IMPACT OF FEMALE EDUCATION ON POVERTY REDUCTION: AN EVIDENCE FROM PAKISTAN

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ABSTRACT- The objective of this research paper is to measure the impact of female education on poverty in Pakistan. Female are half of the population and their education is necessary to enhance their role in national development. In order to measure the impact of female education on poverty we collected data from World Development indicators and Pakistan Economic Survey for the period from 1996 to 2016. Our dependent variable is poverty while population, female literacy rate, household income and GDP are independent variables. We used ARDL approach to analyze data and draw results. We found that there is negative relation between female education and poverty, which means increase in female education will decrease level of poverty.

Key words: Female education, poverty, GDP, gender equality, household income, population growth rate.

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1. **INTRODUCTION**

"If you educate a man, you educate an individual. But if you educate a woman, you educate a nation. When girls are educated, their countries become stronger and more prosperous," it is a famous saying that highlights the importance of female education for national development. Education improves economic condition, boosts economic activity and increase financial gain. It will increase a person's probabilities of getting a healthy life, build his maternal health and boost confidence to combats against diseases like HIV and AIDS. Education promotes gender equality, eliminate practice of kid marriages and promote peace, Education may be a core need for human and economic development. Neglect of education produces a lot of economic and social problems in developing countries. Education is considered as the key sort of investment as somebody made in capital and services

Napoleon Says:

"Give me good mothers and I Shall give you great nation."

Lower women's education attainment rate had a negative impact on economic growth. In developing countries women education reduce fertility rate infant death rate and increase youngsters' education. Increase in the level of female education improves human development outcomes such a child survival, health and schooling. Lower female education has harmful effect on economic progress. It lowers the typical level of social wealth……It was found that gender inequality in initial education reduce economic growth. Increase access to education will contribute to reduce poverty. However, the condition of female education in Pakistan is not satisfactory and women have to fact multi-dimensional social and economic problems during education.

1.2 General Barriers to Girl's Education

Barriers to girl's education are as under: -

1.2.1 Lack of investment:

The Government does not adequately invest in schools and faculty. Pakistan spends far less on education than is recommended by the United Nation Educational Scientific and Cultural Organization (UNESCO). One result is that there are not enough school for all children in Pakistan. Many students in Pakistan not safely reach the school. Private school fill gap but it is costly way of obtaining education for poor students. An "upward bottleneck" exist as children especially girls become older because they cannot freely move.

1.2.2 High cost of education:

Poor families struggle hard to meet the costs of sending their children to school. Government schools are generally more affordable than private schools, but some charge tuition, registration or examination fee and they almost always require that student's families also pay the bill for associated cost. They include stationary, uniforms, school bags and shoes. Poor families which cannot enter a government school look for education opportunities in private schools.

1.2.3 Poor quality of education:

Many families stated blocking about the excellence of schooling obtainable to them. Some said it was so poor that there was no point to sending children to school. In government school, parent and students complained of teachers not showing up, overcrowding, and poor facilities. In private sector admin and teachers only concern with reputation not those students who fulfil

the merit, they are not selected for poorness. Teachers in both Gov. and private schools pressure to pay for out of –school for tutoring and additional expenses.

1.2.4 No enforcement of compulsory education:

There is another reason that so many children do not go to school because there is no law to fare the parents to send their children to school. Expectation that children should study. Pakistan's authority pass a law and 'the orders to provide free and compulsory education to all children of the age of five to sixteen years. When a child dropout of school, individual teacher's some encourage the child to continue studying, but there is no government effort to enroll or retain children in school.

1.2.5 Corruption:

Corruption is also another barrier to education system. Some job holder obtains their jobs through political connection. When they obtain their positions they are not eligible for those job. Teachers not properly motivate the students. Especially in mostly in rural schools are empty without of teachers. Some schools are under the authority of local lords, who lived there and also they hold the school because their rich parents donate the land for schools.

Figure 1.2 Illustrate the literacy rate in Pakistan (2014)
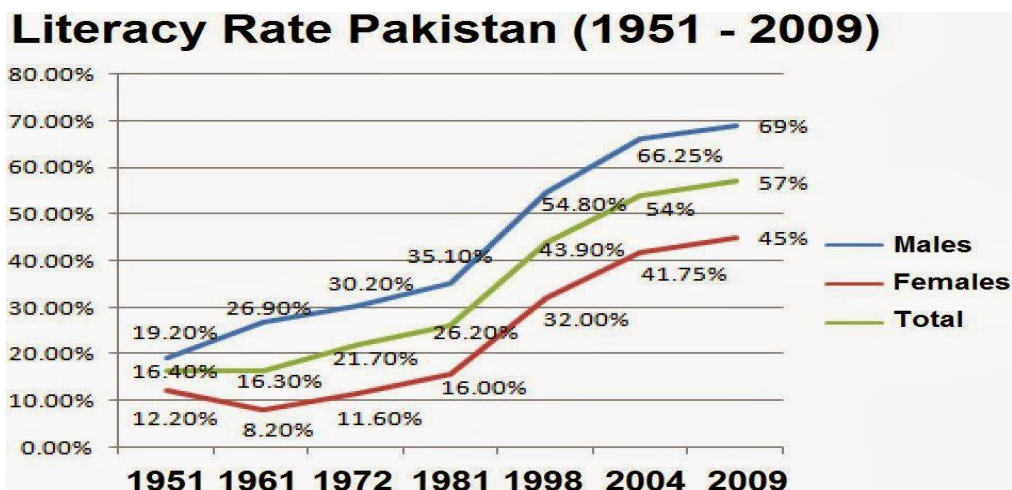
Source Discussion in 'Pakistan Economy' started by Riaz Haq, Mar 20, 2014.

1.3 Specific Social barriers to Girl's Education

There are many social barriers in the way of girl's education

1.3.1 Poverty

Main barriers to girl's education is poverty. Most of population of Pakistan is living in poor condition or says that they are at below the poverty line, so they are not in position to provide basic needs to their families. They have no food, water, health sanitation and medical facilities. In this condition they never think about education of their children's.

1.3.2 Social norms

Some families do not believe that girls should be educated or believe girls should not beyond a certain age. Attitudes regarding girl's education very significantly across different communities. Income areas families violating cultural norms prohibiting girls from studying can face pressure and hostility.

Some girls are removing from school due to thinking that there age is not good for sending girls for outside the house or school.

1.3.3 Insecurity

Insecurity is a major barrier in the way of girl's education. Parents do not send their girl's to school due to the harassment issue. Because the ratios of kidnaping, crime and attacks are increasing day by day. Parents afraid to take risk, so they feel safe their girls at home. To increase the female literacy rate must insure the Govt to give safe environment to the girl's.

1.3.4 Attacks on schools

Many Asian countries are facing escalating levels of violence associated with insurgence, and ethnic and spiritual conflict. This can be having a devastating impact on girl's access to education. December 2014 attack on army public college in metropolis town .between 2013 to 2017 many schools were attacked usually with device, killing many hundred students and lecturers, and damaging and destroying infrastructure.

1.4 Main research problem

Our main research problem is to measure the Impact of Female education on poverty reduction: An Evidence from Pakistan.

1.5 Objective of study

The objectives of study are outlined as under:-

1. To study the importance of female education.

2.To analyze the impact of female education on poverty reduction.

3. To suggest the ways how to improve female education in Pakistan.

2 LITERATURE REVIEW

Awan et al (2011) analyzed the impact of education on poverty reduction. They used the regression model to analyze the data. They found

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negative relation between education and poverty level. They suggested to widen the scope of education in Pakistan to enhance national income and living standard of people.

Iqbal (2014) worked on funding and managing impoverishment reduction in rural areas qualitative information form technique used, non-parametric check findings area unit operating solely males' member area unit important and negatively related to being poor.

Chauhdry and Rehman (2009) analyzed gender difference in education in rural area units in Asian nation they use logit model of regression findings are education and earners have negative impact on impoverishment.

Farooq and Sarwar (2011) worked at education, economic process and impoverishment. They use co- integration approach to find out long run relationship between education and economic development.

Ali and Nishat (2010) worked on foreign in flow on impoverishment through education. They used ARDL technique and found positive relation between impoverishment, mortality and feminine enrollments and foreigner flow.

Awan et al (2015) analyzed the contribution of working women in their family budget in D.G. Khan Area. OLS technique was employed to draw the results, which indicated that female's earning viably contributed in the family's income and living standard particularly education of children.

3. RESEARCH METHODOLOGY

Research methodology means applying some techniques to search for the solution of our research problem. For this we use different methods in our work. Our research is quantitative based on time series data.

3.1 Proposed Econometric Model

Data is used from1996-2016 to know how we can measure poverty level in a country, also how much poverty is effected by other factors. So, poverty is dependent variable and Female literacy rate, population growth rate, household income and GDP are our independent variables. The model of our study is given below: -

$$Y=\beta 0+\beta 1(F.litr)+\beta 2(Pop.gr) + \beta 3(H\_H\_I)+ \beta 4(GDP)+ \mu$$

Y= Poverty (Poverty Ratios in Pakistan)

POP (gr)= Population growth rate annual

F.litr= Female Education ratio

GDP= Gross Domestic Product

H_H-I=Household income

μ=the error term.

3.2 Types of data

We have used secondary data which was collected from the sources given in table 1.

Table 1:Variables and sources of data

Variables	Description	Unit of measurement	Source
Povr	Poverty	Ratio	Pakistan Economic Survey
F.Litr	Female Education	Ratio	World development indicator
Pop	Population	g.rate	Pakistan Economic Survey
GDP	Gross domestic product	Ratio	World development indicator
H_h. income	Household income	Ratio	World development indicator

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4. DATA ANALYSIS

4.1 Descriptive statistic

We apply descriptive statistic to check the normality of our model. For this we construct hypothesis Ho = residuals are normal, H_1= residuals are not normal.

Table 2: Descriptive statistic

Variables	Povr	F_litr	GDP	H_H_I	POP
Mean	38.4809523	85.81371	0.048667	8.872619	2.180476
Median	31.0000000	85.94300	0.039000	6.379000	2.110000
Maximum	64.3000000	89.87800	0.190000	23.26600	2.530000
Minimum	12.4000000	80.71400	0.009000	1.545000	2.020000
Std.Dev	15.9051444	2.704421	0.039359	7.417066	0.155482
Skewness	0.35804236	0.1736683	2.318147	0.710302	1.227594
Kurtosis	1.79021358	1.934099	8.998315	2.041085	3.068087
Jarque-Bera	1.72931545	1.099708	50.29063	2.570429	5.278509
Probability	0.42119569	0.577034	0.000000	0.276591	0.071414

Calculated by Author through E-view

Explanation

The probability value of our four variables are insignificant which are respectively 0.577034, 0.071414, 0.421196, 0.276591 that's means residuals

are normal and we accept our null hypothesis. Only GDP probability value is significant so we can considere that our model is normal.

4.2.Unit Root Test (ADF)

Unit root test is applied to check the stationarity in our selected data. In this

Povr	F.litr	Pop	GDP	H_H_I
I(1)Int	I(0)Trnd+Int	I(0)Trnd+Int	I(1)Int	I(1)Int

study, we check the coefficient value and probability of the data. The ADF test results shown in table is given as under.

Table 3: Stationary levels of ADF test

Explanation

Table 3 shows the results as Povr is integrated at I (1) 1st difference and intercept, F.litr is integrated at I (0) level and trend & intercept, Pop is integrated at I (0) level and trend & intercept, GDP is integrated at I (1) 1st difference and intercept, and household income is integrated at I (1) 1st difference and intercept. As the variables are stationer at different orders, we apply ARDL techniques to analyze our data.

4.4 Autoregressive Distributed Lag (ARDL) Model

ARDL Model is used to measure the relationship between the variables. How independent variables do effect the dependent variable.

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Table 4: Results of ARDL Model

Variables	Coefficient	Std. Error	t-Statistics	Prob
POVR(-1)	0.102500	0.091260	1.123160	0.2904
LNPOVR	34.56509	5.141352	6.722957	0.0001
F_LIT-RATE	-161.0456	233.9988	0.688232	0.5087
LNF_LITRATE	-13653.40	19655.61	-0.694631	0.5048
H_H_INCOME	-1.795680	3.476858	-0.516466	0.6180
LNH_H_INCOME	7.663554	12.89655	0.594233	0.5670
POP	-617.7204	496.0257	-1.245337	0.2445
LNPOP	1372.865	1148.676	1.195172	0.2626
GDP	-6.196315	119.4937	-0.051855	0.9598
LNGDP	0.709808	6.530656	0.108689	0.9158
C	47157.16	67563.33	0.697970	0.5028
R2	0.967913	D.W		2.31624
Adj.R2	0.932261	Prob(F-Statistics)		
S.E of regression		0.000016		
4.222389		F-Statistic		2.14886

Calculated by Author through E-view

Explanation

Table 4 reveal short run relationship between dependent and independent variables. We noted that female literacy rate is negatively related

to poverty that means if one-unit increase in female literacy rate it will decrease poverty by 10%. The same is the result of. Household income which is also negatively related to poverty. It means if one unit increases in household income it will decrease about 17 percent poverty. GDP is negatively related to poverty. If one-unit increase in GDP it will decrease poverty by 16 percent. R-square value reveals that all independent variables have 96% impact on poverty.   Adjusted R-square value reveals that 93 %variation dependent variable is due to independent variables after adjustment. Durbin-Weston value 2.31 reveals that there is negative auto correlation. Overall probability value 0.00016 shows that model is significant.

Table 5: Results of Bound test

Test stat	Value	Sign if.	I(0)	I(1)
F-Statistics	7.27769	10%	2.37	3.2
		5%	2.79	3.67
		2.5%	3.15	4.08
K	3	1%	3.65	4.66

Source**:** calculation by Eviews student 10version

Explanation

The value of F- statistic is greater than others values so there is long term relation between variables.as value is greater than I (1) we accept H_1 hypothesis and reject Ho hypothesis, that is Female education have impact on poverty reduction. As we know that education is time consuming investment, also pop and poverty are long run processes to decrease them and increase GDP. So there is long run relation between poverty and education.

5. FINDINGS AND RESULTS

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In this study we have studies the relationship between Female education and poverty. Our results reveal that as female education increases poverty is decreased; this is because of high female literacy rate that increase the opportunities of job for female. Females are also became part of family income earner. Similarly, if female literacy rate in Pakistan increases it will also have positive impact on GDP that consequently will reduce the poverty level. If females are educated they will work like male and earn living for their family.As other variables household income is also negatively related to poverty. Population and GDP are also negatively related to poverty. R-square value reveals that independent variables have 96% impact on poverty while Adjusted R-square value reveal that 93 % variation in dependent variable is due to change in independent variables after adjustment. Durbin-Weston value 2.31 reveals that there is negative auto correlation. Overall probability value 0.00016 shows that the model is significant.

6. CONCLUSIOSN

In this research study we have investigated the effect of female education on poverty in Pakistan. The data use for this study was secondary, which was taken from World Development indicators and Pakistan Economic survey for time period (1996- 2016). To draw the results, we have selected poverty is our dependent variable and female literacy rate, household income, GDP, and population growth rate as independent variables. We conclude from the above discussion that female education has negative relationship with poverty level in Pakistan so that Government of Pakistan must focus on female education and allocate maximum funds for this purpose. It will not only reduce poverty level but also improve the living standard of families, their per capita income and education of their children. In short, female education has multi-

faced positive effects on the society. So the Government should remove all barriers in the way of female education.

7. Policy implications

Government should take action to eradicate the problems of gender inequality, hunger, early age marriages, proper education and health, etc. Government should try to overcome un-development expenditures and spend that money on the uplift of poor faculty and learners.

Educated female should be provided level playing field so that they can viably contribute into national development. The educated women must be included into mainstream of labour force so that they will be able to participate in economic activities without any discrimination and fear.

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CONTRIBUTION OF AUTHORS AND CONFLICT OF INTEREST

This research work was carried between collaboration of two authors.

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