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# THE ROLE OF PRIMARY EDUCATION IN ECONOMIC DEVELOPMENT: A CASE STUDY OF DISTRICT MULTAN-PAKISTAN

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*ABSTRACT*-The objective of study is to analyze negligence in education at primary level. This study explores the impact of backwardness in primary education. The study is designed to investigate the issues of basic education by visiting different primary schools (public and private) in Multan city. The main problems of primary education are low enrollment, low quality of education, deficiency of schools, schools at long distance, no parents' motivation to their children about education, no transport facilities, low level of the income of the households, language problems, curriculum differences, class differences, shortage of teachers, high drop-out ratio etc. We used primary data which was analyzed through SPSS. We have concluded that mismanagement, low budgetary allocation, wrong policies, shortage of teachers and schools, lack of awareness, poverty etc. are major causes of the low enrolment and high drop-out ratio in primary education.

Key words: Low per capita income, shortage of teachers, lack of motivation.

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#### **1. INTRODUCTION**

Primary education teaches us simple concepts (UNICEF Report, 2005), narrated that primary schooling provide Childs many optimistic belongings, including lessening poverty, lessening child mortality rates, positive gender equality and cumulative ecological concern. With the help of Primary schooling students become able to know important skills that are foundation for the rest of their educational career. In primary education teachers teach students questions like calculation, Discipline, Linguistic Paintings, Natural features, Drawing, Harmony and many other basic things of these type. Primary schooling is much valuable in this sense that in the way of this education child interact with children which are not meet earlier in this sense they know different habits, races, socio-economic statuses, different religions and also know the methods of conversations Therefore, Primary school instructors have a exceptional chance to teach children about broadmindedness and respect. Students of primary school have opportunity to get simple lifetime services like appraisal, text, spelling, relational statement and attentiveness. This is only primary school which teach the students good habits like, time managing, multitasking business, Short and long term forecasting and pattern of tests.

Primary school instructors clarify several different topics to the students, so in this way they engage them in different work assignments and also promote good habits among them. Primary school teachers use different tools to teach Childs and maintain their considerations including Games, Books, Movies, Artwork and Computers. In short, we can say that primary/Elementary education is a base of any country progress which help that country people to improve himself and improve his personality, and also improve himself for the benefit of a country mean beneficial person of a country.

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So the nations who pay attention on the primary education they must grow quickly because primary education generates self-confidence.

#### 1.1 Background of Study

Gloomy picture still exists as there is no attention on primary education. Authorities focus on secondary and higher education but neglect the primary education which is the base of secondary and higher education. Due to neglect of primary education our education system is totally flopped due to poor base of the building of education system. Due to neglect of primary education today we are much backward in the field of education world level. From the different studies we come to know that we are much backward in the field of education. Primary schools education is much disturbed especially in rural areas where primary schools are much less in quantity and those fewer schools are the victim of mismanagement. Mismanagement mean that people of the local areas use the building of schools illegally and keep their animals in that building. Many schools used for different social ceremonies.

#### **1.2. Primary Education in Pakistan**

Our education system is confronted with number of problems like corruption, distortions, discrimination, untrained staff, low management of salaries mean teachers are underpaid, lack of policies implementations, outdated curriculum and many other problems of this type. For improving our education system, we must resolve these problems speedily. In this way, we can improve our primary education, which has been given low priority by policy makers.

#### **1.3 Neglecting Status of Education in Pakistan**

Education system is weak in Pakistan from primary to higher level. Poverty is a main hurdle in Pakistan education system. Government facilities are much less which do not fulfill the needs of people. Due to reason private sector is working to Global Journal of Management, Social Sciences and Humanities 744 Vol 4 (4) Oct-Dec,2018 pp. 741-.758. ISSN 2520-7113 (Print), ISSN 2520-7121 (Online) www.gjmsweb.com.editor@gjmsweb.com Impact Factor value = 4.739 (SJIF).

promote education in Pakistan. But poor people cannot afford high fee of education. The end result is that poor becomes more poor while rich people move forward in every high salaries job. So education inequality is creating inequality in job, opportunities, wages and social status. So the society has been divided into different classes and people are recognized through their social classes, despite the fact that our religion teaches us that there is no difference in people due to race and class. Government need to promote the schools so that poor students can get education and avail job opportunities. Instead, the number of private schools and colleges are increasing exponentially as is shown in Table 1.

Nature of schools	Sectors	1999-2000	2005	2007-2008	Change since 2000 (%)
Primary	Private	14,748	16,911	17,250	17%
Frinary	Public	131,779	119,848	139,342	6%
Middle	Private	12,550	24,115	24,847	98%
	Public	12,085	14,334	15,982	32%
High	Private	5,940	13,484	14,053	137%
8	Public	8,509	9,471	9,911	17%

 Table 1: The Number of Public and Private Schools,1999-2008

Sources: Adapted from I-SAPS, 2010

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## 1.4 Major Issues in Primary Education

- Low per capita income
- Operational and Administration ineficiences
- High Drop Outs ratioo
- Weak Policy Application
- Old-fashioned Study System
- Absence of Qualified Teachers
- Non-availability of resources
- Absence of Faculty Regulation
- Absence of Management
- Non-market curriculum

## 1.5 Main Research Problem

Our main research problem is to study the role of primary education in economic development. We have intended to conduct our research by restricting our study to District Multan.

## 1.6 Objectives of Study

The objectives of the study are,

- To study the importance of primary education.
- To study the hurdles in the promotion of primary education
- To analyze the effects of high dropout rate problem and its effect on economic development.
- To suggest the solution of the problems facing by primary education.
- To suggest ways how to promote primary education in Pakistan.

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### 1.7 Scope of Study

This study will help to improve the primary education which is the essential for the children and for the country. This study will provide insights to policy makers and guideline for devising policies to improve primary education system in the country. The scope of our study is wide and its impact is multi-dimensional.

### 2. LITERATURE REVIEW

Hassan (1997) examines policies 1942-1992 and describes that low investment in education sector and poor management of organization are main cause of backwardness of primary education.

Zafar (2004) focused gender disparities which was cause of backwardness in primary education. He disclosed that enrollment of boys and girls was equal but female dropout ratio was greater.

Kosimbei et al (2005) analyzed gender and socio economic sectors and describe that boys were efficient and intelligent than girls so we must focused on girls education.

Memon (2007) discussed the backwardness of primary education and said that is main cause is low quality of education. Low quality was due to untrained staff, poor laboratories, and weak examination system.

Hussain et al, (2008) said that poor education system was cause of backwardness in primary education.

Asghar et al (2009) described importance of education and create link between education and health. He stated that educated persons pay attention on their health so healthy Pakistan needs improvement in education. Global Journal of Management, Social Sciences and Humanities 747 Vol 4 (4) Oct-Dec,2018 pp. 741-.758. ISSN 2520-7113 (Print), ISSN 2520-7121 (Online) www.gjmsweb.com.editor@gjmsweb.com Impact Factor value = 4.739 (SJIF).

Ahmad (2009) explained that corrupt authorities and poor implementations of policies and rules were cause of backwardness in primary education.

Huismen et al (2010) contended that poverty, education, environment of schools, building of schools, socio economic factors, father occupation, parents education level, facilities of schools and teacher availability are the factors which influence primary education.

Commer (2010) focused that low enrollment was main cause of backwardness and the low enrollment.

Rehman et al (2012) discussed the importance of education i agriculture sector and suggested that education may be promoted in rural areas to eradicate poverty.

Rashid et al (2012) reported the problems of education sector which was obstacle in the way of progress argues that natural calamity, political instability, lack of motivation and failure of planning.

Benz (2012) also discussed the primary education problems like low budget, attention in curriculum, old teaching methods, political interferences and lack of support to new private institutes/schools.

Khattak et al (2012) highlighted contribution of education in economic growth because education has long run impact. He suggested to accelerate the enrollment and discouraged dropout.

Ahmad et al, (2013) highlighted backwardness of primary education such as nepotism, corruption, no check and balance, low quality of education etc. and suggested improving monitoring system.

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Ahmad (2013) focused poverty which was main cause of backwardness. Author suggested poverty reduction for promote education system.

Chohan et al (2013).has given three reasons which were family, school and student aptitude. According to author these three reasons were main factors which influenced primary education.

Pegkas (2014) viewed the link between education and growth. He said that three levels of education primary, secondary and higher education are main factor for development but primary education is key factor for economic development.

With the help of literature review we come to know that Pakistan is much backward in the sector of education which is the main cause of its underdevelopment. The education sector's main problems are poverty, nepotism, decrease investment in education sector, corruption, underutilization of funds, high population growth rate, effect of races, class and status, poor policies and their implementation, outdated curriculum and duality in curriculum, teacher incompetency and their poor training, lack of people awareness which is cause of low enrollment in schools, low quality education, gender effects, low security system, child labor, poor quality education in public sector while high cost education in private sector which is out of the reach of poor's, political instability and poor examination system and many other problems of similar nature. If we want to improve our system than we must solve these problems.

#### 3. RESEARCH METHODOLOGY

#### 3.1 Data and its Types

In our study we used primary data collected from different schools of Multan District. The data was collected through a structured questionnaire. We take the data for sample of 200 students of different schools located in Multan district. Global Journal of Management, Social Sciences and Humanities 749 Vol 4 (4) Oct-Dec,2018 pp. 741-.758. ISSN 2520-7113 (Print), ISSN 2520-7121 (Online) www.gjmsweb.com.editor@gjmsweb.com Impact Factor value = 4.739 (SJIF).

### 3.2 Selected variables

The variables of our study are stated as under:-

1.Primary education(PE)	=	Dependent Variable
2.Poverty(POV)	=	Independent Variable
3.No of teachers (TEACH)	=	Independent Variable
4.Budget Allocation (BA)	=	Independent Variable
5.Enrollment of students (Enr)	=	Independent Variable

## 3.3 Specification of Model

We developed our econometric model on the basis of the above variables. The model is as under: -

Primary education = Intercept + Poverty + No of teachers + Budget Allocation +

#### Enrollment of students

 $PE = B_1 + B_2 (POV) + B_3 (TEACH) + B_4 (BA) + B_5 (Enr) + e$ 

PE = Primary education

 $B_1 = Autonomous \ factor > 0$ 

 $B_2 = Poverty$ 

B<sub>3</sub>=No of teachers

B<sub>4</sub>= Budget Allocation

 $B_5 = Enrollment$ 

e = error term

## 3.4 Analytical Technique

We will use Ordinary Least Square (OLS), Multiple Regression and ANOVA methods to measure change in selected variables and draw the results.

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### 4.DATA ANALYSIS

We analyze the results through Correlation, Multiple Regression analysis and ANOVA methods. The results drawn are tabulated in the following tables.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.558ª	.311	.308	.337

Table.2Model Summary

a. Predictors: (Constant), Shortage of teachers in your school?

The Value of R is 0.558 shows significant negative correlation between shortage of teachers and drop out ratio. Similarly, the value of  $R^2$  is 0.31 which shows that one unit change in independent variable causes 31 percent change in dependent variable. It means if we increase one teacher it will decrease 31 percent drop out of the student. This is a significant positive relationship between increasing number of teachers, which will decrease 31 percent drop out ratio. So this variable is very important.

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Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.149	1	10.149	89.529	.000 <sup>a</sup>
	Residual	22.446	198	.113		
	Total	32.595	199			

## **3 ANOVA RESULTS**

a. Predictors: (Constant), Shortage of teachers in your school?

b. Dependent Variable: Drop-out ratio is the major cause of illiteracy of Pakistan?

**ANOVA** results shows that model is goodness of fit with data. Table 2 shows that independent variables significantly and statistically predict the variation in dependent variable, F(1,198) = 89.529, p < .0005.

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			Standardiz	-	
			ed		
	Unstandardized		Coefficien		
	Coefficients		ts		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	.568	.071		7.950	.000
Shortage of teachers in your	.477	.050	.558	9.462	.000
school?					

Table 4Coefficients

a. Dependent Variable: Drop-out ratio is the major cause of illiteracy of Pakistan.

The data in Table 3 also confirm the results of Table 1 showing that shortage of teachers will cause 56 percent drop out of the students at primary level.

### 4.1 General Interpretation

To examine the relationship between shortage of teachers and its effect on drop-out ratio through correlation, multiple regression analyses and ANOVA. The results show that shortage or unavailability of teacher is the significant variable. Thus, if we want to stop drop out ratio of students we should increase number of quality teachers. It will increase literacy rate and also pave the way for poor students to obtain higher education. Global Journal of Management, Social Sciences and Humanities 753 Vol 4 (4) Oct-Dec,2018 pp. 741-.758. ISSN 2520-7113 (Print), ISSN 2520-7121 (Online) www.gjmsweb.com.editor@gjmsweb.com Impact Factor value = 4.739 (SJIF).

#### 5.FINDINGS OF FIELD SURVEY

The demographic statistics of the respondents are that their majority 57.5 percent were male and their age group was between 11-16 years. More that 58 percent respondents lived in urban areas. Only 37 respondents have their own transport while 73.5 percent have their own houses. Around 96 percent were satisfied with work load of school and 74.5 percent were found satisfied over current school system and lack of crowding in class room. About 6 percent respondents were unsatisfied with school environment. The family income of 53.5 percent respondents was between Rs. 5,000-15,000/- The schools of 71.5 percent respondents have walls and proper class rooms. About 6.5 percent respondents receive text books from schools and 63.5 percent were satisfied over their health and nutrition. About 90 percent respondents told that study material was too costly. More than 96.5 percent respondents disclosed that teachers do not use audio-visual tools during teaching. About 67 percent respondents told that their parents do not motivate them to go to school due to low financial status. About 60 percent respondents told that low enrolment of students is due to location of school at long distance from their houses. 83 percent respondents told that their monthly progress reports are not sent to their parents. 66 percent told that their schools conduct weakly tests while 80 percent told that their teachers are present in the classes. More than 97 percent were satisfied over curriculum. About 51 percent complained that their teachers do not pay attention to their students. Similarly, they also complained that their schools do not provide text books in time and they would have to wait long. 575 percent participated in the field survey were males while rest of the participants were female. 62 percent complained the shortage of teachers in the schools. 82.5 percent respondents informed that teachers motivate them to learn. 98 percent said

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that teachers and parents understand the value of education. The maximum number of the respondents (79.5%) responded that drop-out ratio is harmful and major cause of illiteracy in Pakistan. The maximum number of the respondents (99.5%) responded that English language is the main cause of failure of students.

## 6. CONCLUSIONS

After having interview of 200 respondents we reach the conclusion that our education system especially primary education is being carried out without any planning and this is the reason that drop out of the students is high at primary level. The major problem of our education are: low enrolment, low quality curriculum, high cost of learning material, location of schools at long distance, low per capita income, high poverty level, low wages, absence of technology, unavailability of transport and unsafe environment particularly for female students. Lake of parents' motivation and shortage of teachers are another problems being faced by our primary schools. Proper buildings and class rooms are not available. English language is one of the main cause of the failure of students in the exams. If we want to enhance literacy rate at primary level and stop drop of the students, we will have to solve these problems on war footing.

### 7. POLICY RECOMMENDATIONS

- Government start programs for parents' awareness that they should send their children to schools.
- Government should construct schools and hospitals in rural areas and take initiative to stop migration from rural to urban areas.

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- Government must provide public transport in rural areas so that the students living in far-flung areas can get education.
- Well-thought policies may be framed and be executed effectively.
- Government must control child labor.
- Population must be controlled.
- Government must introduce advance methods of teaching in our education system so that we may be ranked in the field of developed countries.
- Monthly report for students must be dispatched to the homes of students so that parents may be aware about the performance of their children.
- Government take strict action to finish the deficiency of teachers.

## REFERENCES

- Afzal, M., Malik, M. E., Begum, I., Sarwar, K., & Fatima, H. (2012). Relationship among education, poverty and economic growth in Pakistan: an econometric analysis. *Journal of Elementary Education*, 22(1), 23-45.
- Ahmad, I., Rauf, M., Rashid, A., ur Rehman, S., & Salam, M. (2013). Analysis of the problems of primary education system in Pakistan: Critical review of literature. *Academic Research International*, 4(2), 324.
- Ashraf, M., & Kopweh, P. (2012). "Globalization and education policy of Pakistan: The challenges of access and equity in education". *Glasgow: College of Social Sciences, School of Education, University of Glasgow, UK.*
- Awan, Abdul Ghafoor (2012). "Human Capital: Driving Force of Economic growth in selected Emerging Economies", *Global Disclosure of Economic and Business*, Vol.1(1):09-30.

Awan, Abdul Ghafoor (2011) "Changing World Economic and Financial

Global Journal of Management, Social Sciences and Humanities 756 Vol 4 (4) Oct-Dec,2018 pp. 741-.758. ISSN 2520-7113 (Print), ISSN 2520-7121 (Online) www.gjmsweb.com.editor@gjmsweb.com Impact Factor value = 4.739 (SJIF).

Scenario" *Asian Accounting and Auditing Advancement*, Vol.1 (1) 146-175.

- Awan, Abdul Ghafoor (2016). "Wave of Anti-Globalization and Capitalism and its impact on World Economy". *Global Journal of Management and Social Sciences*, Vol.2 (4) :1-21
- Awan, Abdul Ghafoor (2015). Analysis of the impact of 2008 Financial crisis on the economics, political and health system and societies of advanced countries" *Global Journal of Management and Social Sciences*, Vol 1(1):1-16
- Awan, Abdul Ghafoor (2012). "Emerging versus Aging Economies: A Comparative study of Advanced and Emerging Economies" *International Journal of Management Research and Emerging Sciences* Vol 2 (1): 45-65
- Awan, Abdul Ghafoor (2015) Comparative analysis of the Literature of Economic Growth in the perspective of Advanced and Emerging Economies", *Science International*, Lahore, Vol.27 (3):3579-3587
- Bano, A., & Naseer, N. (2014)."Social Adjustment and Academic Achievement of Primary Gradea.".Pakistan Journal of Social Sciences (PJSS), 34(1), 217-227.
- Behrman, J. R., &Deolalikar, A. B. (1995). "Are there differential returns to schooling by gender? The case of Indonesian labour markets." .Oxford Bulletin of Economics and Statistics, 57(1), 97-117.
- Bengali, K. (1999). History of educational policy making and planning in Pakistan.Islamabad: Sustainable Development Policy Institute.

Global Journal of Management, Social Sciences and Humanities 757 Vol 4 (4) Oct-Dec,2018 pp. 741-.758. ISSN 2520-7113 (Print), ISSN 2520-7121 (Online) www.gjmsweb.com.editor@gjmsweb.com Impact Factor value = 4.739 (SJIF).

- Benz, A. (2012, November). The Crisis of School Education in Pakistan, Government's Failure and New Hopes in the Growing Private Education Sector". In *International Asian Forum.International* Quarterly for Asian Studies (Vol. 43, No. 3/4, p. 223). Arnold Bergsträsser Institut.
- Butcher, K. F., & Case, A. (1994). "The effect of sibling sex composition on women's education and earnings". *The Quarterly Journal of Economics*, 109(3), 531-563.
- Daniel, H. D., Schwarz, S., &Teichler, U. (1999). "Study costs, student income and public policy in Europe". *European Journal of Education*, 34(1), 7-21.
- Grossman, J. B. (1994). "Evaluating social policies: principles and US experience". *The World Bank Research Observer*, *9*(2), 159-180.
- Handa, S. (2002)."Raising primary school enrolment in developing countries: The relative importance of supply and demand". *Journal of development Economics*, 69 (1), 103-128.
- Herz, B. K. (2006). Educating Girls in South Asia: Promising Approaches. United Nations Children's Fund, Regional Office for South Asia.
- Hill, D. (2004). Books, Banks and Bullets: controlling our minds—the global project of imperialistic and militaristic neo-liberalism and its effect on education policy. *Policy Futures in Education*, 2(3-4), 504-522.
- Hoodbhoy, P. (2011)." Education Reform in Pakistan-Challenges and Prospects".
- Husain, I. (2001). "How is Pakistan positioning itself for Challenges of Globalization" Mahbubul Haq Human Development Review, 1(2), 101-111.

Global Journal of Management, Social Sciences and Humanities 758 Vol 4 (4) Oct-Dec,2018 pp. 741-.758. ISSN 2520-7113 (Print), ISSN 2520-7121 (Online) www.gjmsweb.com.editor@gjmsweb.com Impact Factor value = 4.739 (SJIF).

## CONTRIBUTION OF AUTHORS AND CONFLICT OF INTEREST

This research work was carried out in collaboration between two authors. Author 1, Dr.A.G.Awan, is Ph.Ds in Economics from Islamia University of Bahawalpur-Pakistan and Business Administration from University of Sunderland. He contributed in this research paper by way of formatting, editing and giving final shape to the manuscript.

Author 2, Muhammad Afzal, is a M.Phil scholar at Department of Econoomics, Institute of Southern Punjab.. He designed the study, collected and analyze data. He wrote first draft of the manuscript under the supervision of first author. Both authors read the manuscript carefully and declared no conflict of interest with any person or institution.