ASSESSING PUBLIC SECTOR INITIATIVES AND ITS IMPACT ON THE DEVELOPMENT OF EDUCATION SECTOR IN PAKISTAN

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ABSTRACT

Education is an important tool for the socio-economic development of a nation. Government of Pakistan realizes the importance of education and has made serious efforts to address the issue of education at the macro-level. All education policies, plans and reforms were given some importance in order to remove gender disparity and to upgrade education status in Pakistan, which has resulted in an improved scenario. Therefore, the study enumerates the public sector initiatives (i.e. education plans, policies and schemes) which were taken by government of Pakistan during past 65 years. In order to evaluate the impact of government initiatives, different education indicators including literacy rates, gross & net enrolment trends and physical infrastructure in public schools, were analyzed. The results of the study show that besides all the aforementioned initiatives, the situation of education have not satisfactory improved. The government is still not able to achieve the required education standard (i.e. quality and quantity both). Even basic or primary education is not yet made accessible to all its population. It is analyzed that policy formulation is not enough criteria to develop a strong and effective education system. In fact successful education system depends on proper implementation of policy which further depends upon honest and hardworking staff, sufficient funding and political stability of the country. Unfortunately, Pakistan lacks in all these properties.

Keywords: Education, Socio-Economic, Development, Government Initiatives, Physical Infrastructure, Literacy and Enrolment

1. Introduction

Universal human right to education is the most pivotal key for development of various productive skills and abilities. Advances in education enable human resource to broadly participate and contribute to their societies and nation's economies.

After 65 years of independence population in Pakistan frequently suffers from multiple disparities including education. Government of Pakis-

tan realizes the importance of education and has been committed to provide equal opportunities of education to all without any discrimination. Government is developing series of efforts at policy level in order to influence progress in education. Therefore, this research study evaluates public sector initiatives and their impact in development of education sector in Pakistan. The study also identifies the factors and socioeconomic impediments in the direction of education in the country. The research paper is splitting up in three different parts. Part one give introducetion, part two provides literature review and the methodology. Part three explain study results, conclusions and suggestion.

2. Conceptualization

The word education refers to a process of teaching and learning (especially in schools, colleges and in universities) to improve knowledge and skills (Organization for Economic Cooperation and Development, 2013). Education gives intellectual, moral and social instruction which may include training

or instruction for a particular purpose (Lynd, 2007). Education includes development of character and mental power through systematic instructions (UNESCO, 2012). According to Qasmi (2009), education enhances people's efficiency to work in economic activities and uplifts their socio-economic status. There are various stages of education (including primary, middle, high secondary and tertiary) however, it is worldwide recognized that, primary and secondary education is not the adequate standard to achieve more robust national economic growth. Indeed, higher education becomes the foremost need for development of an economy (Isani & Virk, 2003). Highly educated human resource can play a more productive role to ensure sustainability of economic growth rate. On the other side, quality of primary and secondary education has great influence in preparing individuals for the subsequent higher education and their healthier economic contributions. Poor quality of primary and secondary education puts off individuals from becoming successful at higher education level and limits their access to better employment positions (Khan and Jabeen, 2011). "Primary education is the most important step in a child's educational career. It can make or break the child's educational career" (Pakistan Education Statistics, 2010-11, pp8). The Islamic republic of Pakistan is a developing country associated with unsustainable socio-economic development (United Nations, 2010). Pakistan is agricultural based country where particular proportion of population belongs to rural areas (Chaudhry et al., 2012). The education system of Pakistan strives to ensure availability of education from basic to higher education level. Structure of education system in Pakistan consists of number of stages such as pre-primary, primary, middle, secondary, higher secondary and higher education (Annual Status of Education Report, 2013). In Pakistan education sector in large scale is supposed to be public sector. However, on a limited scale private education institutions also impart education at all levels. Overall there are 194, 151 (i.e. 72%) public education institutions accommodating 66 percent of total students and 76, 674 (i.e. 28%) Private education institutions accommodate 34 percent of total students (Pakistan Education Statistics, 2010-11). The majority of private education institutions charge high fee and provide improved quality of education (including better physical facilities). However, greater part of wellknown private education institutions establish themselves in urban areas and facilitate welloff communities of society whereas large part of rural population is poor and highly depends on public sector education. Government of Pakistan has launched various policy documents and several action plans periodically for boosting up the education system in the country. However, World Economic Forum 2011, Global Gender Gap Report (2011) reported that in Pakistan, education is not in accessible to all. According to Ministry of Labor and Manpower Government of Pakistan (2009), "Still almost 44 million Pakistani population in working age (i.e. 15 plus) have not had the opportunity to learn how to read and write" (Ministry of Labor and Manpower Government of Pakistan, 2009, pp.18). According to Chaudhry et al., (2012), lack of state attention towards education sector and unfavorable socio-economic environment are supposed to be responsible for unsatisfactory status of education in Pakistan.

To sum up, education has huge benefits in socio-economic development of a country. At policy level, the Government of Pakistan makes efforts and has developed various education stages for providing education to all. However, access education remains an unsolved issue in Pakistan. This opens the area to investigate the major initiatives taken by government of Pakistan to improve the education sector in the country during past decades and to analyze their impact on the development of education sector in the country.

3. Methodology

This research study focuses on examining public sector initiatives and their impact on development of education sector in Pakistan. Therefore, the parameter of education plans and policies was selected to

evaluate public sector initiatives for the development of education sector in Pakistan. On the other hand, various other parameters, including literacy rate, net enrolment rates, gross enrolment rates and available physical facilities in public schools were selected to measure the impact of public sector initiatives for upgrading the education scenario in Pakistan. This research study is based on secondary data. Therefore, annual time-series data was collected from the website of Federal Bureau of Statistics of Pakistan, Economic Surveys of Pakistan and other secondary sources. In order to measure the significance of progress in literacy rate, Ordinary Least Squares Method (OLSM) was applied. Statistical Package for Social Sciences (SPSS) and MS-Excel were used to analyze the data and to present the findings. The findings of this study would provide numerical facts about the present scenario of education in Pakistan which help to generate compatible initiatives to overcome the hurdles in the direction of education and to improve the male-female education status in the country.

4. Results and Findings

Results and finding regarding Public Sector Initiatives and their Impact on Education Sector of Pakistan presented are as following.

5. Public Sector Initiatives

Pakistan inherited British education system (Isani & Virk, 2003). Later on, Government of Pakistan took various initiatives to achieve long-term sustainable educational growth in the country. The brief review of major policies, plans, programmes and schemes with reference to education in Pakistan is discussed below.

5.1. Education Plans

The Government of Pakistan has planned its economy including education sector for forty (40) years through eight optimistic five-year plans. The mechanism of five years plans was designed to mold the education system according to the socio-economical, national and ideological needs of Pakistan (Awan, 2005).

Table-1 Key Aspects of Five Year Plans in Pakistan with Education Focus

Plans and	Years	Key Aspects
Policies First Five Year Plan	1955-60	Universal Primary Education, Improved infrastructure & enrolment at all levels, Quality of education, Manpower development in higher education
Second Five Year Plan	1960-65	Improved infrastructure and enro- lment at all levels, Scholarship for talented students, Free education at primary stage
Third Five Year Plan	1965-70	Improved infrastructure and enro- lment at all levels with particular focus on primary education, Balan- ced & integrated education deve- lopment, Enlarged crops of tea-chers, To encourage research, scie-nce and technology
Fourth Five Year Plan	1970-75	Improved infrastructure and enrolment at all levels, To develop more functioning education system, Literacy rate, To remove rural-urban education disparity, To strengthen research, development planning & agriculture education
Fifth Five Year Plan	1977-83	Improved infrastructure and enrolment at all levels, To achieve universal primary education, remove education disparity among social classes and rural-urban areas, qualitative improvement in higher and professional education
Sixth Five Year Plan	1983-88	Universal Primary Education, improved infrastructure and enrolment at all levels, Introduce Literacy Programme, To improve teachers qualifications, To encourage private education sector
Seventh Five Year Plan	1988-92	Universalize to primary education, literacy rate, quality of education at all levels, Improved infrastructure and enrolment at all levels
Eighth Five Year Plan	1993-98	Broaden the education resource through private sector investment, To increase infrastructure and enrolment at all levels, Availability of primary schools at reachable distance, Improvement in curricula, text-books & examination system, To improve literacy rate

Source: Isani & Virk (2003), Zaidi (1999), Social Policy Development Centre Annual Review (2003) & Pakistan Institute of Legislative Development and Transparency (2011).

Throughout history Government of Pakistan made only eight five years plans (Isani & Virk, 2003).

Table-1 highlights key aspects of educational aims and objectives of Pakistan within the framework of past five year development plans, which deal with development of education. Key aspects show that every new five year plan revised previous key focus. This indicates improper implementation of plans. In general every fiveacknowledges vear-plan great significance of education. However, in any emergency situation, education sector was ignored. Sajid (2006), reported that at the initial stage of Third Five-Year-Plan (1965-70) in Pakistan war with India over Kashmir was broken in year 1965 therefore, priority of education was put at behind and more resources were diverted to defense. Although every plan gave importance to education however, the common focus of almost every plan was to achieve universal primary / basic education. Even then after forty years of five years of planning, Pakistan remained unable to provide basic education to all its peoples (Bengali, 1999). Policy makers realized that the development of five year plans was not practicable due to rapid

changes in domestic and global economy. Therefore, after eighth Five-Year-Plan (1993-98) policy of five years plans was not further carried on. (Zaidi, 1999).

5.2 Education Policies (1970 to 2010)

The Government of Pakistan has made serious efforts to address the issue of education, at the macro-level. Table-2 summarizes the key aspects of education policies in Pakistan with education focus and highlights that all education policies were given importance to removing gender disparity and upgrading education scenario in Pakistan. The study of the policies framework indicates that all education policy documents revised same desired goals. This indicates that previous policies did not successfully achieve their set targets. Besides education plans and policies different education programmes were announced for example Nai Roshni School. However, due to political instability these programs were ended without giving fruitful results.

Table-2
Key Aspects of Education Policies in Pakistan with Education Focus

Education Policies	Years	Key Aspects		
New Education Policy	1970	To achieve universal primary education by 1980, Islamic values, Manpower development, Equal access to education opportunities, To establish new universities.		
National Education Policy	1972	To achieve universal primary education, Literacy rate, Nationalization of private institutions, Equal access to education opportunities, Manpower development, Establishment of new universities.		
National Education Policy	1979	To achieve universal primary education, Literacy rate, Better educational structure, Islamic values		
National Educational Policy	1992	To achieve universal primary education, literacy rate, Quality of education, Private sector encouragement, Islamic values		
National Educational Policy 1998-2010	1998	To achieve universal primary education, Literacy rate, Manpower development, Islamic values		
National Education 2009 Policy		To achieve universal primary education, equality in education by gender and area, 10 percent enrolment of 18 to 23 years old youth in higher education, Teachers training, Improvement in curricula and text-books, Islamic values		

Source: (Isani & Virk, 2003), (Zaidi, 1999) Social Policy & Development Centre Annual Review, 2003) & (Pakistan Institute of Legislative Development and Transparency, 2011).

Government of Pakistan made its last education policies (i.e. National Educational Policy 1998-2010 and National Education Policy 2009) and set the targets to achieve up to 2015 and up to 2025. In addition to these policies, various action plans (such as National Plan of Action (2001–2015) and The National Plan of Action (2013-16) and different policy recommendation documents (such as Pakistan 2020: A Vision for Building a Better Future) are presented from time to time for proper implementation of policies (Ministry of Education, Trainings and Standards in Higher Education Government of Pakistan, 2013).

6. Impact of Public Sector Initiatives on Education Sector in Pakistan.

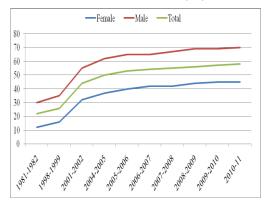
In order to analyze the Impact of Public Sector Initiatives on Education Sector in Pakistan study parameters including literacy rate, enrolment trends and available physical facilities were analyzed and presented as following.

6.1 Literacy Rate

Literacy rate is defined as the ability to read and write a language whereas, literacy rate of a country refers to particular proportion of population able to read, write, to understand and to speak a language (Chitrakar, 2009). Figure 1 indicates that during last four decades the literacy rate has progressed from 12 to 45 percent or as less than one percent per annum. Besides improvement in relative positions, during comparative years from 1981-82 to 2010-2011 gender gaps increased from 18 percent to 25 percent respectively. UNESCO (2012) reported that socio-economic environment and government ignorance are the major causes for gender disparity in education in Pakistan. According to

Begum et al., (2011) poor quality of learning environment, insufficient numbers of schools is the major factors responsible for poor and unequal literacy rate among both genders in Pakistan.

Figure-1
Male-Female Literacy Trends
in Pakistan n=10 (%)

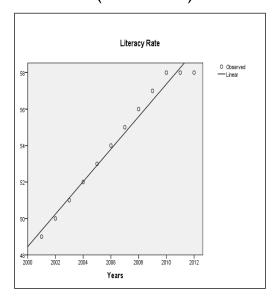


Source: United Nations Educational, Scientific and Cultural Organization (2006), Economic Survey of Pakistan (2004-05), Economic Survey of Pakistan (2008-09) & Economic Survey of Pakistan (2011-12)

A simple linear regression presents the mathematical relationship between two quantitative variables, where dependent variable is predicted by using only one independent variable (Christopher, 2011). Figure-2 presents graphical outcome of regression model for literacy rate in Pakistan (i.e. dependent variable). Pattern of regression line and high pos-

itive values of correlation (i.e. 0.98) confirm that literacy rate in Pakistan significantly has increased during past years. The values of R square (i.e. 0.97) indicate that 97 percent of the variation in literacy rate, is explained by this model. Significant values of F-statistics (i.e. 442.347) indicate that the equation as a whole is statistically significant in explaining literacy rate.

Figure-2 Regression Results for Literacy Rate in Pakistan n=12 Years (2000 to 2012)



Data Source: Pakistan Economic Survey 2008-09, 2010-11, 2012-13 and Federal Bureau of Statistics of Pakistan (2011) *Significant at 0.000 level

7. Enrolment Rates

This research study also used net and gross enrolment trends at various education stages to measure the performance of education sector in Pakistan.

7.1 Net Enrolment Rates

Net Enrolment Rates (NER) is the participation rate, which is the total number of enrolment of particular age group students who are enrolled in a specific stage of education divided by the total number of population (i.e. in the official age group) who ought to be attending a specific stage of education (Lynd, 2007).

Table-3 Net Enrolment Rates by Education Stages in Pakistan (%)

Education Stages	Age		1998-99		2010-11			
		Male	Female	Total	Male	Female	Total	
Primary	5-9	49	38	44	60	53	56	
Middle	10-12	19	13	16	22	19	20	
Matric	13-14	10	7	9	11	10	11	

Source: Social Policy and Development Center (2009) & Pakistan Social Living Standards Measurement Survey (2010-11)

Table 3 shows net enrolment rate at various education stages in Pakistan. The data reveals unsatisfactory growth in net primary enrolment within both genders in Pakistan during last fifteen years. However; disparities still persist at primary level in Pakistan. In Pakistan net enrolment rates at the above primary stage always remain much lower than net enrolment rate at the primary stage because many boys and girls discontinue their education after primary stage due to poverty Nations Educational, (United Scientific and Cultural Organization, 2012). Table-3 also indicates that net middle enrolment trends at national levels are two times lower than net primary enrolment trends whereas, gender enrolment trends show females' declining status at middle stage without significant enrolment growth during last decade.

Data also shows that the net matric enrolment rate Pakistan in total is very low (i.e. only 12 percent). Furthermore, during last decade growth in net enrolment at matric stage was incredibly small (i.e. only 3 percent). Khan (2010) reported that because of poor economic conditions of families, children quit their studies and start to earn. This is major reason of low net enrolment rates in Pakistan.

7.2 Gross Enrolment Rates

The Gross Enrollment Rates (GER) is the participation rate, which is total enrolment regardless of age in a specific stage of education divided by the total number of population (i.e. in the official age group) who ought to be attending a specific stage of education (Economic Survey of Pakistan 2011-02).

Table-4: Gross Enrolment Rates by Education Stages in Pakistan (%)

Education	Urban			Rural			Total		
Stages	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary	109	103	106	96	75	86	100	83	92
Middle	70	73	71	55	37	47	59	48	54
Matric	80	77	79	57	35	47	65	49	57

Source: Social Policy and Development Center (2009) & Pakistan Social Living Standards Measurement Survey (2010-11)

Table-4 shows gross enrolment rate at various education stages in Pakistan. Comparative analysis of table 4 with table 3 indicates that gross enrolment rates at the primary level are much higher than net primary enrolment rates. According to Economic Survey of Pakistan (2011-12), in education sector of Pakistan at primary level the numbers of repeaters is high and large numbers of overage children also enrolled at primary stage. On the other hand, numbers of official aged group (i.e. aged 5 to 9) children who are out of schools is also high (this includes more girls). This leads to the high gross enrolment rates at the primary stage compared to net enrolment rates at this stage. High number of repeaters and over age children's enrolment at primary stage reduces the opportunities

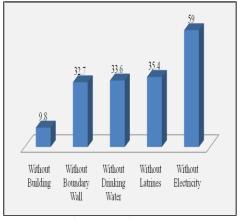
of primary education for those children who are in official aged group (i.e. aged 5 to 9) for this stage. This would hinder Pakistan from moving closer to achieving universal primary education. Table 4 also shows low enrolment rate for females as compared to male children at primary education level. Data also highlights that the difference is markedly large in rural areas than in urban areas. Table-4 also presents gross middle enrolment trends in urban areas which appear to be better than those in rural areas. According to Chaudhry et al., (2012) economic and socio-cultural impediments negatively affect female education particularly in rural areas of Pakistan. Moreover, in Pakistan almost half (49.3 percent) of the capacity of the entire education system is devoted to primary education.

This reduces the recourses of education system for strengthening education system beyond the primary stage (Iqbal. et al., 2013). Therefore, lowest enrolment trends within both genders are observed in rural areas. Furthermore, Gross Matric Enrolment Rates indicate that the gender and regional discrimination is persisting in Pakistan. Furthermore, poor share at matric stage of rural females indicates that rural females remain more deprived of getting their basic universal human right (i.e. education).

7.3 Physical Infrastructure

Quality of education is highly associated with existing learning environment in educational institutions (Organization for Economic Co-operation and Development, 2013). Figure 3 highlights differences in availability of physical facilities in public schools in Pakistan. Missing physical facilities in public schools are an important factor that negatively contributes for education disparity in Pakistan among regions, gender and provinces (Annual Status of Education Report, 2013). Females are sensitive by nature. Therefore, they are highly affected by learning poor environment (Mohammad and Khan, 2008). Country's rural population highly depends on public education sector but poor infrastructures of public schools are most prominent in rural areas. In some pockets landlords and tribal conservative communities strictly prohibit education and discourage the development of education in their areas. This in turn results in lower enrolment and poor physical maintenance of public education schools (Khan, 2010).

Figure-3 Missing Basic Infrastructure Facilities in Public Primary to Higher Secondary Education Institutions of Pakistan (%)



Source: Pakistan Education Statistics (2010-11)

8. Conclusions and Recommendations

Education has gigantic benefits in economic and non-economic fields of life and well educated human resource can play an efficient role in economic and non-economic development of the nations. Government of Pakistan took many initiatives to ensure accessibility of education to everyone which has resulted in an improvement. However, much needs to be done because besides all the above initiatives the situation of education has not satisfactorily improved. Government is still not able to achieve the required education standard (i.e. quality and quantity both) even basic or primary education is still not in the access to all its population. It is analyzed that policy formulation is not enough criteria to develop a strong and effective education system. In fact successful education system depends on proper implementation of policy which further depends upon honest and hardworking staff, sufficient funding and political stability of country. Unfortunately, Pakistan lacks in all these properties. However, government achieved

some targets and Pakistan made some progress in education sector. Consequently, malefemale education status up to some extent has improved.

To upgrade the education sector and to remove the regional and gender disparities in access to education, it is suggested that Government of Pakistan should uplift their education policies, plans and schemes. On other side, special initiatives should be taken by both public and private sectors to upgrade the status of education with special focus on rural areas. To improve the quality of education and to motivate both towards genders education there is need to improve physiccal learning environment in all education institution.

References

Annual Status of Education Report. (2013). ASER Pakistan. South Asian Forum for Education Development. Islamabad.

Anwar Mohammad Nadeem. (2005). Evaluative Study of Management Techniques Used in Administrative & Academic Decision Making in Universities. PhD Thesis. University Institute of Education & Research. Rawalpindi.

Bengali Kaiser (1999). History of Educational Policy Making and Planning in Pakistan.

- Working Paper Series # 40. Sustainable Development Policy Institute (SDPI).
- Begum Zohra, Khan Iqbal & Iqbal Assad. (2011). Socioeconomic Status of the Girl Students and Their Dropout Rate at Primary Level in F.R. Kohat (FATA- Pakistan). European Journal of Social Sciences. 20(2):356-384.
- Christopher Dougherty, (2011) Introduction to Econometrics, **4th** edition, Oxford University Press.
- Chaudhry Imran Sharif, Farhana Nosheen & Muhammad Idrees Lodhi. (2012). Women Empowerment in Pakistan with Special Reference to Islamic Viewpoint: An Empirical Study. Pakistan Journal of Social Sciences (PJSS) Vol. 32, No. 1, pp.171-183.
- Chitrakar Roshan. (2009). Overcoming Barriers to Girls' Education In South Asia: Deepening the Analysis. United Nations Children's Fund 2009. Regional Office for South Asia. Kathmandu. Nepal.
- Economic Survey of Pakistan (2004-05), Economic Advisor Wing, Finance Division, Islamabad.
- Economic Survey of Pakistan (2008-09), Economic Advisor Wing, Finance Division, Islamabad.
- Economic Survey of Pakistan (2010-11), Economic Advisor Wing, Finance Division, Islamabad.
- Economic Survey of Pakistan (2011-12), Economic Advisor Wing, Finance Division, Islamabad.
- Federal Bureau of Statistics of Pakistan (2011). Pakistan Statistical Year book 2011. Islamabad. Pakistan.

- Iqbal Ahmad, Muhammad Rauf, Aqeela Rashid, Shahfiq Ur Rehman, Muhammad Salam. (2013). Analysis of the Problems of Primary Education System in Pakistan: Critical Review Of Literature.Volum 4.No 2.Issn.2223
- Isani U.A.G. & Virk Mohammad Latif. (2003). Higher Education in Pakistan: A Historical and Futuristic Perspective. National Book Foundation. Islamabad.
- Khan Shahinshah Babar (2010). Problems in Universalization of Primary Education in Pakistan. Pak. J. Commer. Soc. Sci. Vol. 4 (2), 147-155
- Khan Tayyeb Ali and Jabeen Nasira. (2011). Tenure Track System in Higher Education Institutions of Pakistan: Prospects & Challenges. Educational Research & Reviews. 6 (9):605-621.
- Lynd Douglas. (2007). The Education System in Pakistan: Assessment of the National Education Census. UNESCO. Islamabad. Pakistan.
- Ministry of Labour and Manpower Government of Pakistan. (2009). Pakistan Employment Trends for Women (Series No.5). Labour Market Information and Analysis Unit. Islamabad.
- Ministry of Education, Trainings and Standards in Higher Education Government of Pakistan, (2013). National Plan of Action to Accelerate Education-Related MDGs 2013-16; Achieving Universal Quality Primary Education in Pakistan. http://planipolis.iiep.unesco.org/upload/Pakistan/Pakista

- n_National_plan_of_action_2013-2016.pdf
- Mohammad Jalal-Ud-Din and Khan Munir. (2008). Socio-Economic and Cultural Constraints of Women in Pakistan with Special Reference to Mardan District, Nwfp Province. Sarhad J. Agric. Vol.24, No.3.
- Organization for Economic Co-operation and Development (OECD) (2013). Education at Galance, OECD Indicators, OECD Publishing. IBSN. 978-92-64-20105-7
 http://www.oecd.org/edu/eag2
 013%20(eng)--FINAL%2020%20
 June%202013.pdf
- Pakistan Education Statistics 2010-11. National Educational Management Information System (NEMIS)-Academy of Educational Planning and Management (AEPAM). Islamabad. Ministry of Education.
- Pakistan Institute of Legislative Development and Transparency, (2011). Right to Free and Compulsory Education in Pakistan. Enforcement of Article 25-A of The Constitution of Pakistan.
- Pakistan Social and Living Standards Measurement Survey (2010-11). Government of Pakistan Statistics Division Federal Bureau of Statistics. Islamabad.
- Qasmi Marhab. (2009). An Analytical Study of Female Education in Rural Sindh & its Impact on Socio-Economic Environment. The Women-Annual Research Journal. 1:82-104
- Sajid Ali. (2006). Why Does Policy Fail? Understanding the Problems of Policy Implementation in

- Pakistan: A Neuro-Cognitive Perspective. International Studies in Educational Administration, 34(1). Available at: http://ecommons.aku.edu/pakistan_ied_pdck/10
- Social Policy and Development Centre. (2003). Social Development in Pakistan: The State of Education. Annual Review 2002-03. Karachi. Pakistan.
- Social Policy and Development Centre. (2009). Social Development in Pakistan: Women at Work. Annual Review 2007-08. Karachi. Pakistan.
- UNESCO. (2006). Pakistan: where and who are the world's illiterates?. Background Paper Prepared for the Education For All Global Monitoring Report 2006 Literacy for Life. Available at: http://unesdoc.unesco.org/images/0014/001459 /145959e.pdf
- UNESCO. (2012). World Atlas of Gender Equality in Education. French (France). http://www.uis.unesco.org/Education/Documents/unesco-world-atlas-gender-education-2012.pdf
- United Nations. (2010). The World's Women 2010: Trends & Statistics. United Nations Publication. New York.
- World Economic Forum (2011). The Global Gender Gap Report 2011. Geneva. Switzerland. Available at: http://www3.weforum.org/docs/ WEF GenderGap Report 2011.pdf
- Zaidi S. A. (1999). Issues in Pakistan's Economy. Oxford University Press. Karachi.