50% in Pakistan, 75% in Bangladesh, 77% in India and 100% in Sri Lanka. By all criteria, Pakistan's educational system was at the bottom of the international ladder.

A number of empirical studies show that the returns to expanding years of education in Pakistan are still considerable, i.e. 20 percent (Behrman 1995). The implication is that Pakistan has lost considerable earnings due to under investment in education. A social rate of return of 13 percent for primary school, with reinvestment, would lead to a doubling of assets within six years (Shabbir 1994). In one influential work, an attempt was made to characterize the cost to Pakistan of having low schooling and a relatively large gender gap by a series of simulations based on pooled estimates of the dependence of growth on initial schooling investments. The authors found that Pakistan's 1985 income would have been 25 percent higher if Pakistan had had Indonesia's 1960 primary enrolment rate and about 16 percent higher if female enrolment rates had been at the same level as for boys (Bridsall, Ross and Sabot 1993). Extending these projections to 2005 it would be safer to conclude that Pakistan's per capita income today would have been almost double than what it actually is and the record on poverty much better.

The gender gap in education in Pakistan suggests that the country has foregone a great opportunity by not capitalizing on the large rates of return of female schooling on economic productivity. In a study of estimates of wage relations for males and females separately over several time periods using Household Income and Expenditure Surveys, it was found that females had higher rates of return than their male counterparts (Ashraf and Ashraf 1993). Some estimates suggest that the return on getting more girls into schooling may be over 20 percent. Another study estimated that annual growth in income per capita could have been nearly a percentage point faster if Pakistan had closed the gender gap as fast as East Asia between 1960 and 1992. (Klasen 1999).

Pakistan thus missed economic opportunities that have been exploited by many developing countries by increasing educational levels for the bulk of its labour force and, thus, enhancing their household incomes and reducing poverty. What is more disturbing is that the low net enrolment ratios will make the achievement of 100 percent literacy levels even more difficult in the future. This has serious implications for Pakistan's competitiveness and rapid poverty reduction.

The enrolment rate in primary education is 40 percent among the poorest 10 percent of the population, while the children of the richest 10 percent have reached 100 percent enrolment. Moreover, nearly 40 percent of children belonging to the poorest quintile drop out of school by grade 4. The comparable figure for children belonging to the richest quintile is only 12 percent. It can thus be seen that a majority of the children belonging to the poor families are not acquiring the basic skills that would equip them to participate in the country's economic development while the children of the rich families are better off.

Social Action Program, a multi-donor programme of assistance to Pakistan implemented during the 1990s has had a mixed record of success. The number of girls enrolled in primary school in Balochistan doubled as a result of subsidized recruitment of female teachers and the drive to increase girls' education led to higher enrolment of boys (Kim, Alderman and Orazem 1999).

Adult Literacy rate in Pakistan had risen to 47 percent by 1999 while female literacy rate to 32 percent. Net enrolment ratios, however, remained unchanged. It is estimated that there are 13 million out-of-school children of about 50 million children in the 5-9 years age group over half of whom are girls (SPDC 2003). In Balochistan and North West Frontier Province (NWFP) – the two conservative provinces of the country – the female literacy rate more than doubled in the decade of the 1990s much more rapidly than the national average bridging the gap somewhat. But the fact remains that both Sind and Punjab have still twice as many literate females as a proportion of the population compared to Balochistan and the NWFP.

The other noteworthy development in the 1990s was the emergence of non-governmental schools sponsored by the private sector (for profit), communities, and not-for-profit organizations. Between 1983 and 2000, the number of private primary and secondary schools in the country increased ten fold from 3,300 to 32,000 – much faster than the population of school-aged children (Andrabi et al 2002). Table 2 shows that in 2002, the private schools had a share of 27 percent in primary school enrolment. The expansion of private schools has also played an important role in bridging the gender gap in primary schooling in Pakistan. Andrabi et al (2002) provide evidence that private primary, middle and secondary schools have a lower ratio of enrolled boys to girls than comparable public schools. Private schools have achieved a more balanced male/female ratio than public schools despite the fact that a larger proportion of them are co-educational schools. This finding challenges the

conventional wisdom that the parents in rural areas in Pakistan are not willing to send their daughters to co-educational schools. Even private schools for low income households are emerging. According to a survey, two thirds of all primary school students in low-income neighborhood in Lahore attend private schools. The record of these institutions in expanding access is impressive but in imparting quality education it has been mixed. In the higher education a number of institutions of international standards were established in the country during this period. There are no firm estimates of the enrolment in private and non-governmental institutions in the tertiary sector, but the number is expanding fast.

The remittances sent by the Pakistani workers employed in the North America and the Middle East are also reported to have a positive influence on the education of their own children's and the children of their extended families education. As most of the migrant workers originate from poor families this investment in their children's education is likely to have some intergenerational mobility out of poverty.

In the period since October 1999 several major initiatives have been taken to bring about structural reforms in the education sector. The thrust of these reforms is achieving universal primary education and adult literacy, improving the quality of education, a focus on technical and vocational education and reform of Madrasah education.

In Punjab and Sindh provinces, education up to matric levels has been made compulsory and free. The Punjab Education Sector Reform Program (PERSP) implemented with the support of the World Bank has set up a workable model of expanding access, and improving governance and quality of education. Provision of free text books to primary school students, monthly stipends to girls enrolled at the middle schools, appointment of better qualified teachers and

improvement in physical infrastructure have led to an overall 13% increase in enrollments in primary schools and 20% increase in enrollments of girls at middle level in fifteen low literacy districts of Punjab. The model has proved successful because of the wider participation of civil society organizations, district and local level department staff, parents and the teachers. An overarching objective of this program is to reduce gender inequalities in the province. If successfully replicated to other provinces it is quite likely that the unsatisfactory performance of the past several decades could be reversed and the slippages in meeting the MDG goals could be contained.

Higher education has received a big boost in the allocation of financial resources and improvement in the quality of education. The enrolment ratio which is only 2.6 percent compared to 10 percent in India is projected to double in the next five years while the Universities are being upgraded through a vigorous programme of faculty development, scholarships and stipends to the poor, curriculum revision, equipping laboratories and libraries, connectivity to pooled and shared resources and emphasis on research. Annual Budget allocation has been raised ten times from a paltry sum of \$15 million to \$150 million while that for Science and Technology increased from \$3 million to \$100 million.

Table 2 also explodes the popular myth held in the Western Countries that Pakistan's education system is heavily populated with the madrassahs who are producing the fundamentalists, extremists and terrorists for the rest of the world. Primary enrolment in madrassahs accounts for only 0.9 percent of the total enrolment and there is distinct differentiation among even those attending madrassahs. A majority of madrassahs are not affiliated with any of the religious political parties or jihadi groups and offer a balanced curriculum to their students. The weight of Koranic studies, theology and Islamic History is relatively high in this type of madrassahs compared to modern schools but they do teach other subjects such as Mathematics, Geography, and Civics etc.

Andrabi et al (2004) analyzing the district wise data from the 1998 census, have found that the Pashto speaking belt along the Western Border with Afghanistan is the only region in the country that has a high proportion of madrassah enrolment. But even this accounts for just over 2 percent of total enrolled children in the 10 districts of Pashtun belt. The media reports of claims about enrolment and existence of madrassah education have been very carefully analyzed in this study and found to be highly exaggerated.

Despite the positive movements on macroeconomic front the unemployment situation in Pakistan has not yet improved. The linkage between higher employment and poverty reduction is strong both through direct and indirect channels. But in the last several years Pakistan has shown high economic growth but the improvement in the employment front is by no means, satisfactory. Unemployment rate has declined from 8.3 percent to 7.7 percent in the last two years but the trend is still not widespread either geographically or sectorally and has occurred mainly due to an increase in the jobs for the category of unpaid family workers in the rural Punjab.

There are at least five different factors that I would like to put forward to explain this phenomenon of higher incidence of unemployment coexisting with rapid growth rate in Pakistan.

First, there is a serious mismatch between the jobs demanded by the emerging needs of the economy and the supply of skills and trained manpower in the country. While the economy is moving towards sophisticated sectors such as telecommunications, information technology, oil and gas, financial services, engineering goods the universities and colleges are turning out hundreds of thousands of graduates in Arts, Humanities and languages. This mismatch has created waste and misallocation of resources on one hand and the shortages of

essential skills required to keep the wheels of the economy moving. On the basis of anecdotal evidence I have put together Box-I that summarizes the emerging employment scenario in Pakistan – the sub sectors and companies where the jobs are being created or are likely to emerge in significant numbers in the next few years. It also shows that public sector and government is losing jobs or there is at least stagnation. Technical and vocational training has failed to keep pace with the emerging skill gaps that have further been widened by the migration of experienced technicians and professionals to the Middle East and elsewhere.

Second, there is a crisis of expectation among the families and the youth belonging to certain areas of the country which have enjoyed quota reservations in the government jobs for last several decades. As the economy is relying more on the private sector and the public sector enterprises are being privatized the opportunities for new jobs in the government ministries, attached departments, public sector corporations, state owned enterprises and nationalized commercial banks are fast disappearing. Those who used to get into the public sector on the basis of quota entitlements therefore feel themselves at a disadvantage in the job market. The security of the tenure, the perks and power which they were expecting are no longer available and this has led to a lot of frustration among a section of the population. The private sector employers are highly competitive in their choice of recruitment and totally indifferent to the considerations of regional balances.

Third, the aggregate elasticity of employment with respect to GDP was historically high because of the relative weight of agriculture. But as the share of agriculture in GDP is declining the contribution of agriculture sectoral elasticity to the aggregate elasticity has also dwindled. Higher total factor productivity in the economy and technological innovations are also reducing the demand for unskilled and semi – skilled labor force in almost all the sectors of the economy.

The inefficient utilization of factors of production that was a characteristic of public sector dominated economy has been minimized as a result of structural reforms in tariffs, taxation, financial markets and privatization. The demand for labor inputs per unit of output has consequently been reduced due to this compositional shift from the public to private sector employment. At the same time labor force participation rate is on an upward incline because of the entry of large number of females. High unemployment rates under these conditions of productivity and efficiency gains are therefore not surprising.

Fourth, factor mobility across the provincial boundaries is highly limited with the exception of Karachi which absorbs people from all parts of the country. Labor market segmentation based on ethnic and province of origin and domicile is quite pervasive and allows simultaneous existence of labor shortages in one part of the country with excess availability in other. The high costs of relocation for the job seekers and high search costs perceived by the employers further attenuate a state of disequilibrium in the nation wide labor market. The regional labor markets may be relatively more efficient but the same is not true of the national labor market.

Fifth, the archaic and outdated labor laws, levies and benefit payments imposed upon the formal sector of the economy create a wedge between the unit costs borne by the employer and the actual wage received by the employees. There is little incentive for the employer to hire people on permanent basis and invest in their training, skill up gradation and productivity enhancement. They have therefore developed a short sighted view of extracting as much value as possible by engaging part time or contractual employees. In a competitive environment, this behavior is not tenable over a long period of time. The businesses have to close down or substitute capital for labor reducing the level of labor absorption in the economy.

The future agenda for productive employment generation and education are closely interlinked. We will therefore have to address (a) the issue of greater focus on technical, vocational and professional education (b) expanding enrolment in higher education to at least 10 percent of the relevant age group (c) improving access, quality and governance in primary and secondary schooling (d) providing incentives to encourage enrolment of girls in schools (e) reforming madrassah education and making them relevant to the labor market requirements (f) restructuring labor laws and regulations that discourage employment in the formal sector.

TABLE - I
TRENDS IN HUMAN DEVELOPMENT

	<u>1960</u>	<u>2000</u>	<u>Change over the Period</u>
Life Expectancy at birth (years)	43	61	42%
Infant Mortality Rate	163	80	-49 %
Population with access to safe water	25	90	260%
Underweight children under five	47 ²	38	-24%
Adult literacy Rate	21 ¹	51.6 ⁴	146%
Female literacy Rate	11.6 ¹	39.2 ⁴	238%
Gross enrolment ratio for all levels	19 ³	33	74%
Gross enrolment ratio for primary	36	83	130%
Net primary enrolment ratio	-	58	-
Net Secondary enrolment ratio	-	38	-
Mean Years of schooling	1.4 ²	3.0	114%
Population growth rate	3.2 ⁵	2.0	-62%
Human Development Index	0.346	0.497	44%

¹ 1970

² 1975

³ 1980

⁴ 2003-04 (Labour Force Survey)

⁵ 1960-90

Source: Government of Pakistan, UNDP, World Bank (various publications).

Note:- The data on Social Indicators in Pakistan suffers from high degree of inconsistency over time and should be interpreted with caution. They represent broad orders of magnitude rather than precise numbers.

TABLE – II

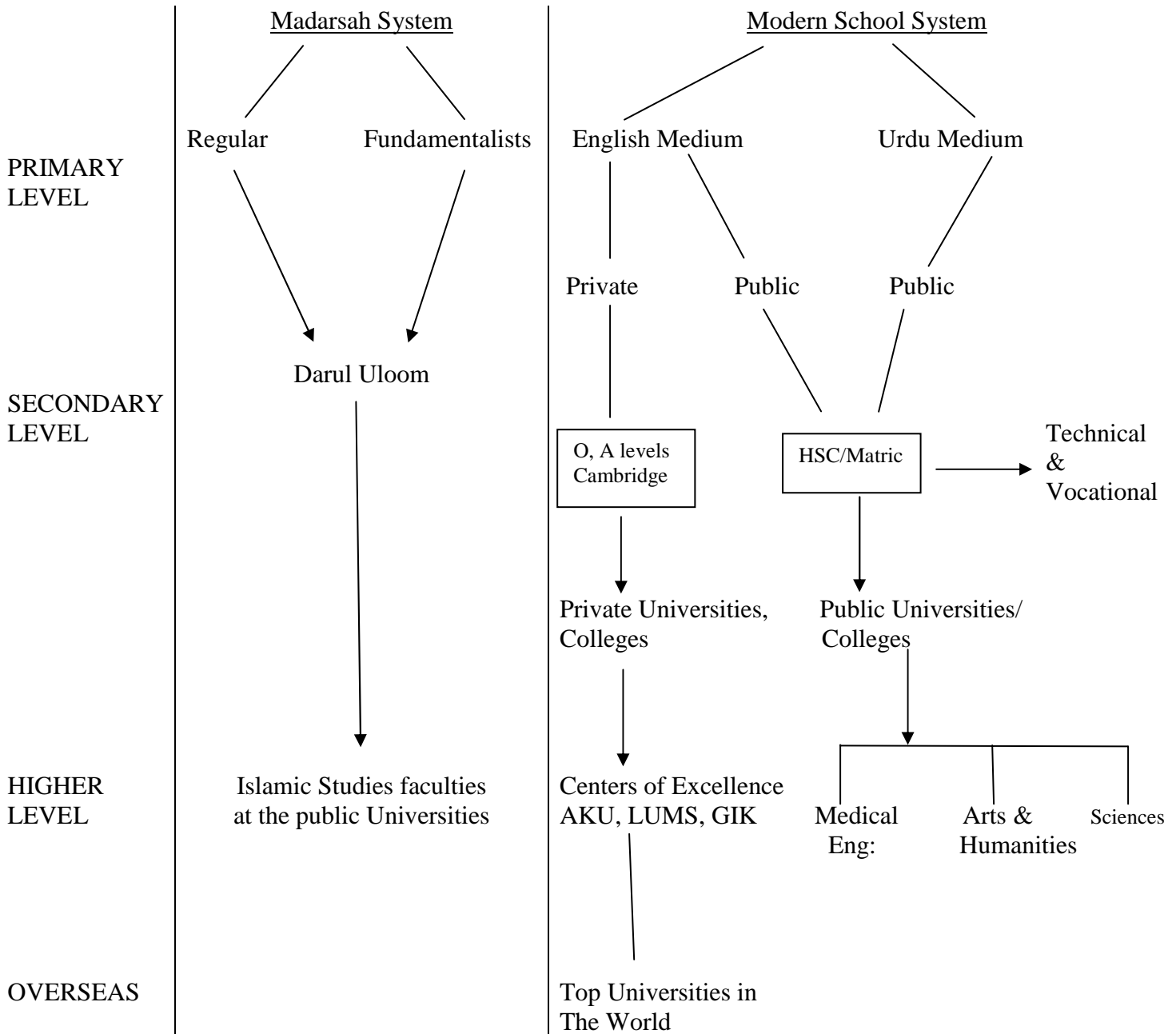
Distribution of Primary Enrolment – 2002

	<u>Urban</u>	<u>Rural</u>	<u>Overall</u>
Government	62.4	81.8	73.0
Private	36.9	17.1	26.1
Madrassah	0.7	1.1	0.9
Total:	100	100	100

Source: PIHS (2000)

CHART

Fragmentation and Segmentation of Education System



BOX I

Emerging Employment Scenario in Pakistan

WHERE ARE THE JOBS BEING CREATED?

- Mobile phone, Wireless loop and LDI companies
- Public call offices
- Internet service providers and Broad band service providers
- Cable services
- Electronic media companies
- Private and non-governmental educational institutions
- Scientific research and development organizations
- Private and philanthropic hospitals and clinics
- Agriculture farm machinery sales and workshops
- Automobiles service stations and show rooms
- Automotive vendor industries
- Fertilizer, pesticides, seeds and agrochemicals distributions
- Dairy and milk processing packaging and marketing
- Livestock, Fisheries, Fruits and vegetable industry
- Feed mills
- New private banks including Islamic banking and Microfinance institutions
- Advertising, Marketing and Creative Services
- Intercity and Intra city Coach, bus and transport services
- CNG filling stations
- Hotels and restaurants
- Information technology and Internet related companies
- Accountancy and Management Consultancy
- Construction Services particularly plumbers, electricians, masons
- Private Airline Companies
- Oil and gas exploration, drilling

WHERE ARE THE JOBS DISAPPEARING OR STAGNATING?

- Federal Government ministries and attached departments
- Provincial Government departments and agencies
- Public Sector Corporations
- Nationalized Commercial banks
- Public Sector Universities and Colleges
- Print media companies
- PIA, Pakistan Steel, Pakistan Railways
- Water and Power Development Authority
- Provincial Government Owned enterprises and Corporation

REFERENCES

Alderman, Harold; Peter Orazem and Elizabeth Paterno (2001), "School Quality, School Cost and the Public/Private School Choices of Low Income Households in Pakistan", *Journal of Human Resources* 36(2).

Alderman Harold, Jere Behrman, David Ross and Richard Sabot (1996), "The Returns to Endogenous Human Capital in Pakistan's Rural Wage Market", *Oxford Bulletin of Economics and Statistics*.

Andrabi, Tahir, Jishnu Das and Asim Khawaja (2003) "Private Schools in Pakistan: Catering to the Elite", World Bank, Washington D.C.

_____ Tristan Zafonc (2004), "Religious School Enrollment in Pakistan: A Look at the Data", World Bank, Washington D.C.

Ashraf, Javed and Birjis Ashraf (1993), "Estimating the Gender Wage Gap in Rawalpindi", *Journal of Development Studies* 29.

Behrman, Jere (1995), "Pakistan: Human Resource Development and Economic Growth into the Next Century", Background Paper for Pakistan 2010, World Bank.

Birdsall, Nancy, David Ross and Richard Sabot (1993), "Underinvestment in Education: How much Growth has Pakistan Foregone", *Pakistan Development Review*.

Easterly, William (2001), "Pakistan's Critical Constraint: Not the Financing Gap but the Social Gap", World Bank, Mimeographed.

Government of Pakistan 2000, "Census of Private Educational Institutions in Pakistan", Federal Bureau of Statistics.

Government of Pakistan 2001, "Pakistan Integrated Household Survey", Federal Bureau of Statistics.

Government of Pakistan 2004, "Accelerating Economic Growth and Reducing Poverty", Ministry of Finance, Islamabad.

Hoodbhoy, Pervez (ed) (1998), "Education and State: Fifty Years of Pakistan", Oxford University Press.

Kim, Jooseop, Harold Alderman and Peter Orazem (1999), "Can Cultural Barriers be overcome in Girls' Schooling?", World Bank Working Paper 10.

Klasen, Stephan (1999), "Does Gender Inequality Reduce Growth and Development? Evidence from Cross-Country Regressions", Background Paper for Engendering Development, World Bank.

Shabbir, Tayyeb (1994), "Mincerian Earnings Function for Pakistan", Pakistan Development Review 33(1).

Social Policy Development Center (2003), "Social Development in Pakistan, Annual Review 2002-03", (Karachi, SPDC)

UNDP, (2003), "Human Development Report 2003", Oxford University Press, New York.

World Bank (2003), "Pakistan Poverty Assessment", World Bank PREM Sector Unit.

Stern, N. (2001), "Investing for Growth and Poverty Reduction: Institutions and People", Speech delivered at Islamabad on March 29.

Husain, I. (1999) Pakistan: , "The Economy of an Elitist State", Oxford University Press, Karachi

Economic Development, Remittances, and Migration in Pakistan. Impacts of Remittances. Key Findings and Policy Implications. Previous studies on remittances in Pakistan include estimating the determinants of remittances and linking them with their potential in reducing poverty. Nishat and Bilgrami (1993) show that remittances in Pakistan are significantly influenced by family size, income, education, skill, and living with or without family. in countries with significant potential employment. Table 7 summarizes three different methods of emigration used by Pakistani workers, namely through agents, relatives in the destination country, and tourist visas. Each has its associated costs and the poor may need to borrow money at a high interest rate to meet the costs.