Disparities in education along socio-economic lines in Pakistan

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"I want to send my children to school. I want them to have a better life than mine. But I cannot afford to pay their fees, buy them books or get them pencils every month. Mostly people of this village don't send their children to school and make them work instead as all of us are too poor. My children have been dropped out of primary school as I had no money"

The voice is that of Sakina Bibi; a mother and a resident of a remote village in Balochistan. One of the harsh realities behind the education crisis in Pakistan cannot be better summarized than the story presented above.

Today where due to rapid globalization, economic activity is becoming increasingly knowledge based and education has gained importance more than ever, the education system of Pakistan continues to stay ineffective and unproductive. The vital role and significance of education is largely mistreated and ignored in Pakistan[1]. Moreover, the provision of educational opportunities is unfortunately determined and made available on the basis of regional disparities, rural-urban location, gender, types of schools, income and wealth of parents etc. Pakistani society has become largely fragmented and segregated on various socio-economic lines since the last couple of years. The inequality in income and wealth not only continues to grow with every passing year but also has triggered disparities in education[2]. The propagation of private schooling system has further intensified the disparities resulting in polarization of education along socio-economic lines[3]. People falling in lower-middle income group remain deprived of quality education provided by private schools due to exorbitant fees charged by them while the government schools fail to come up at par in terms of quality of education. ASER (The Annual Status of Education Report) data reflects such inequalities very clearly. ASER 2012 pointed out the dismal performance of government schools as compared to private ones in language and arithmetic assessments.

ASER data can further be used to identify the relationship between students' performance and the disadvantages they face because of their home background. The household indicators tapped during the survey can be used as a baseline to determine the wealth status of households. A comparison of wealth status of households with the learning levels of children can provide a snapshot of the extent of inequality in learning levels across wealth distribution.

Such analysis on patterns of inequality in learning outcomes will bring the attention of the policy makers to formulate policies that empower children from poor backgrounds to beat the odds. The imbalances if not checked will push the inequities in the education sector further down the abyss. Providing equal opportunities in schooling along with strengthening quality of education can serve as a benchmark for bringing a change in social and economic outcomes. An equitable distribution of educational opportunities will allow the poor to gain from the benefits of economic growth and contribute towards higher growth rates. Whereas, depriving the poor from educational opportunities will result in lower economic growth and amplification of income inequality[4].

Hence, equitable access and learning is a key to "sustained development". This research appraises education inequalities in Pakistan with the help of ASER data (2012) covering 136 rural districts of Pakistan and investigates if the children from the lower income groups are worse off.

In order to highlight the above mentioned aspect of our education system, an ASER composite wealth index has been constructed by integrating all the households indicators mentioned in the survey form. These indicators measure the economic potential and achieved levels of income and wealth of a household. The table representing the variables used to create the wealth index is described below.

Variables	Description
Type of house	Type of house is a categorical variable with kutcha given the value 1, semi-pucca equals 2, and pucca equals 3.
House owned	Dummy equaling 1 if the house is owned, 0 otherwise.
Electricity connection	Dummy equaling 1 if the house had electricity (visible wires and fittings), 0 otherwise.
Toilet	Dummy equaling 1 if the household had a toilet, 0 otherwise.
Mobile	Dummy equaling 1 if anyone in the house has a mobile, 0 otherwise.
Television	Dummy equaling 1 if the household has a television, 0 otherwise.

[1] Jamal. H and Khan. A. 2005. "The Knowledge Divide: Education Inequality in Pakistan". The Lahore Journal of Economics.
[2] UNESCO, EFA Global Monitoring Report. 2012.
[3] A Study of Education, Inequality and Polarization in Pakistan. Tariq Rehman. Oxford University Press.
[4] Javid. K. 2011. "Rural-Urban Divide in Education- Inequities Reinforcing Inequities". ASER 2011

Construction of ASER wealth index:

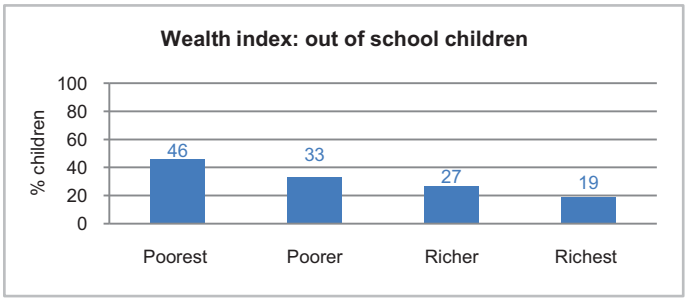
ASER wealth index has been developed by using principle component factor analysis procedure in the STATA software.[5] Using the above mentioned method of creating quintiles, ASER 2012 data has been divided into four categories/quintiles (i.e. poorest, poorer, richer, and richest) which represent the entire population of Pakistan in a socio-economic context.

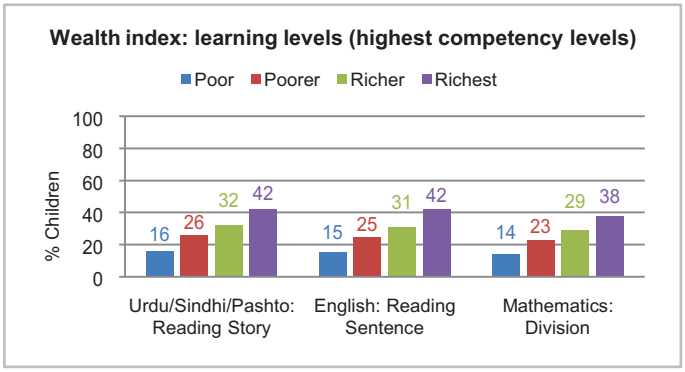
Results of the ASER 2012 data reveal that the poorest quintile has the highest level of children enrolled in government schools (91%) whereas the remaining 9% of the children are enrolled in the private sector schools. The second quintile, which is poorer, has 82% children enrolled in government schools and 18% children enrolled in private schools. The third quintile, richer, has 75% children enrolled in government schools and 25% in private schools. The richest quintile has the highest number of children enrolled in private schools (40%) and the lowest percentage of children in government schools (60%). It is evident from the figures that enrollment in government schools falls and for that of private school increases as we move along the wealth index towards the richest. A strong correlation between wealth and enrollment in private schools is established. Though a number of low fee private schools exist in the country, they are still more expensive than their public counterparts and thus are not affordable for all income quintiles[6].

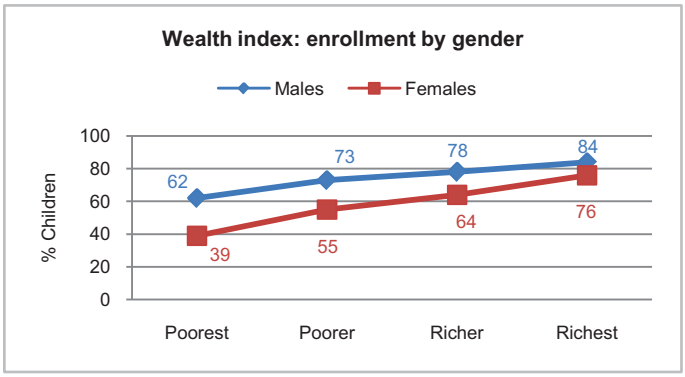
A large proportion of households are not able to send their children to schools at all because of poverty. Result of ASER 2012 displays the percentage of out-of-school children to be highest in the poorest quintile (46%) as compared to other quintiles.

Given the bleak picture portrayed by the disparities in enrollment according to types of schools, a similar image comes to light when the "learning levels" according to wealth status are taken into account. The graph clearly indicates that the learning levels of children are directly related to their wealth status. The learning level of children in all three subjects increases as we move along the wealth index towards the richest quintile. Poorest have the lowest learning levels (16% Urdu/Sindhi/Pashto, 15% English, and 14% Math) and richest have the highest learning levels (42% Urdu/Sindhi/Pashto, 42% English, and 38% Math). The households with better wealth status are able to spend significantly more on their children's education improving their opportunities for better quality schooling as reflected by the enrollment figures mentioned above.

The status of wealth was also found to be influencing gender inequity. The males and females of the lowest quintiles are particularly disadvantaged as only a limited set of educational opportunities is available to them. The percentage of males and females enrolled in schools goes up as we move along the wealth index towards the richest. Inadequate public expenditure in rural areas, limited number of schools, obsolete teaching methodology etc. might be the reasons leading towards restricted access to basic education which further transforms into learning gaps across different income groups.







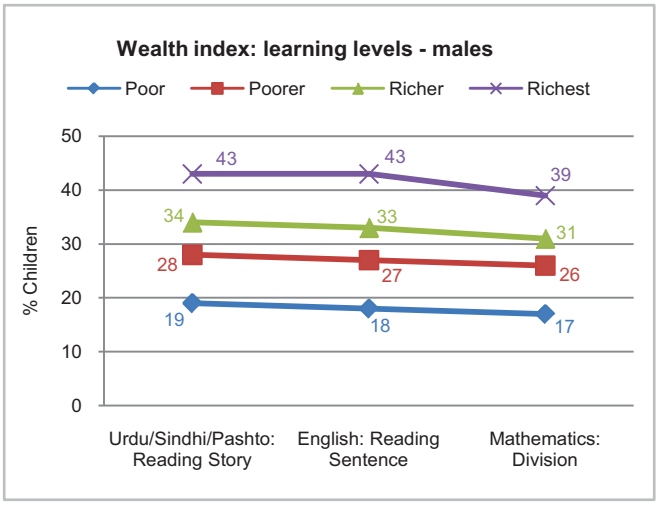
[5] It factorizes variables in a way such that it creates weighted combination of the input variables in the following manner e.g. $F_1 = a_{11}X_1 + a_{12}X_2 + \ldots$.
In order to select factors, eigen values from a principal component analysis are used and the factor coefficient scores are created. Further, the indicator values are multiplied by the coefficient scores and added to come up with the wealth index. The index is then divided into groups/quintiles to categorize the population according to their wealth status.

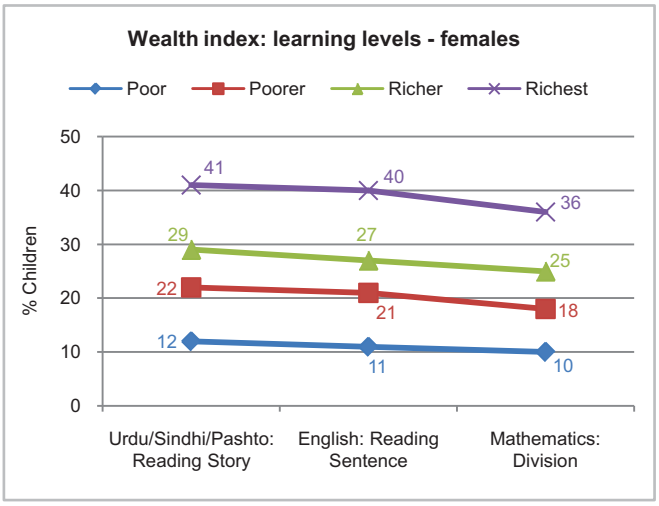
[6] Bari. F and Sultana.N. 2011. "Inequality in Education". ASER 2011.

The differences in learning levels for both males and females across different quintiles present an alarming picture. Learning levels of males and females improve as we move from the poorest quintile to the richest quintile. Highest learning levels of females are seen in the richest quintile across the three competency levels (41% Urdu/Sindhi/Pashto, 40% English, and 36% Mathematics). Similarly males falling in the richest income group are better able to perform the language and numeracy tasks than children falling in low income groups. This also confirms with the findings of PISA survey 2009[7] that established: "the higher the quartile of the socio economic index to which a student belonged, the better the performance, with a similar pattern for boys and girls."(EFA Global Monitoring Report 2012)

The current state as demonstrated by ASER 2012 clearly illustrates the appalling access and gender disparity created by differences in wealth status. This also corroborates with the results of World Inequality Database on Education (WIDE) produced by EFA Global Monitoring Report Team at UNESCO. The WIDE Database has provided figures for over 50 countries to allow for comparison in disparities across countries and to identify which groups are most disadvantaged within these countries on the basis of gender, wealth and location.

Article 25A embedded in the 1973 constitution of Pakistan that promises free and compulsory education for all children aged five to sixteen appears to be meaningless in a country where the education system is fragmented and inequality persists to such an extent. If our objective is to educate all children, we need to challenge the existing differences and divisions in order to provide equal set of opportunities to all children of the society. Moreover, at a time when the international community begins to plan post-2015 education goals and framework, it is vital to ensure that equity based targets are included and measuring marginalization in education is given a high priority.





[7] Amongst learning assessments, PISA has done the most comprehensive coverage and surveyed 74 countries: all the OECD countries and forty other countries. The survey assessed the performance of 15 year olds and in addition collected data on parental occupation and education, selected home characteristics such as availability of books.