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A Sociological Analysis of Economic Impediments of Development in Education Sector: A Case of Southern Punjab (Pakistan)

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Abstract

The rate of schooling success in adult population at primary, secondary and higher education has positive relationship with the growth of GNP. The acquisition and application of knowledge by different countries has been governed largely by whether their population has acquired traits and motivations associated with formal schooling. They are dependent heavily on the larger part of economic conditions and ideological influences. Government is encouraging private sector investment in education sector but it more focuses on the urban areas not only denying equitable admittance to basic education for people of backward areas but also perpetuating poor educational status of the people. There are various economic impediments that are hampering the process of development in education sector of Pakistan. These impediments comprise of disparities between region and gender, lack of trained teachers, deficiency of proper teaching materials, poor physical infrastructure of schools and low levels of public investment in primary education sector. A sample size of N1=600 respondents (n1=200 parents, n2=200 students and n3=200 teachers) was taken from n4=50 affiliated schools (from BISE) through multistage sampling technique. Data was collected through interview schedule and then statistical test of ANOVA was used for the purpose of establishing the causal relationship among the dependent and independent variables. Thus the researcher concluded that lack of well designed curriculum, underinvestment in education sector, corruption, inflation, low parental income and cost of schooling deprives the children from getting quality education. Thus increasing the allocation of funds to education sector, provision of administrative autonomy, lessening the direct cost of schooling and improvement in infrastructural facilities are the major remedies for reducing the negative impacts of these economic impediments on education sector of Southern Punjab (Pakistan).

Keywords: Impediments, development, budget allocation, infrastructure, poverty

1. Introduction

South Asian countries have experienced rapid growth over the last three decades with lower levels of inequality. Reduced poverty and income inequality leads to more accentuate on the basic education, labor demand and economic growth. The rapid growth and reduced inequality escorted to higher demand and supply of education (Fasih, 2008). Moreover low levels of income inequality may directly stimulate economic growth. Accordingly there is a causal relationship between low inequality, economic growth and educational attainment. Thus educational policies show high investment on education sector. It is the key to sustainable development because it has the influence on productivity effects and reduced income inequality (Bridsall, et al. 1995). Since education is an investment, there is a significant positive correlation between education and economic productivity. When people are educated, their standards of living are likely to improve, since they are empowered to access productive ventures, which will ultimately leads to an improvement in their livelihoods (Nconco, 2006). The role of education therefore, is not just to impart knowledge and skills that enable the beneficiaries to function as economies and social change agents in society, but also to enhance the significant impacts on ideologies, rationales and aspirations which are the necessary prerequisites for the process of sustainable development (Anderson and Dexter, 2005). The straightforward linkage between education is through the improvement of labor skills, which in turn increases opportunities for well paid productive employment. Accordingly it will enable the citizens of any nation to fully exploit the potential positively (Aikman and Unterhalter, 2005).

Relative to the other countries which have almost same per capita income levels as Pakistan these countries are mostly investing on human capital. This investment on human capital is measured by educational performance of any country. Relative and absolute poverty are serious obstacles to human capital accumulation in Pakistan (Sawada, 1997). Expenditure allocations predict that input use should be chosen so that the marginal product per dollar of each input is equalized (Institute of Social and Policy Sciences, 2009). The existing literature shows that marginal product per dollar of inputs not directly valued by teachers are commonly 10-100 times higher than input valued by teachers. This illustrates that inputs which provide direct benefits to educators (like teachers wages) are used relative to inputs that contribute directly to education output (like books or instructional materials). This shows very high ratio of teachers to parents and teachers to students influence in the determination of expenditures. This entails that education reforms shifts the relative strengths of parents verses teachers in allocation of expenditures and can sometimes lead to massive gains in the cost effectiveness of the schools (Pritchett and Filmer, 1999). In spite of larger differences in social structures, cultural and historical backgrounds, higher education have to face serious challenges. Higher education entails good economic conditions but unfortunately poor countries have to face a lot of economic deprivation regarding higher education (Chaudhry, et al. 2009). The most significant economic issues in education sector are as follows:

1) **Lack of resources:** Financial adjustments required by a highly competitive and unpredictable global economy but regrettably the education sector of Pakistan lacks the basic resources that are required for the development of education sector in

Pakistan.

2) **Inadequate budget allocation to education sector:** Government of Pakistan is allocating lowest budget to education sector from the onset of technological transformations. This economic constraint is the base of many economic impediments in education sector of Pakistan (like poor infrastructural development, lack of schools and lack of proper training materials etc).

3) **Cost of schooling:** Cost of schooling is the major economic impediment that is accountable for low enrollment rate in education sector of Pakistan. This direct cost of schooling includes school books, school uniforms and other educational expenditures etc.

4) **Child labor:** Limited family earning is the major determinant of Intrahousehold and Extrahousehold child labor. This economic impediment is the major deprivation factor for children (in getting low quality education or no education at all) (Jam, 2005).

The enrollment rate and education accomplishment is directly influenced by gender, poverty, family structure and investment in children education. They have momentous impact on investment in children education such as poverty, household structure and economic well being of the individuals (Ali, 1997). Improved economic status of the parents escorts towards more investment on their children education (both males and females but especially for the females) but this is not necessarily true because many times well being and economic status even lead towards gender biasness. In addition to this family structure (as measured by number of children in the household of diverse age groups and child relationship to the head of the household) are also found to have the significant influences on educational investment (Shapiro and Tambashe, 2001).

Government is not able to invest more on education sector. The population of Pakistan is growing at the faster pace but the investment in education sector is not in an passable amount (Bano, 2008). Government allocation of education budget is not ample to meet the needs of education sector. This budget lags behind the other South Asian countries. Due to this lag the development rate of Pakistan is far below the third world countries (Memon, 2007).

Percentage share in educational expenditure by province and level of education						
	Federal	**Punjab**	**Sind**	**NWFP**	**Baluchistan**	**Pakistan**
2000-2001						
Primary education	15.58	56.97	48.39	47.69	41.82	47.79
Secondary education	17.28	26.55	30.56	36.92	31.09	28.27
College and universities	33.17	9.12	8.58	7.65	5.04	11.30
Professional	25.34	4.11	5.59	5.10	9.20	7.41

2001-2002						
Primary education	9.09	56.41	46.62	35.52	36.75	32.65
Secondary education	10.78	24.9	32.25	32.32	28.32	28.51
College and universities	29.44	9.39	8.55	6.01	7.70	14.71
Professional	28.82	5.83	7.24	5.10	8.59	10.21
2002-2003						
Primary education	8.79	57.54	45.72	41.55	36.75	42.4
Senalcondary education	11.94	24.27	33.81	35.73	28.32	25.81
College and universities	46.59	9.77	9.23	3.09	8.43	15.52
Professional	16.92	5.17	6.36	3.42	11.86	7.73
2003-2004						
Primary education	7.83	60.14	43.08	44.88	34.88	44.32
Secondary education	10.25	21.35	32.61	38.52	29.66	24.00
College and universities	50.81	7.30	8.26	7.14	6.83	15.27
Professional	13.76	4.65	6.11	4.93	7.37	6.74
2004-2005						
Primary education	11.46	57.6	42.91	45.84	30.66	42.18
Secondary education	8.81	21.56	33.41	41.3	24.44	23.46
College and universities	28.70	7.88	8.93	6.22	6.35	12.31
Professional	40.54	4.49	6.85	4.97	7.79	12.97
2005-2006						
Primary education	5.47	55.06	39.73	45.71	30.43	37.99
Secondary education	7.82	23.18	32.87	45.14	26.85	23.89
College and universities	59.10	8.73	10.29	6.17	6.93	20.62
Professional	13.12	5.17	6.13	5.31	9.79	7.47

Source: PRSP Annual Progress Report (Various years) published in working paper of Pakistan Institute of Economics (PIDE) in 2007.

The most important contribution in increased budget allocation is by the Punjab Education Sector Reform Programme (PESRP). The investment in education started to rise in 2003. The total expenditure on education tripled from Rs. 9200 million in 2005-2006 to Rs. 21480 million in 2007-2008. Most of the budget invested in the education sector was allocated to the primary level and as a result an increase in the enrollment rate of the primary students takes place (Ahmad, 2009).

Allocation of budget to education sector and percentage change					
Education budget	**2008/2009 budget**	**2008/2009 expenditure**	**2009/2010 budget**	**Percentage change**	
				Budget	**Expenditure**
Total	22,521.63	29,140.37	21,267.17	-6%	-27%
Salary	9,235.27	9,300.21	11,236.39	22%	21%
Non-salary	13,286.36	19,840.16	10,030.78	-25%	-49%
Source: Institute of Social and Policy Sciences, 2009					

Pakistan allocates lowest budget to education sector. Public expenditure to education is lowest part of the GDP as compared to other South Asian countries. Pakistan allocates 2.24% GDP in 2005-2006. Then there was an increase in the budget allocation by the government in 2006-2007 which was 2.50% of the GDP. After that government allocated 2.47% GDP in 2007-2008. Subsequently in 2008-2009 the government allocated 2.10% GDP to increase the literacy rate. In 2009-2010 the budget allocation GDP is 2.05%. Thus budget allocation became lesser in the later years after 2005-2006 (Economic Survey of Pakistan, 2010).

Summary of public sector budget allocation for education 2009-2010 (Rs. in millions)			
Federal governments			
Federal government	**Current**	**Development**	**Total**
Ministry of Education	3718.665	5500.000	9218.655
Higher education commission	21500.000	18500.000	44000.000
Federal government education institution in Cantonment and Garrisons	1929.760	14.910	1944.670
Federally administered tribal areas	4143.716	1534.318	5678.034
Gilgat Baltistan	1408.738	784.081	2192.819
AJ & K	3794.450	722.000	4516.450
Social welfare and special education commission	410.340	316.450	726.790
National, vocational and technical education commission	226.000	1500.000	1726.000
Other federal ministries/divisions and organizations	6570.556	3663.33	10233.89
Total (federal)	43702.222	32535.090	76237.312
Provisional governments			
Government of Punjab	24778.707	24794.589	49573.296
Government of Sind	13919.081	6020.000	19939.081

Government of Khyber Pakhtunkhwa	2411.730	2421.133	4832.863
Government of Baluchistan	2008.985	6059.354	8068.339
Total (Provinces)	43118.503	39295.076	82413.579
District government			
Punjab	66223.058	6293.739	72516.797
Sind	31930.127	5714.157	37664.284
Khyber Pakhtunkhwa	21379.271	1995.678	23374.949
Baluchistan	8673.374	102.460	8775.834
Total districts governments	128205.830	14106.034	142311.864
Total provinces and district governments	171324.333	53401.110	224725.443
Grand total federal, provisional and district governments	215026.555	85936.200	300962.755
Source: Ministry of Education published in Pakistan Economic Survey, 2010.			

Education endow with strong base for the socio-economic development of any country. An education system of poor quality may be one of the most important rationales why poor countries like Pakistan do not develop (Filmer and Prittchet, 2001). There are many barricades in education sector like disparities between region and gender, lack of trained teachers, deficiency of proper teaching materials, poor physical infrastructure of schools, low levels of public investment in primary education sector, allocation of government funds towards higher education and movement of highly educated people to developed countries for higher education or in search of better job opportunities (Checchi, 2003). Other blockades are acute shortage of teachers, poorly equipped laboratories, little relevance of curriculum to present day needs, cheating in examinations, overcrowded classrooms and lack of adequately trained master trainers (Memon, 2007).

Globally, educating a nation remains the vital strategy for the development of third world countries (Aikaman & Unterhalter, 2005). Numerous studies on human capital development concur that it is the human resources of a nation (and not its capital or natural resources) that ultimately determine the pace of its economic and social development. The principal institutional mechanism for developing human capital is the formal education system of primary, secondary and tertiary training (Nsubuga, 2003). Because child labor, deprivation from schooling, dispossession from adult employment and augmented fertility rate depends upon decision making of the household to educate their children (Leech and Little, 1999). The researcher has pointed out that every child has been engaged in one of the three activities at the age of 5-14 either he is at school, working at workplace or physically disabled (Deininger, 2003). Dropout rates of the children may be one of the determinants of child labor. Additional determinant is poor household with low adult employment. This determinant will tend to keep their children back from school and these households will have higher demand for children to provide child labor to earn additional income for their households (Mahmood, et al. 1994).

There are many factors that can reduce child labor such as enhanced access to school, provision of incentives and reduction in schooling costs. It may raise the school attendance

and thus becomes the major economic factor to reduce child labor. The researcher pointed out two major types of child labor in Pakistan (Boyle, 2002). One is child labor within the household (Intrahousehold child labor) and other is child work in the labor market (Extrahousehold child labor). They both have an impact on schooling access of rural areas of Pakistan. Extrahousehold work is the major motivational factor for the parents for not sending their children to school (Hazarika and Bedi, 2003). Nevertheless there are many economic obstructions in education sector that diminishes its effectiveness for the development of country. These barriers are lack of resources, poor infrastructure, lack of well designed curriculum, underinvestment in education sector and low quality of teachers training (Rehmani, 2010). Quality of education in Pakistan is very low due to wastage of resources, direct cost of schooling and improper infrastructure (Shami, et al. 2005). School uniforms, schools books, low parental income and labor contribution are the cost of schooling that divests the children from getting quality education (Hopper, 1991).

Gender inequality is widespread in resisting the process of development in Pakistan. There are numerous factors that contribute to lack of access of women to education sector like lack of incentives for parents who educate their daughters, deficiency of proper infrastructure, low quality education, cost of schooling, public private divide in education sector and institutional weakness (Andrabi, et al. 2007). Regardless of these economic determinants low adult literacy rate, low enrollment rate, high dropout rate, high cost of schooling, parental disinterest in educating their children, lack of proper school infrastructure, economic insecurity for teachers and low quality education are the major barricades that have negative impact on literacy rate of Pakistan (Aly, 2007). Other constraints are squat socio-economic status of the parents that limited the access of girls to education sector, lack of proper school arrangements that is attributed to lack of improper school infrastructure and proximity of the schools. Shortage of girls schools, poor quality teachers training , teachers absenteeism, weak curriculum and low quality education are the foremost obstacles to girls education (Qureshi, 2004).

During the past fifteen years the ratio of female to male population has increased but the endeavors to improve the female life quality and their contribution to education and economic development is still low (Siddique, 2001). Accordingly the female literacy rates and access to education is also low. These findings demonstrates that like the other developing countries in South Asia the status of human resources is low despite the expansion in health and education infrastructure (Brown, 2006).

2. Purpose of the Study:

The current situation of education/literacy in the country is pathetic and diverse economic impediments are needed to be addressed. This research intends to understand the current situation of literacy rate in Pakistan and analyze various economic obstructions that are hampering the process of development in education sector of Pakistan (especially in context of Southern Punjab). Although some researches are conducted on various underlying issues that are related with economic sphere that incorporate lack of manpower, lack of proper school infrastructure and non-availability of learning materials. Alternatively deficient

salaries for teachers, inadequate coordination between planning and implementation; lack of coordination between national education ministry, provincial ministries and local bodies; lack of sufficient budgetary allocation to education sector, cost of schooling as well as child labor are the major economic impediments that have significant negative impact on education sector of Southern Punjab (Pakistan). This research is exceptional in addressing these issues in general in context of Southern Punjab (Pakistan). The identification of these variables endow with an enhanced understanding about various aspects of the research especially related with economic impediments. The researcher cracks down on the following research questions during the course of present study:

1. What are the major economic impediments in structure of education sector of Southern Punjab (Pakistan)?
2. To what extent these economic impediments are hampering the process of development in education sector of Southern Punjab (Pakistan)?
3. What are the recent chronic trends of budget allocation by the government in education sector of Southern Punjab (Pakistan)?
4. What are the major implications of these budget trends on literacy rate of Pakistan?
5. What are the major policy implications for this issue?

3. Methodology:

Data was collected from the students enrolled in class 10^{th} of affiliated schools from Board of Intermediate and Secondary Education (BISE). All the students, their parents and teachers from affiliated schools from BISE were the universe while the students enrolled in grade 10^{th} were the target population. A sample size of N1=600 respondents (n1=200 students, n2=200 parents and n3=200 teachers) were selected through multistage sampling technique. Two districts (Multan districts and Vehari district) were selected from Multan division through simple random sampling technique in the first stage of sample selection. Then n4=20 schools were selected from Vehari district and n5=30 schools were selected from Multan district (a grand total of N2=50 schools) through systematic random sampling technique in the second stage of multistage sample selection. Afterward the researcher selected an average of 3-6 students from 10^{th} grade of each school by the application of law of large number in which the bigger sample is selected from the bigger part of the population and the smaller sample is selected from the smaller part of the population. Interview schedule was used as a tool for data collection procedure. Both structured and unstructured questions were used to evaluate the relationship among the study variables. The foremost purpose behind using both the open ended and close ended questions were to maximize the response rate. The researcher had to face many constraints in terms of biased responses of the respondents but the researcher tried to avoid the response errors to the maximum level. Data was coded by using SPSS software (version 17) and the relationship was established among the dependent (effect) and independent (cause) variables. Then the researcher analyzed the data through ANOVA test application. The formula for one way ANOVA is as follows:

$$SS_{total} = (\Sigma x_1^2 + \Sigma x_2^2 + \ldots \Sigma x_r^2) - \frac{(\Sigma x_1 + \Sigma x_2 + \Sigma x_r)}{N}$$

$$SS_{total} = \left[\frac{(\Sigma x_1)^2}{n_1} + \frac{(\Sigma x_2)^2}{n_2} + \ldots \frac{(\Sigma x_r)^2}{n_r} \right] - \frac{(\Sigma x_1 + \Sigma x_2 + \ldots \Sigma x_r)}{N}$$

$SS_{within} = SS_{total} - SS_{among}$ df_{among} = r-1 df_{within} = N-r

$$MS_{among} = \frac{SS_{among}}{df_{among}} \qquad MS_{within} = \frac{SS_{within}}{df_{within}}$$

$$F = \frac{MS_{among}}{MS_{within}}$$

x = individual observation
r = number of groups
N = total number of observations (all groups)
n = number of observations in group

4. Results and Analysis:

Determinants			
Variables	*Percentage of respondents who agreed on this stance*		
	Teachers	**Students**	**Parents**
Corruption	66.5%	43.5%	28%
Inflation	51%	42%	70.5%
Limited family earnings	68.5%	79%	34.5%
Lack of resources	78%	59.5%	47%
Wastage of resources	75%	54.5%	48.5%
Non-participation from private sector	64.5%	72.5%	82.5%
Inadequate school infrastructure	54.5%	76%	57%
Direct cost of schooling	61%	54.5%	73.5%
School fee	58.5%	67%	81.5%
Intrahousehold child labor	70%	55.5%	28.5%
Extrahousehold child labor	74.5%	61%	32.5%

Lack of future economic security for teachers	86.5%	52%	16.5%
Overcrowded classes	67.5%	75.5%	45%
Lack of libraries	64.5%	72%	45%
Lack of laboratories	70%	73.5%	49.5%
Lack of research facilities	62.5%	77%	54%
Low budget allocation by the government	83%	57.5%	48.5%
Lack of stakeholders participation	52%	63.5%	32%
Lack of public private partnership	51.5%	41%	63%
Inadequate shift of resources between subsectors	48%	32%	14.5%
Lack of qualified manpower	23%	57.5%	34%
Widening the structural divide	62.5%	71.5%	51%

5. Discussion:

Quality and improved schooling is the base for development planning and this is controversial nowadays because school quality and expansion does not perk up economic expansion (Hanushek and Woessmann, 2007). The researcher concluded that education quality is indispensable in promoting economic well being of the individuals. There is a strong verification that convalesce schooling does not plays a vital role in economic well being of the individual but cognitive skills of the population is directly narrated to economic growth, individual earnings and allocation of income towards education sector (Brown, 2006). The skill development and quality of educational institutions escort towards high economic growth. In developing countries the deficit skill development leads towards less economic growth. If the economic gap between the countries is reduced then the education system requires the major structural changes and they must focus on the cognitive skill development of the individuals (Vachon, 2007). Additional blockades are lack of government obligation to education sector, inadequate allocation of resources to education sector, shifting resources between public and private sectors, inadequate resource mobilization, inadequate shift of resources between subsectors, misplaced budget priorities and neglection of government to primary education in terms of budget allocation of resources (Filmer, 2007). There are assorted stumbling blocks in education sector like overcrowded classes, absence of basic classroom materials, lack of drinking water and sanitary facilities.

School level blockades include no school close to home, poor quality environment e.g. poor condition of buildings, overcrowded classes, lack of portable water availability, poor sanitation system as well as physical and psychological violence (Noorani, 2009). Pertaining to the above revealed discussion the above mentioned table no.1 also cited that 48% teachers, 32% students and 14.5% parents agree that (inadequate shift of resources between subsectors) and 67.5% teachers, 75.5% students and 45% parents agree that (overcrowded classes) are the

major economic impediments that are hampering the process of development in education sector of Southern Punjab (Pakistan). There are diverse blockades in education sector like overcrowded classes, absence of basic classroom materials, lack of drinking water, lack of sanitary facilities and inappropriate teachers training (Vachon, 2007). Therefore education system is not in a position to manage the learning outcomes especially in the literacy, numeracy and life skills. Gender discrimination, rural urban gap, teachers absenteeism, inadequate attention of teachers to every student and lack of teachers availability are the foremost determinants that leads to various economic impediments (PRSP, 2003).

The key learning constraints include low economic status of the parents, low parental education, cultural barriers, weak teachers performance, lack of accountability and insufficient instructional time. Demand side constraints include poor families, low levels of parental literacy and linguistic differences. The major teachers side constraint is low level of motivation and incentives for teachers (Groppela, 2003). Accompanying impediments include lack of supervision, lack of inspection systems, low teachers salaries and job insecurity for teachers (86.5% teachers, 52% students and 16.5% parents agree on this stance as the major economic impediment in education sector of Pakistan), insufficient teachers training, lack of teachers qualification and decentralized system of teachers monitoring (Anderson and Dexter, 2005). The literacy rate of Pakistan is very low especially Southern Punjab ranks lowest in literacy rate. Government is not able to invest more on education sector. The population of Pakistan is growing at the faster pace but the investment in education sector is not in an adequate amount. Government allocation of education budget is not sufficient to meet the needs of education sector (Memon, 2007). Other economic impediments include the official fees and the second category includes the extensive range of factors like household budgets, cost of textbooks, school uniforms, school fees and various other educational expenditures (Leech and Little, 1999).

Other economic impediments are also significant like low proportion of revenue allocation to education sector, low share of education budget to basic education, lack of government obligation to education sector, derisory allocation of resources to education sector, shifting resources between public and private sectors, misplaced budget priorities and neglection of government to primary education in terms of budget allocation of resources (Ajuoga, 2000). Government allocation of education budget is not sufficient to meet the needs of education sector. This budget lags behind the other South Asian countries. Due to this lag the development rate of Pakistan is far below the other third world countries (Ahmad, 2009).

Thus the above cited table shows that 83% teachers, 57.5% students and 48.5% parents agree that lack of budget allocation to education sector is the major economic impediment in education sector of Pakistan. Dropout rates of the children may be one of the determinants of child labor. Other determinant is poor household with low adult employment. This determinant will tend to keep their children back from school and these households will have higher demand for children to provide Intrahousehold child labor to earn additional income for their households (Mahmood, et al. 1994). Thus the above mentioned table illustrates that 70% teachers, 55.5% students and 28.5% parents agree that Intrahousehold child labor is the major determinant of drop out of students from school. They both have an impact on

schooling access of rural areas of Pakistan. Extrahousehold work is the major motivational factor for the parents for not sending their children to school (Hazarika and Bedi, 2003). Accordingly 74.5% teachers, 61% students and 32.5% parents agree that Extrahousehold child labor is the major economic impediment associated with education sector of Southern Punjab (Pakistan). There are many factors that can reduce child labor such as enhanced access to school, provision of incentives and reduction in schooling costs. It may raise the school attendance and thus becomes the major factor to reduce child labor (Mansuri, 2006).

However in poor countries the state provision is privatized through cost sharing and transfer of financing responsibility from national budgets to household budgets. Government investment on education can be increased through reallocation of resources. School fees is the major determinant of school completion and it is the direct cost of schooling that has the negative influence upon the enrollment rate of the students (Deininger, 2003). Accordingly 58.5% teachers, 67% students and 81.5 % parents agree that school fees is the major economic impediment that deprives the students from schooling. On the other hand lack of political will, weak implementation of educational laws as well as direct cost of schooling are the major economic barricades of development in education sector (Boyle, et al. 2002). Increase in educational expenses comprises of direct cost of schooling that is the major rationale of high dropout rate of children particularly of the girls because this direct cost of schooling is out of affordance for the poor families (Malik, 2002). Therefore 61% teachers, 54.5% students and 73.5% parents agree that direct cost of schooling is the major economic impediment that is responsible for low enrollment rate of the students. In addition to this Andrabi, et al. (2007) concluded that school fees, school uniforms, school books and school shoes are the direct cost of schooling that results in high dropout rates of the students. On the other hand gender discrimination with girls, traditional prejudices and gender role stereotypes are the indirect cost of schooling that contributes to low enrollment rates of the students. In Pakistan parents prefer to educate their sons than their daughters. This gender discrimination in the investment of education is due to limited family earnings and income volatility (Sawada, 1997).

There are countless determinants of girls and boys schooling. Grade attainment, current enrollment rate, withdrawal from school and various household effects are the major determinants of school completion for both boys and girls (Glick and Sahn, 2000). Increase in household income has positive impacts on girls schooling but has no impact on boys schooling because boys are already preferred over girls even when investment is low in case of education (Behraman and Knowles, 1999). There is a strong relationship between household income and child schooling. Less intergenerational mobility leads to less attainment of educational opportunities (Glewwe and Kremer, 2005). Nevertheless sometimes gender differentiations influence the issue because the parents prefer to invest more on boys education than girls education because it is mostly admitted that boys education is a necessity and girls education is a luxury. Therefore 68.5% teachers, 79% students and 34.5% parents agree that limited family earnings is the major determinant of preference for boys education over girls education. Pakistan, India, Nepal and Indonesia have strong influence of household wealth on student enrollment in the school because family wealth have strong and direct

influence on per capita output and poverty (Filmer and Pritchett, 2001).

The researcher found that there is a strong alliance between family wealth and enrollment rate of children. When family income increases then parents afford direct cost of schooling and willing to send their children to school (Aslam, 2009). There are several factors that becomes the hurdle in the implementation of any education policy and they comprise absence of whole education sector view, lack of policy coherence in education sector, unclear roles of fragmented government, parallel systems of education (public-private divide), widening the structural divide, weak educational planning, weak management and lack of stakeholders participation (Bynner and Parsons, 1997). Accordingly 62.5% teachers, 71.5% students and 51% parents agree on this stance that widening the structural divide is the major economic impediment related with education sector of Southern Punjab (Pakistan). On the other hand the researcher also focused on other economic impediments and they include lack of resources and wastage of resources (Rehman, 2005). Quality of education in Pakistan is very low due to wastage of resources, grade repetitions and high dropout rates of the students. Due to this resource depletion the budget allocation and the financial resources of the education sector are not able to meet the educational expenses. Thus the above mentioned table demonstrates that 78% teachers, 59.5% students and 47% parents agree that lack of resources is the major economic impediment that plays a vital role in decreasing the literacy rate of Pakistan. On the other hand a simultaneous economic impediment in education sector is also the wastage of resources. These material constraining factors that influence the school performance include lack of well furnished school buildings, inadequate resources, lack of well designed curriculum and non-manageable class size (Shami, et al. 2005). Thus 75% teachers, 54.5% students and 48.5% parents agree that wastage of resources is the major economic impediment that is responsible for weak performance of education sector in Pakistan.

There are other multidimensional problems of the country like lack of resources, non-participation from private sector (64.5% teachers, 72.5% students and 82.5% parents), scarcity of the qualified manpower (23% teachers, 57.5% students and 34% parents), inconsistency in the policies of various regimes, political instability, insufficient education management system, wastage of resources and poor implementation of educational policies (Barnet, 1990). There are numerous barriers and disputes that have to be faced by the developing countries. There is always lack of institutional arrangements and also financial constraints. Developing countries have to face many constraints regarding education sector because they cannot face the challenges of unpredictable global economy due to budget constraints (Rasian, 2009). The researcher concluded the work of Robertson (2009) and World Bank (2007) to analyze the economic challenges and barriers regarding higher education in developing countries. There are three foremost factors that constraints the education growth in Pakistan (such as poor state of government, poor state of institutions and lack of competitive environment that restricts the innovation process). Accordingly there are numerous barriers such as government failure, institutional shortcomings, corruption (66.5% teachers, 43.5% students and 28% parents) and inadequate juridical independence that hamper the process of development in education sector of Pakistan. Despite this fact

education institutions do not supply adequate skilled labor force that is the major stumbling block in the process of development in Pakistan (Qayyum, et al. 2008).

There are diverse factors that contribute to disappointing performance of Pakistan such as excessive defense spending, weak government performance, corruption, inflation (51% teachers, 42% students and 70.5% parents) government instability, sectarian violence and Kashmir conflict. Elementary education provides the opportunities to underprivileged countries to develop (World Development Indicators, 2007). There are countless social evils in the developing countries (like corruption, unemployment, low earnings, inflation, exploitation, rapid population growth and political instability) that lower the literacy rate of Pakistan. South Asian countries have literacy rate of 43% and the foremost indicators that determine education are sky-scraping (Kazmi, 2005). The most essential investment in human capital is education but education sector of Pakistan is suffering from many barriers that obstruct its process of development. These confronts range from lack of libraries to deficiency of research facilities. Other challenges include underinvestment in education sector, lack of accountability, lack of potential for resource mobilization and high dropout rates of students from Pakistan. There are some other resisting factors in the process of development in education sector of Pakistan. They comprise lack of availability and accessibility of low cost and high quality education, absence of formal criterion for funds allocation at school level, weak policy framework of the government and lack of teachers availability (PRSP, 2003). Thus 54.5% teachers, 76% students and 57% parents agree that inadequate infrastructure is the major barrier that is responsible for low quality education and low enrollment rate of the students to schools. Barriers regarding education include gender in equalization, rigid family decisions to send their daughters to schools, lack of infrastructure, lack of quality education, cost of schooling and proximity from school (Andrabi, et al. 2007).

Developing country like Pakistan has to countenance numerous barricades regarding quality of staff, government intervention, academic standards, libraries development, improvement in laboratories, increase in research facilities and student preparation (Aslam, 2009). Thus 64.5% teachers, 72% students and 45% parents agree that (lack of libraries), 70% teachers, 73.5% students and 49.5% parents agree that (lack of laboratories) and 62.5% teachers, 77% students and 54% parents agree that (lack of research facilities) are the major economic impediments that impedes the process of development in education sector of Pakistan. The researcher pointed out that government intervention is significant regarding higher education but unfortunately very low budget is allocated towards higher education. Education sector has to face lot of confronts like lack of dedication of teachers towards their teaching profession, low quality teaching, inadequate availability of research facilities across higher education and little possibility of international collaboration with other universities (Robertson, 2009).

6. Hypothesis testing:

Hypothesis 1:

Hypothesis: Underinvestment by the government in education sector is the major determinant of low literacy rate.

Independent variable (Cause variable): Underinvestment by the government (Low budget allocation to education sector)

Dependent variable (Effect variable): Low literacy rate

One-way ANOVA among three stakeholders of education sector (Students, Parents, Teachers)

Source	DF	SS	MS	F	P
Factor	2	140.90	70.45	13.84	0.000
Error	596	3033.19	5.09		
Total	598	3174.10			

Discussion:

As the researcher evaluated the responses of three major stakeholders in education sector (parents, teachers and students) therefore the researcher used ANOVA test for this purpose. Since 1947 every year the budget allocation to education sector diminishes or remains constant. Mostly the government allocates 2% GDP to education sector of Pakistan. Other issues in this regard are dissimilar sectors of educational institution that needs different budgets. As mentioned by Memon (2007) government is not able to invest more on education sector. The population of Pakistan is growing at the faster pace but the investment on education sector is not in an adequate amount. Education is the fundamental investment in human capital formation. Therefore the researcher made this hypothesis to enhance the vital obstruction of low budget allocation by the government to education sector of Pakistan. As mentioned by Ahmad (2009) government spending on education increases in recent years. The most important contribution in increased budget allocation is by Punjab Education Sector Reforms Programme (PESRP).

Year wise budget allocation to education sector of Pakistan				
Year	**Recurring budget**	**Development budget**	**Total education budget**	**% of GDP**
1995-96	39.610	2.585	42.195	2.00
1996-97	40.536	1.968	42.504	2.62
1997-98	46.100	2.984	49.084	2.34
1998-99	46.979	2.427	49.406	2.40
1999-2000	51.572	2.430	54.002	1.7
2000-2001	54.396	1.966	56.362	1.6
2001-2002	64.975	2.500	67.475	1.9
2002-03	67.270	2.604	69.874	1.7
Source: Ministry of Education, Government of Pakistan.				

The investment in education started to rise in 2003. The total expenditure on education tripled from Rs. 9200 million in 2005-2006 to Rs. 21480 million in 2007-2008. Most of the budget invested in the education sector was allocated to the primary level and as a result an increase in enrollment rate of the primary students takes place (Falch and Rattso, 1997). The below mentioned table makes this hypothesis more valid. The table shows that among various South Asian countries Pakistan spend lowest GDP on education sector. Therefore its literacy rate is also lowest among other South Asian countries.

Comparison of public sector spending on education		
Country	**Public sector spending as a percentage of GDP**	**Literacy rate in percentage**
Bangladesh	2.6	55.0
China	-	93.7
India	3.3	-
Indonesia	3.5	-
Iran	5.2	-
Malaysia	4.7	92.1
Nepal	3.2	57.9
Pakistan	2.1	57.0
Sri-Lanka	-	90.6
Thailand	4.5	-
Vietnam	5.3	92.5
Source: World Bank, UNDP, UNESCO, FBS, Ministry of Education.		

Public expenditure to education is lowest part of the GDP as compared to other South Asian countries. Pakistan allocates 2.24% of the GDP in 2005-2006. After that there was an increase in the budget allocation by the government in 2006-2007 which was 2.50% of the GDP. Subsequently government allocated 2.47% of the GDP in 2007-2008. Then in 2008-2009 the government allocated 2.10% of the GDP to increase the literacy rate. In 2009-2010 the budget allocation of the GDP is 2.05%. Thus the budget allocation became lesser in the later years after 2005-2006 (Economic Survey of Pakistan, 2010).

Percentage GDP spend on education in various countries	
Country	**Percentage GDP spend on education**
Pakistan	2.3%
Iran	4.7%
Malaysia	6.2%
Thailand	4.2%
South Korea	4.6%
India	3.8%
Bangladesh	2.5%
Source: World Development Indicators, 2007.	

Thus from the above discussion and statistical test the researcher can deduce that underinvestment by the government in education sector has significant impact on literacy rate.

The references shows that lower the GDP spend on education sector by the government lower will be the literacy rate. Thus the **(*p*=0.000)** which shows that low budget allocation by the government is the major economic impediment to education sector of Pakistan.

Hypothesis 2: Limited family earnings prefer boys education over girls education.

Independent variable (Cause variable): Limited family earnings

Dependent variable (Effect variable): Preference of boys education over girls/ Gender discrimination with girls enrollment

One-way ANOVA among three stakeholders of education sector (Students, Parents, Teachers)

One-way ANOVA: Students, teachers, parents

Source	**DF**	**SS**	**MS**	**F**	**P**
Factor	2	65.62	32.81	18.66	0.000
Error	597	1049.49	1.76		
Total	599	1115.12			

Discussion:

The researcher hypothesize that when there is an issue of investment on children education then the parents prefers boy enrollment in private schools and girls enrollment in public schools. On the other hand when there is limited family earnings then parents prefer boys schooling over girls schooling. Therefore the enrollment rate of girls is far behind than boys. Sometimes limited family earnings deprive both boys and girls from schooling but girls especially become the victim of low socio-economic status of the parents. As mentioned by Watkins (2000) limited family earnings maneuver both at micro level and macro level. At the micro level limited family earnings in households deprive the children from schooling while at the macro level it confines the government spending in education sector. Therefore low socio-economic status of the parents or limited family earnings is the major determinant of low enrollment rate of children. But girls especially become the victim of this determinant. In addition to this quality education is also necessary for enrollment of girls to schools. As mentioned by Qureshi (2004) the most imperative economic impediment related with girls education is limited family earnings because it is the leading rationale for allocating the household funds towards boys education. From the above discussion the researcher concluded that whenever there is an issue of investment on education then boys are always preferred over girls. Thus girls are always been discriminated from access to education sector than boys. As mentioned by Rehman (2005) limited family earning escorts parents to prefer boys schooling over girls schooling. Boys schooling is associated with larger rate of returns as compared to girls schooling. Accordingly the researcher come to the conclusion that when

girls have been deprived from completing education then this will have the negative impact on economic growth of the country (Kochar, 2004). Therefore girls are always considered as the marginalized component of the society and due to the fear of lower rate of returns girls have always been sidelined in school enrollment. There always exists gender gap in education sector because boys are more preferred to accomplish education than girls (Klasen, 2002). This gender equality has greater impacts on economic growth of country. The main reason is that the average level of human capital lowers because the gender equality leads to low investment on education and thus unskilled labor effects the economic growth of the country. Miscellaneous stumbling blocks related with girls education are mostly concerned with cultural and economic constraints (Glick and Sahn, 2000).

Girls are deprived from decision making about education and thus have little contribution in the economic sharing (because education attainment is directly related with economic sharing process) (Behraman and Knowles, 1999). Therefore girls have low enrollment rate as compared to boys. There are three major areas in education sector that should be explored because they have the dramatic effect on primary school access, type (private verses public) and quality of education because these factors influence the parental decisions to enroll their children to school or not (Lloyed, et al. 2005). Gender discrimination also prevails in educational sector because quality of girls education in schools is the important feature that influences the decision making of the parents to enroll their girls to school but for the boys quality does not matter because parents are already more focused on boys education than girls education (Suryadarma, et al. 2006). On the other hand financial resources are also important. Accordingly financial resources will decide that whether girls have to enroll in schools or not. These differences occur due to differences of parental preference for their daughters and sons (where sons got larger preferences in education than their daughters). Domestic responsibilities have negative impacts on girls education as compared to boys education. Thus **(p=0.000)** and the alternate hypothesis is accepted and the null hypothesis is rejected. Thus the researcher concluded that limited family earning (an imperative economic impediment) is the major determinant of parental preference for boys schooling than girls schooling. Thus family income and probability of schooling are interrelated to each other because school fees and other expenditures narrated to school are only affordable by small population.

Hypothesis 3

Hypothesis: Direct cost of schooling is the major determinant of high dropout rates among the students.

Independent variable (Cause variable): Direct cost of schooling

Dependent variable (Effect variable): Dropout rates among the students

One-way ANOVA: students, teachers, parents

Source	DF	SS	MS	F	P
Factor	2	262.29	131.15	93.17	0.000
Error	597	840.37	1.41		
Total	599	1102.66			

Discussion:

The researcher hypothesize that there is greater impact of cost of schooling on dropout rates of students in schools. There are many obstructions that contribute to high dropout rates of the students. Parental carelessness, increase in educational expenses and non-instantaneous advantages from education sector are the major causes of high dropout rate of students (Glewwe and Kremer, 2005). Child mental weakness is also the factor. Income of household is the important determinant of school completion and increased enrollment rate of students. Due to lack of schools children are slot in child labor and various employment opportunities. Public primary schools significantly amplify the likelihood of dropout rates because they are not able to provide necessary educational skills to the students. Thus the acquisition of the skills will have positive impact on cognitive skills and thus improves the quality of education which will boost the enrollment rate of the students. Direct cost of schooling is also the foremost economic impediment in the development of education sector and this can be divided into two categories. The foremost category includes the official fees and the second category includes the extensive range of factors like household budgets, cost of textbooks, school uniforms and school fees (Watkins, 2000). Other barricades are lack of low government obligation to education sector and shifting resources between public and private sectors and inadequate resource mobilization (Kennedy and Baxter, 2000). The researcher portrays a relationship between two variables. The researcher hypothesize that there is a significant relationship among direct cost of schooling and high dropout rates among the students. There are many obstructions in education sector that encumbers the process of development and they include two foremost areas such as direct cost of schooling (e.g. school fees, school uniforms, school shoes and school books) and indirect cost of schooling (e.g. traditional, cultural and religious beliefs; gender stereotypes associated with girls education, lack of knowledge on benefits of education and gender differences) (Noorani, 2004). Afterward the researcher had taken the responses of the three stakeholders (parents, students and teachers). After this the researcher applied ANOVA test on this hypothesis. There are many supply and demand side barriers that have the momentous impact on education sector. These barriers incorporate various socio-cultural and economic factors such as inclination of boys education over girls education, poverty, direct and indirect cost of schooling (such as school fees, school uniforms and school books) transportation issues, opportunity costs verses lower rate of returns (Addy, 2008). Direct cost of schooling is the major determinants of high dropout rates among the students (Boyle, et al. 2002). The foremost factor behind this is low

socio-economic status of the parents that cannot afford the direct cost of schooling. School uniforms, schools books, low parental income and labor contribution are the cost of schooling that deprives the children from getting quality education (Hopper, 1991). Poverty is the major determinant of school completion of children. The results of the hypothesis shows that null hypothesis is rejected. Null hypothesis depicts that there is no association between direct cost of schooling and dropout rates of the students. On the other hand alternate hypothesis is accepted which says that direct and indirect cost of schooling is directly associated with high dropout rates of the students. Thus **(*p*=0.000)** that this association to be perfectly interrelated.

7. Conclusion:

Developing countries like Pakistan have to face many economic impediments in education sector due to unpredictable global economy. There are other multidimensional problems of the country like lack of resources, non-participation from private sector, scarcity of the qualified manpower, inconsistency in the policies of various regimes, political instability, insufficient educational management system, wastage of resources and poor implementation of educational policies. There are auxiliary economic impediments faced by Pakistan like lack of resources, non-participation from private sector, scarcity of the qualified manpower, inconsistency in the policies of diverse regimes, political instability, insufficient education management system, wastage of resources and poor implementation of educational policies. There is always an alliance between income inequality and allocation of resources. Thus direct cost of schooling, opportunity cost of schooling, gender factors, child labor, limited family earnings and inflation are the major factors that deprive the children from educational access. All these factors interact permanently to dispossess the children from schooling. The role of government in provision of equal employment opportunities is also crucial. Nevertheless in poor countries the state provision is privatized through cost sharing and transfer of financing responsibility from national budgets to household expenditures. Other stumbling blocks are also important like lack of government obligation to education sector, inflation, corruption, lack of stakeholders participation, lack of qualified manpower, shifting resources between public and private sectors, inadequate resource mobilization and misplaced budget priorities are the foremost economic impediments that have negative impact on education sector of Southern Punjab (Pakistan).

8. Policy implications:

1. Government should allocate funds both at the regional and provincial level on equality basis.
2. Government should allocate funds on the equivalent basis without the discrimination of rural and urban areas.
3. Government should be fully dedicated and committed to increase the literacy rate.
4. Government should diminish rural urban discrimination of education.
5. Government should eradicate the school fees predominantly at the primary level.
6. Government should encourage parents and reward their efforts regarding their

children academic achievement.

7. Government should encourage research projects and their critical analysis in education sector so that sufficient data can be collected for the policy makers in education sector of Pakistan.
8. Government should encourage the role of NGO's in provision of educational services to maximum population.
9. Government should ensure future economic security and incentives for the teachers so that they can work without any uncertainty.
10. Government should ensure participation from the private sector so that the uniformity in education sector can be attainment.
11. Government should focus on increasing the number of schools so that parents and students have an easy access to education sector at least at the primary level.
12. Government should give maximum funds to establish laboratories, libraries and research centers in every school.
13. Government should give some incentives so that stakeholders participation can be amplified in education sector of Pakistan.
14. Government should implement policies that can give administrative autonomy and uniformity to education sector which is the only way to achieve quality education in Pakistan.
15. Government should perk up enrollment rate of the students by reducing the direct and indirect cost of schooling.
16. Government should perk up school reformations and ensure improvement in the school infrastructure of Pakistan.
17. Government should improve the infrastructural facilities like clean water, roads, boundrywall, toilets and lightening.
18. Government should augment welfare services so that the poor families should focus on educational attainment of their children.
19. Government should commence positive competition between the state schools and private schools so that both can contribute to increase the literacy rate of Pakistan.
20. Government should make improvement in internet availability.
21. Government should make improvement in library construction and organization.
22. Government should make improvement in research facilities.
23. Government should make improvement in curriculum by comparing national curriculum with curriculum of different countries.

24. Government should make improvement regarding quality of education.

25. Government should make such strategies so that adequate resources can be mobilized to increase the budget allocation in education sector of Pakistan.

26. Government should surmount the problems of corruption, inflation and rapid population growth that are directly influenced on lowering the literacy rate of Pakistan.

27. Government should endow with financial facilities to policy makers so that good policy making and policy implementation can be ensured.

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