

## AZAD JAMMU AND KASHMIR DISTINCTLY MOVES FOR GENDER PARITY AT PRIMARY SCHOOL LEVEL: A HISTORICAL COMPARISON FROM MICS DATA

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### ABSTRACT

The state of Azad Jammu & Kashmir (AJ&K) is an area hosting 4.02 million people in 13,297 square kilometers area. It [AJ&K] makes substantial progress in education indices including Gender Parity (GP) at the primary school level with a precise Gender Parity Index (GPI) of almost 1.00 in primary school education at the state, division, district, urban, and rural levels. However, the research work in this area is scanty as little or no research work is undertaken to investigate AJ&K's work in GP in the historical context. This research effort, therefore, is a preamble for bridging the existing research gap in the literature. It is an opening initiative to explore AJ&K's progress in GP at the primary school level over time with segregation at the division, district, and urban-rural levels in the last two decades. In particular, it is inclined to analyze AJ&K's work in attaining MDGs and SDGs earmarked targets in Pakistan. It is also intended to examine the mother's education and the family's economic standing in articulating GP in the state. Furthermore, it also enlists some contributing factors enabling AJ&K to take the lead in getting GP at the primary school level in Pakistan and its regions. For this purpose, this pioneering study benefits from Secondary Data obtained from MICS AJ&K 2008 and 2020-21 along with some other credible sources. Different graphical tools are operated to show the prevailing gender parity/disparity at different levels. The analysis has been carried out using SPSS-26 and MS Excel. It reveals that GP remained neglected in AJ&K until the last century. However, by witnessing steady progress in the new millennium, it [GPI] reached the desired level with a GPI of 0.97 in 2008 and precisely with a GPI of 1.00 in 2020. AJ&K also witnesses GP at state, 3 divisions, and urban-rural areas along with 8 out of 10 districts in 2020 against 4 out of 8 districts in 2008. However, girls living in poor households or with illiterate mothers are still victims of gender bias. Moreover, the gender gap still exists at the middle and secondary levels in AJ&K harming either boys or girls. The analysis of the historical data also reveals that AJ&K government commitment and community support not only helped the timely attainment of the desired GP score but also to take the lead in Pakistan and its regions. The analysis of MICS data further validates progress in attaining GP Index in AJ&K from 0.98 in 2008 to precisely 1.00 in 2021 (MICS AJ&K 2008 and 2020-21). AJ&K outperforms Pakistan and provinces/areas in getting MDGs and SDGs targets much before time. The state also enjoys gender parity in quality education - reading and numerical skills with negligible difference. The study enlists govt. pledge and community involvement along with improved access, student-teacher ratio, and girls' share in schools as the potential factors behind AJ&K attainment even with financial hardship, weak education system, and poor institutional capacity. This study stresses taking proactive efforts and improving the teaching-learning environment to sustain gender parity at the primary level and improve it at the middle and secondary levels of education in AJ&K. Retaining government commitment and community support along with a special focus on girls having illiterate mothers or residing in the poorest households would also pay a dividend in improving GP at middle and secondary level and maintaining it at primary level in AJ&K. It also needs special endeavors to bridge the Gender gap existing in quality education as more than 30% students' fail in all 3 quality tests.

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**Keywords:** Primary School Education, Gender Parity, Gender Parity Index, Primary school enrolment, Net Attendance Ratio, Disparities, government, community, Quality Education, Mother Education, Wealth Quintile, Urban and Rural Areas, Divisions and Districts.

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## INTRODUCTION

Education is not only crucial for economic acceleration but also serves as a primary driver for Human Resource Development (HRD). It is a vital tool that is highly valued by individuals, nations, and societies for their socio-economic progress. It also plays a critical role in addressing poverty and improving the overall well-being of individuals and families. Therefore, both developed and developing countries recognize the significance of education as a key component of their development initiatives (Singh, 2018; Knowles and Maddison, 2002; Carrin, 2004; Rehman and Uddin, 2009; Kazmi, 1995 & 2010; Shabbir and Wei, 2014 & 2015; Farooq and Kai, 2016; PAGE, 2021). Shabbir and Wei (2015) describe education as a domain of the government sector with objectives relating to nation-building and social integration as well as achieving social cohesion. Despite its crucial importance, education remained ignored until the early 1970s due to the belief that investing in education yielded passive returns. It was assumed that investments in physical capital would indirectly benefit social sectors - education and health via trickle-down effect. However, this postulated trickle-down effect proved to be unproductive, leading to a paradigm shift in development initiatives, focusing on human resource development through education and health interventions. Both education and health are also taken as a fundamental right and a basic human need that should be promptly fulfilled. Moreover, these are found instrumental in expediting the development process and improving the socio-economic profiles of the general population (Carrin, 1984; Hicks, 1989; Kazmi, 1995, 1997 & 2005). Therefore, developing education at the primary school level not only enhances economic prosperity and overall well-being but also boosts individual

productivity and reduces dependence on social resources. It also plays a significant role in elevating the status of women, reducing gender disparities, combating poverty, and enabling women to take on more dominant roles in developing countries, including Pakistan and AJ&K (Singh, 2018; Kazmi, 2009 & 2010; Rahman and Uddin; Shabbir and Wei, 2014; Farooq and Kai, 2016). However, in AJ&K female<sup>1</sup> participation in education remains limited until the early 1970s (GoAJ&K, 1997).

For assessing performance in the education sector, there are alternative measures<sup>2</sup> widely underused including Gender Parity (GP) in primary school Net Attendance Ratio (NAR). It is generally gauged through the Gender Parity Index (GPI), a very common tool to measure educational performance and historical accounts. (World Bank, 2012 & 2018; Haley, 2017; UNESCO, 2005, 2010 & 2022; PAGE, 2021; WHO, 2023). UNESCO (2010) recognizes GPI as the most vital score referring to a ratio of women to men values of the given indicator. The GPI value of 1.00 refers to a precise gender parity prevalence in the area under investigation with minor variations in indicator values. GP Index is generally presumed to be within the range of 0.97 and 1.03 indicating parity between the genders (UNESCO, 2010 & 2002). To UNESCO's Internal Inclusive Education Planning (2022) it is the ratio of women to men values of the given indicator.  $GPI < 0.97$  indicates a disparity disadvantaging girls and depriving them by triggering their denial of skill, education, and job opportunities. The  $GPI > 1.03$  on the other hand indicates a disparity disfavoring males. It means inequalities harming boys and thus augment the number of out-of-school boys implying soaring child labour (UNESCO, 2005, Guarcello and others 2014; WEF, 2021 & 2022; PAGE 2021). However, Gender Parity in primary education is key

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<sup>1</sup> Male and female ratio in AJ&K is 100:101 (P&DD AJ&K, 2022)

<sup>2</sup> That is literacy, enrolment, retention, student teacher ratio, etc.

to redress gender discrimination but hardly explored in developing countries leaving the research work on GPI in Pakistan trivial while in AJ&K almost non-existent.

Low female participation is evident in all sectors of AJ&K's economy but education has been the prime victim since independence due to an inherited defined and ill-managed education system with 250 primary schools. The girl's share was only 4 in it indicating female deprivation in AJ&K leading to extreme gender discrimination. The situation was more critical at middle and secondary levels where females get one school in 29 middle schools and no school at the secondary level (GoAJ&K, 1977 & 1997; Farooq and Kia, 2016). Limited budgetary allocations until the 1970s associated with a poor learning environment and weak institutional capacity proved hostile to girls' education implying to GP disfavoring them in AJ&K (AEPAM, 2013 & 2014; Farooq and Kai 2016; Shabbir Wei 2015). However, the start of the development process during the 1970s backed by the government's Will and Community support helped AJ&K to alter this unusual situation, prevailing there since 1947. The new development initiatives proved instrumental in improving education indices including GPI with dividends for females in the last few decades. Nevertheless, the lack of research work on education in AJ&K's in general and GP in primary school net attendance ratio, particularly in the historical context is non-existent. Therefore this study is a preamble for bridging the prevailing gap in research on GP at the primary education level in AJ&K and also making a historical comparison.

There is a wider perception that AJ&K is not only a better performer but also outstrips Pakistan and its provinces/regions/areas in education indices including gender parity at the primary school level (Alif Alien 2015; Shabbier and Wei, 2015; Farooq and Kai, 2016; Tahir, 2016; ASER, 2020; PAGE, 2021). However, this kind of general assertion needs validation based on sound evidence obtained through analysis of the statistical data. So far the major research work on AJ&K's education performance is too small while Gender parity at the primary school level, particularly in the historical context is almost non-existent. Therefore, this preamble effort is to bridge the research gap of AJ&K. The study is thus, intended to analyze and validate AJ&K's

performance in terms of GP in primary school net attendance ratio over time. It also compares AJ&K's performance made in the past using data from different sources including - MICS and PSLM - for making historical comparisons regarding GP referring to earmarked MDGs and SDGs targets for Pakistan and regions/areas. The study is structured as: the statement of purpose, objectives, data collection, and research methodology are part of section 1; section 2 provides an overview of previous work on gender parity at the primary school level in AJ&K; section 3 comprises data analysis of Gender Parity in primary school net attendance ratio; section 4 compares AJ&K working in the historical prospect; and the last section [5] contains the key findings and main conclusions.

### **Statement of Problem**

The study is intended to bridge the prevailing gap in a tributary of knowledge by holding a comprehensive analysis of gender parity in primary school net attendance ratio in AJ&K. Specifically, it examines the historical account of changes in gender parity at the primary school level between 2008 and 20221 at the state, division, district, and urban-rural levels. By analyzing the data at different points in time, the study seeks to shed light on the progress made during the past almost one and half decades at different levels in addressing gender bias and achieving gender parity in primary school education in AJ&K. This study also examines the role of mother education and family economic steadying in determining gender parity in AJ&K. A comparative approach provides valuable insights into the dynamics of gender parity and contributes to a comprehensive understanding of the education landscape in AJ&K. Additionally, the study attempts to discover the factors enabling AJ&K to make notable progress in getting gender parity at primary, middle, and secondary levels in the same federal-run policies and education systems over time.

### **Objective of the Study**

- Examine AJ&K Education sector working in achieving Gender Parity, particularly focusing on primary school Net attendance ratio -NAR

- Examine AJ&K's performance in gender parity in achieving MDGs and SDGs commitment
- Provide a historical account of AJ&K's GPI for the state, divisions, districts, and urban-rural areas
- Identify prospective sources allowing AJ&K in early achievement of targeted Gender Parity in primary school net attendance ratio.

### LITERATURE REVIEW

The initial development efforts before 1970 primarily focused on investing in physical capital, disregarding the promotion of social sectors including education. This approach assumed that investing in physical capital would result in a trickle-down effect benefiting social sectors. However, the failure of this assumption became evident in the early 1970s, leading to a shift in focus towards investing in human capital formation and addressing basic needs through education and healthcare. It was recognized that such investment enhances the quality of human resources and drives economic growth. The argument presented is that education, as reflected by key indicators - primary school attendance ratio, adult literacy, gender parity, etc., - plays a crucial role in accelerating the development process and improving the socioeconomic status of individuals and society. It also helps in fulfilling basic needs, revitalizing human resource potential and thus improving the overall well-being of the masses. (Carrin, 1984; Hicks, 1989; Kazmi, 1995, 2005, 2010; Rahman and Uddin, 2009; Farooq and Kai, 2016). Singh (2018) also underlines that education development - literacy and gender parity- is a pathway to a happy, successful, and peaceful life while illiteracy is an imprudent barrier to achieving one's life aspirations. Therefore, the consensus of all the nations, societies' religions, etc., is on promoting the educational profile of their people.

With the acknowledgement of the inadequacies of trickle-down postulation, the investment priorities were redesigned in both developed and developing countries leading to more funds for social sector development, particularly for education and health. Resultantly, education improvement emerged to be

instrumental for accelerated development and upgraded the socio-economic standing of an area/people of a nation or a society. It also helps improve individual and family profiles in both developed and developing countries in the past as well as in the new millennium (Kazmi, 1997 & 2010; Johnson, 2005).

There are numerous tools under practice to examine the performance in education in different areas/countries wherein gender parity is a widely used mode to determine the working of the education sector and also conduct historical or regional comparisons. The developed countries allocate more funds to education than their developing counterpart and therefore, enjoy promising educational outcomes in terms of literacy rates, gender parity, etc. On the other hand, the developing nations with few exceptions are poorly performing in these indices due to their weak financial profile and lacking institutional capacity. However, countries like Maldives, Sri Lanka, Cuba, Somalia, Kerala in India, and Vietnam despite their scarce means got better outcomes in the education sector, particularly in adult literacy and gender parity (Kazmi, 2010; Khan, 2017; Farooq and Kai, 2016; Shabbir and Wei, 2015; WFF, 2021; Iqbal, 2021).

In Pakistan education, despite its crucial role in development and socio-economic upgradation, remains an ignored and poorly funded sector in development initiatives with > 3% share of GDP, totally inadequate for getting the committed MDGs 3.1 and SDGs 4.5.1 like targets in education including gender parity (Kazmi, 2005, 2010; Farooq and Kai, 2016; ). Consequently, Pakistan witnesses the lowest literacy rate (55%) ranking it 160<sup>th</sup> in countries worldwide (UNESCO, 2022), and 144<sup>th</sup> in 159 countries as per the World Economic Forum's Global Gender Gap Report 2021 (WEF, 2021). Gender parity also is an ignored area in Pakistan and its provinces/ areas including AJ&K, heading towards insistent gender discrimination that disadvantages girls but favors males at the primary level since independence (GoP, 2009; PSLM, 2011-10; Farooq and Kia, 2016; Iqbal, 2021; and Khan, 2023). Many countries of the world have made significant progress in terms of gender parity while several South Asian, African, and Middle Eastern countries are still victims of disparities

disadvantaging females. Pakistan, with a GPI of 0.84 also lacks gender parity indicating disparities disadvantaging girls persist though smaller in Pakistan than in Chad having a GPI of 0.78. It refers to the instant need for concerted efforts to redress prevailing gender bias and mainstreaming secluded 16% of girls in primary education. A few studies infer that the GPI in Pakistan is improving towards 1.00 (PSLM, 2013-14; Farooq and Kai, 2016; MICS, 2008 and 2021; PAGE, 2021) but sluggish progress in it may take several more decades to bridge the prevalent gender gap (Iqbal, 2021).

Abdul Rashid and colleagues (2012) launched a study on gender parity regarding MDGs in the Quetta district by utilizing secondary data (2000-2010) from the Govt. of Baluchistan Schools & Literacy Department. Despite certain biases and challenges in Baluchistan, it witnesses a positive change in GP. The study finds that adult education in the Quetta district is favorable for boys and biased against women. It also observes that Baluchistan has acquired success in terms of literacy rates for individuals aged 10 years and above. It expects some drop in gender disparity at the primary school level even though there exist challenges in getting targeted Net Enrollment Ratio (NER) due to soaring dropout rates. To deal with the situation, they recommend pouring more financial resources and other inputs into primary education, establishing more girls' schools focusing on rural areas, and improving the institutional capacity of government departments. Additionally, the study recommends more job opportunities in the public sector for women along with a more equitable and broad-based educational environment.

The World Economic Forum (WEF) report in 2021, titled "Global Gender Gap Report 2021," Pakistan has shown a slight improvement in the global gender parity index. The index increased from 0.543 in 2006 to 0.556 in 2021, ranking Pakistan 153<sup>rd</sup> out of 156 countries. However, the report paints a bleak picture of global gender parity, indicating that it will take another generation for women to achieve gender parity. The report also highlights that the COVID-19 pandemic's adverse effects would further intensify the global gender gap, extending the projected time for bridging the gap to 135.6 years instead of the previously estimated 99.5 years, meaning that future generations have to face gender

disparities persistently. In terms of gender parity in Pakistan, the report reveals that Pakistan has the worst ranking in the world regarding the Gender Parity Index. It is slightly better than Iraq, Yemen, and Afghanistan, holding the 153<sup>rd</sup> position out of 156 countries. When it comes to economic opportunities, education attainment, health and survival, and political participation, Pakistan ranks at 152<sup>nd</sup>, 144<sup>th</sup>, 153<sup>rd</sup>, and 98<sup>th</sup> positions, respectively, out of 156 countries. The report also highlights Pakistan's sluggish progress, with a meager improvement of 0.013 in the Gender Parity score over the past 16 years (from 0.543 in 2006 to 0.556 in 2021). In terms of education attainment, Pakistan ranks 144<sup>th</sup> in literacy rate (0.65), 145<sup>th</sup> in primary education enrollment (0.84), and 139<sup>th</sup> in secondary education enrollment (0.85) among 156 countries worldwide. Pakistan lags not only behind in the global context but also the South Asian region, with Nepal outperforming it with a score of 0.895 and ranking 134<sup>th</sup>. At the global level, Pakistan is only ahead of a few countries such as Iraq (145<sup>th</sup>), Nigeria (146<sup>th</sup>), Yemen (152<sup>nd</sup>), Chad (155<sup>th</sup>), and Afghanistan (156<sup>th</sup>) in terms of gender parity. The Global Gender Gap Report by WEF in 2022 also suggests that it may take 132 years to eliminate the gender gap or achieve gender parity globally because "the risk of global gender parity backsliding further intensifies." A report from The Daily Times (July 22, 2022) also highlights Pakistan as the second-worst country, ranking 145<sup>th</sup> out of 146 countries in terms of gender parity, just after Afghanistan. However, the data provided in the reports does not include information about Azad Jammu and Kashmir (AJ&K), although its performance is reportedly better than Pakistan and some of Pakistan's neighboring countries.

In a study by Nasir Iqbal (2021) focusing on the World Economic Forum's 2021 Global Gender Gap Report, it is highlighted that Pakistan is significantly weak in addressing gender gaps across various dimensions of gender parity, including economic opportunities, health and survival, education, political participation, and social empowerment. Pakistan ranks 153<sup>rd</sup> out of 156 countries globally and stands at the 7<sup>th</sup> position among eight South Asian countries, with only Afghanistan performing worse in terms of gender parity. The report also reveals that Pakistan's gender gap widened by 0.7

percentage points within a year. In contrast, neighboring countries such as Bangladesh have made remarkable progress in reducing the gender gap, with its Gender Parity Index improving from 0.627 in 2006 to 0.719 in 2021, ranking it 65<sup>th</sup> globally. Iqbal emphasizes that Pakistan performs worse than India (0.962) and Sri Lanka (0.998) in terms of gender parity, as highlighted in the WEF report. The COVID-19 pandemic has further exacerbated the situation, leading to a 5% loss of jobs for women and posing a future threat to women's economic opportunities. He argues that Pakistan has the worst gender gap and may take several decades (13.6) to bridge the existing gap if the current performance rate continues. To expedite progress and bridge the gender gap in Pakistan, Iqbal suggests rethinking policies and introducing strategies and standards that promote women's empowerment in economic, health, education, and social aspects. However, Iqbal's study does not delve into the specific standing of Azad Jammu and Kashmir (AJ&K) regarding gender parity.

Although presently no/rare study specifically deliberates on gender parity in AJ&K's primary school education a general perception is there that AJ&K in Pakistan outperforms provinces/areas in literacy, enrollment, and gender parity at the primary school level. It also surpasses in accessing MDGs and SDGs in Pakistan and its regions/areas (ASER, 2014 & 2020; Alif Ailaan 2015; Shabbier and Wei, 2014; PAGE 2021; Tahir, 2016). Nevertheless, this sort of sweeping assertion undoubtedly needs validation by empirical evidence based on analysis of the statistical data. The state of Azad Jammu Kashmir like Pakistan since independence, suffered from a fragile education system with a poor school setup when the newly emerged government inherited only four girls' schools from the then princely state (GoAJ&K, 1977). Its education system has remained neglected for many decades, resulting in poor basic facilities in schools such as 41% of schools lack buildings, 87% of electricity, 73% of drinking water, and 82% in boundary walls having implications for achieving set targets in education (Farooq and Kia, 2016; ASER, 2015). The PAGE report (2021) also points out a similar odd situation in AJ&K as only 18% of education institutions in AJ&K have electricity, 51.3% proper toilet facilities, 35.5% boundary walls, and only

34.7% access to clean drinking water referring to poor teaching-learning environment, greatly harmful girls segment. Moreover, SERRA (2022) documents that 800 educational institutions are still working in outdated tents given for restoration of education activities just after the 2005 deadly earthquake wherein females are more vulnerable. The situation in Azad Jammu and Kashmir (AJ&K) remained passive until the early 1970s when the development process was initiated with improved education sector's allocations in development endeavor, having a positive impact on education indicators with dividend to gender parity at the primary school level in the state (MICS AJ&K 2008 & 2021-22; Alif Ailaan, 2015; Farooq and Kai, 2016; ASER, 2020). However, the focus of research on education working in Pakistan and AJ&K is emphasized on adult literacy and other indicators but no deliberation has so far been made on gender parity at the primary school level. Hence, research work on gender parity is rare in Pakistan and further delicate in AJ&K. Most of the studies in AJ&K primarily focus on literacy, job preferences, job satisfaction, teacher performance, or career-related aspects while only a few studies cite AJ&K's Gender Parity Index (GPI) as a simple reference without focusing on persistent gender gap at primary school level in AJ&K. However, a few national and international surveys refer to statistical data without any deliberation. Although AJ&K undertakes some initiatives for improving education indices but focus of research on gender parity at the primary level stands non-existing. Hence, a comprehensive research-based study is required to ascertain the severity of the gender gap in AJ&K and its area level working for instant redressal.

The Pakistan Bureau of Statistics (PBS) "Pakistan Social Living Standards Measurement (PSLM)" survey 2014-15, indicates the Gender Parity Index (GPI) of 0.92 for primary school gross enrolment ratio (GER) for the students aged 6-10 years in 2012-13 referring a gender bias disadvantages girls in overall terms with variations at urban GPI 1.12 and rural and 0.90 for rural areas indicate disparities disadvantaging boys in urban areas while determinant for girls in the rural inhabitants. In the year 2014-15, the GPI at the primary school level does not witness significant changes. It stands at 0.91 for the AJ&K, 1.10 for urban areas, and 0.90 for rural

areas indicating disparities disadvantaging girls persist in the state and rural areas but harming boys in urban areas. Similarly, the analyses of the data for the students aged 5-9 years in the same period, portray a similar picture in 2012-13, with GPIs of 0.95 for the total AJ&K and 1.08 for urban areas while 0.93 for rural areas. This GP index reflects a positive development for gender parity, albeit with some persisting disparities disadvantaging girls.

Farooq and Kia (2016) provide a detailed account of the education system in Pakistan, including AJ&K, and argue that it has been greatly affected by various challenges including low national priority and insufficient funding resulting in a weak education system having implications for education as well as economic development since independence. They assign this fragility to: a biased feudal system; a dishonest bureaucracy corrupt politicians, frequent dictatorial regimes, and a weak civil society along with an unstable democracy. They note that AJ&K's education system is governed by Pakistan's education policies and structured in line with the federal and Punjab education systems and thus victim of a similar dilemma. Despite receiving a significant portion of the development budget (around 9%) and recurring budget (28%), the education system of AJ&K is not efficient enough to bring a conducive teaching environment for quality teaching because a big chunk of budgetary provision goes to infrastructure and recurring activities. However, they found AJ&K performs better than Pakistan and other provinces/areas in terms of education indicators related to the Millennium Development Goals (MDGs). They refer to a joint report in 2015 by SDPI and Alif Ailaan that AJ&K's districts rank as leaders in Pakistan's District Education Ranking. Using AEPAM (2013 & 2014) data, they also find a female-to-male enrolment ratio at the primary level of 0.95 in AJ&K which to them is close to 1.00 indicating there is not much difference between them (Farooq and Kai, 2016). They also detect variations in AJ&K's districts with Muzaffarabad in the lead having a GPI of 1.17, referring to disparities hurting boys, while Neelum is the least performer indicating girls' lacking there. They also infer that AJ&K's education system despite facing multiple challenges is performing better than Pakistan and other provinces/areas in education indicators like Net Enrolment Rate at the primary level, adult literacy,

gender parity index, etc. On providing an account of AJ&K's and provinces/areas' working towards MDGs targets, they underline AJ&K as the only successful entity in Pakistan in achieving targeted GPI precisely "1" in the stipulated timeframe. However, they ignore comparing AJ&K's historical work and success in timely getting GPI and some other indicators with Pakistan and provinces/areas.

The Annual Status of Education Report (ASER), Pakistan (2020) determines the gender gap in AJ&K and Provinces in quality education, especially in Reading Comprehension - Urdu and English and numeracy skills. The study found no gender disparity in Urdu reading skills but a slight 1 percentage point advantage for boys in both English reading as well as numeracy skills. This study deliberates the data on provinces/areas but does not compare AJ&K with other regions in quality education and also ignores > 30 students failing in these tasks (Express Tribune (2013).

The study by PAGE (2021) on "Status of Girls Education in AJK & GB" provides district-wise data for AJ&K and Gilgit Baltistan (GB). It provides some insights into population and budgetary allocations. Education is not only receiving a low share but a significant part of it (2/3) also is earmarked for infrastructure development. In the case of primary school enrollment, AJ&K surpasses the national figures with a 98% enrollment rate for boys and an 89% rate for girls. However, an obvious gender disparity is observed in the out-of-school children ratio i.e. boys 8.8% and girls 21.1% of girls in AJ&K, which might have implications for growing child labor (Guarcello and others, 2014). The study also points out some challenges in making the learning environment conducive such as lacking basic facilities as only 18% of schools enjoy electricity, 51.3% student toilets, 34.7% drinking water, and 35.5% boundary walls. Examining the gender disparities at the division level, the study finds wide variations as the Poonch division is leading with a GPI of 98.07 while the Muzaffarabad division is at the bottom with a GPI of 91.58. In districts there is substantial diversity as the GPI ranges from 88.78 to 98.07 in AJ&K. Sudhnoti district gets the highest GPI of 98.07 while Kotali district gets the lowest GPI of 88.75 denoting substantial variances in gender parity amongst districts. Similarly, this study also deliberates on GPI

in Gilgit Baltistan. The variations in the Northern area [GB] are also evident at the district level wherein Diamer with a GPI of 53.46 is the lowest while Ghizer district with a GPI of 96.39 stands the highest in the GPI ladder. Nevertheless, it is important to note that this research study ignores the direct comparison between AJ&K and GB in gender parity.

The previous paragraphs offer some valuable insights on AJ&K's efforts for achieving gender parity through some better working in the state but fail to deliberate the progress in AJ&K about gender parity. Moreover, the literature ignores investigating historical comparisons at state, division, and districts as well as at urban and rural levels. Furthermore, it ignores deliberation on potential factors permitting AJ&K to perform better in terms of GPI since 2008. This study is, therefore, aiming at addressing the prevailing gaps by steering an inclusive analysis of gender parity data of AJ&K with a special focus on AJ&K's performance from a historical perspective. By doing so, this research study intends to shed light on AJ&K's progress in attaining gender parity in the past. It also seeks to identify the contributing factors enabling AJ&K as a better performer in the given timespan.

#### **ANALYSIS OF MICS DATA (2008 and 2020-21)**

The MICS AJ&K 2007-08 survey contains valuable insights for gender parity in AJ&K's primary education with a GPI of 0.97, indicating gender parity in the Net Attendance Ratio at the primary school level (UNESCO, 2022). It also indicates meeting the MDGs 3.1 target in 2007 even before the given time (2015). While the GP Index is 1.10 at the middle level indicating gender disparity disadvantaging boys instead. There are also some variations at the district level of gender parity. A GPI of 1.05 for Mirpur indicates a slight disadvantage for boys and a GPI of 0.82 for Neelum displays disparities disadvantage girls. Moreover, the students living in poor households witness a GPI of 0.85, which refers to disparities disadvantaging girls whereas the GPI of 0.89 indicates gender disparity harming girls whose mothers hold primary education. While the girls with illiterate or with secondary education mothers enjoy gender parity in both primary and middle school education with GPI 0.98 and 1.00, respectively.

The MICS AJ&K 2002-21 survey while investigating the gender parity at the primary school level in AJ&K, also explicitly examines GP in rural-urban areas, districts, divisions, mother education, and wealth quintiles in a way that the data obtained could be helpful for historical comparisons. The gender parity index is found as GPI 1.00 for AJ&K, 1.01 for urban areas, and 1.00 for rural areas. AJ&K also witnesses Gender parity at the division and district levels but with a little variance in the 2 districts. The survey also contains valuable data on GPI relating to the mother's education and family economic standing or in terms of wealth quintile. The girls having mothers with primary education exhibit parity with a GPI of 0.97 while the girls having mothers with no education or those living in the poorest households observe the lowest GP Index of 0.95, indicating disparities are persistent for girls in these groups. At divisions GPI varies between 1.00 and 1.01, indicating prevalence of gender parity in all three divisions - Muzaffarabad, Mirpur, and Poonch. Similarly, eight out of the ten districts exhibit gender parity with better scores except for Neelum and Haveli districts which lack it stating disparities disadvantaging girls in these 2 districts. AJ&K has also witnessed progress in getting gender parity at middle and secondary levels though gender disparities persist at the overall level. Gender Parity has also been witnessed in rural areas at the middle level and urban areas at the secondary level. The results portray sound data for making historical and other comparisons relevant to GP in AJ&K. It also provides fruitful information regarding AJ&K's efforts along with prudent factors helpful in redressing gender bias and fulfilling international commitments even earlier than the given schedule.

#### **HISTORICAL COMPARISON**

The historical comparison of Gender Parity in AJ&K is based on the data from different surveys including MICS AJ&K 2008 and MICS AJ&K 2002-21. These contain sound statistical information on the GP Index of AJ&K for historical comparison with some segregation in terms of rural-urban, division, district, mother education, and wealth quintile levels, which can potentially be used for historical comparison. It also benefits from the Pakistan Social And Living Standards Measurement Survey (PSLM) GoPAK. The historical comparison of the data shows that



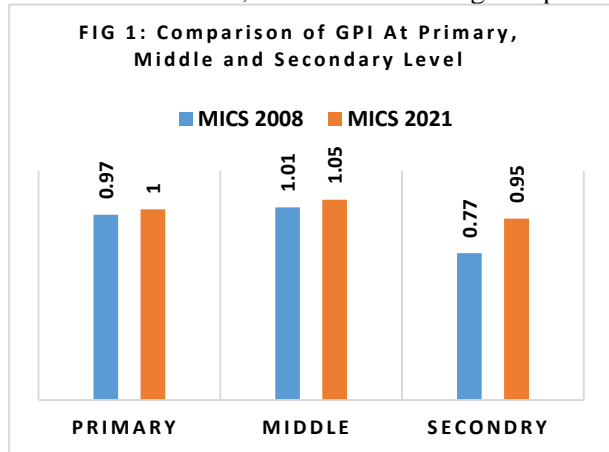
AJ&K efficiently proceeds towards gender parity at the primary level. The analysis of data reveals that precise gender parity is prevailing in AJ&K at the primary level in total terms that improved from GPI 0.97 in 2008 to precisely GPI 1.00 with a 0.03 percentage point gain in 2021. At the urban level disparity favoring females was also removed as GPI dropped from 1.05 in 2008 to 1.01 in 2021 indicating a 0.04 percentage point instant gain. Similarly, the GPI for rural areas of AJ&K also improved favoring girls by increasing from 0.96 in 2008 to 1.00 in 2021, indicating the realization of precise gender parity at the rural level as well in the given timespan. At the district level, the data found GPI also improved in all districts with slight variations. The Neelum despite a 0.09 percentage point gain retains as the least performer in 2021 with a GPI of 0.91 against 0.82 in 2008 while Muzaffarabad enjoys a lead with a GPI of 1.03 in both periods as reflected in Table 1.

**Table 1: Areas-wise Comparison of Gender Parity Index (GPI) AJ&K**

Area/Level		AJ&K MICS 2008			AJ&K MICS 2020-21		
		Primary	Middle	Secondary	Primary	Middle	Secondary
Area	AJ&K	0.97	1.10	0.77	1.0	1.05	0.95
	Urban	1.05	1.22	0.69	1.01	1.14	1.03
	Rural	0.96	1.06	0.78	1.00	1.03	0.85
Division	Muzaffarabad	-	-	-	1.00	1.13	0.72
	Poonch	-	-	-	0.99	0.98	0.98
	Mirpur	-	-	-	1.01	1.06	1.06
District	Neelum	0.82	0.86	0.63	0.91	0.76	0.75
	Muzaffarabad	1.03	1.27	0.80	1.03	1.23	0.73
	Jhelum Valley	-	-	-	0.98	1.07	0.73
	Bagh	0.87	0.97	0.55	1.01	1.04	0.94
	Haveli	-	-	-	0.93	0.71	0.78
	Poonch	1.03	0.81	0.51	1.00	0.92	1.13
	Sudhnoti	0.99	1.19	0.71	0.99	1.10	0.84
	Kotli	0.93	1.22	1.1	1.03	0.97	0.93
	Mirpur	1.05	1.44	0.53	0.99	1.09	1.05
	Bhimber	0.99	1.20	1.07	0.98	1.17	1.21

Sources: a) UNICEF (2008), "MICS AJ&K 2008"; b) UNICEF & GoAJ&K (2022), "MICS AJ&K 2020-21"

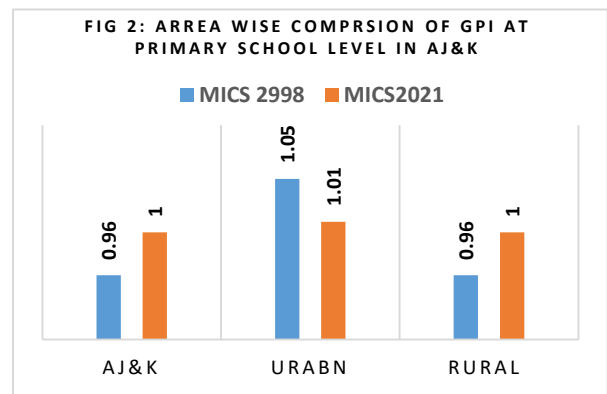
At the middle level, GPI observed a slight departure



from gender parity favoring girls with a GPI of 1.01 in 2008 to 1.05 in 2021. However, the GPI improving trend in the last two decades (2008 to 2021) favors girls, indicating AJ&K’s success in removing gender disparities successfully as displayed in the following Figure 1. AJ&K is spearheading well for redressing gender discrimination in education at all levels with valuable dividends at primary levels at state, division, and district as well as urban and rural areas even with unfavorable financial conditions and teaching environments.

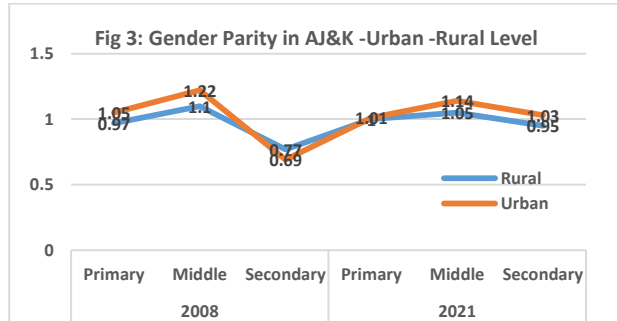
**Comparison of Gender Parity At Rural-Urban Level in AJ&K**

The analysis of MICS AJ&K 2008 and 2020-21 data in Table 1 above further reveals that gender parity at the primary school level in AJ&K is sustaining overtime with an improving trend having GPI 0.97 in 2008 and 1.00 in 2021 indicating the prevalence of precise gender parity at AJ&K level. AJ&K also witnesses improvement in GPI in 2021 at urban and rural levels. For urban areas, it [GPI] was 1.05 in 2008 indicating disparities disadvantaging boys but it improves in their favour ensuring precise gender parity with GPI 1.01 in 2021. Similarly, GPI for rural areas also improved from 0.96 in 2008 to 1.00 in 2021 indicating the prevalence of precise GP in rural areas favoring girls instead. The overall picture of gender parity is portrayed in Figure 2.

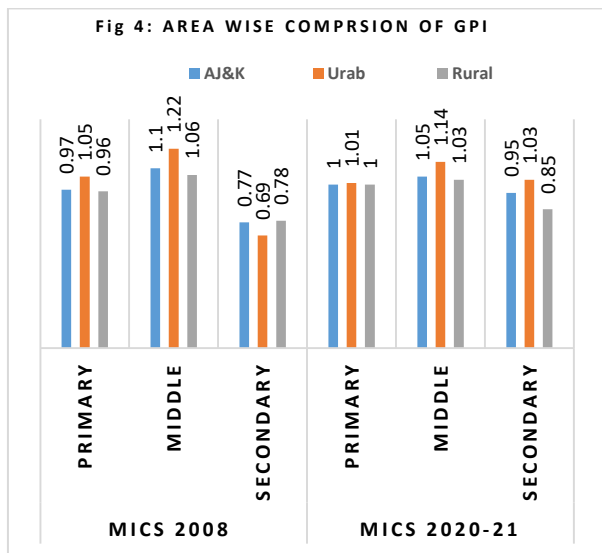


Furthermore, the gender parity comparison also speaks for AJ&K’s judicious efforts to gain precise gender parity in AJK by redressing gender disparities prevailing in 2008. Its efforts not only bring improvement in GPI but also ensure sustainability in GP at the primary level in the state and in urban-rural

areas in 2021 as reflected in Table 1 and Figures 2 & Fig 3.



At middle levels, the GPI in AJ&K along with urban and rural areas observed in 2008 as 1.10, 1.22, and 1.06 respectively (Table 1) indicating a wide gender discrimination disadvantaging boys in the state and its areas. However, the GPI observed a declining trend over time as it dropped from 1.10 in 2008 to 1.05 in 2021 for the state, from 1.22 in 2008 to 1.14 in 2021 for urban areas, and from 1.10 in 2008 to 1.03 in 2021 for rural areas, indicating an instant decline in disparities disadvantaging boys in AJ&K and its urban areas in the past. The data analysis also confirms eliminating gender disparities at the rural level with a vital gain in GPI of 0.07, endorsing the prevalence of precise gender parity in rural areas of AJ&K at the middle level.



At the secondary level, the data in 2008 refer to wide disparities favoring boys at AJ&K, urban, and rural levels with GPI 0.77, 0.69, and 0.78 respectively.

Still, the situation improved in 2021 heading towards gender parity as GPI for AJ&K and rural areas witnessing GPI 0.95 and 0.85 respectively. While the urban areas have successfully achieved gender parity with a GP Index of 1.03 at the secondary school level. The data also demonstrate vital gains at primary and secondary school levels in 2021 as compared to 2008 portrayed in Figure 4 showing a significant success of GoAJ&K in addressing gender bias at all levels with substantial improvement in GPI, generally favoring girls.

**Division and District-Wise Comparison**

The data in Table 1 also witness precise gender parity at the primary level in all three divisions including Muzaffarabad, Poonch, and Mirpur with GP Index 1.00, 0.99, and 1.01 respectively. At the middle level, only the Poonch division gains gender parity with a GPI of 0.98 while the Muzaffarabad and the Mirpur divisions lack it and are experiencing gender disparities disadvantaging boys instead of girls with a GPI of 1.13 and 1.06 respectively. The data also shows that against 100 boys in the Muzaffarabad and Mirpur divisions, 113 and 106 girls are attending middle schools respectively. This situation indicates the absence of school boys as well as some dropouts in both divisions that may have implications for child labor in the area. At the secondary level Poonch division is also in the lead with a GP score of 0.98 while gender disparities are disadvantaging girls in the Muzaffarabad division with a GPI of 0.72 and harming boys in the Mirpur division with a GPI of 1.06. The situation is indicative of wide gender bias at the secondary level as 28 girls in the Muzaffarabad division are out of school as compared to 100 boys. The data in Table 1 also demonstrate district-level variations as Poonch and Muzaffarabad are found the best performers each with a GP Index 1.03 in 2008, demonstrating the prevalence of gender parity in these. Both these districts are maintaining their Gender Parity standing in 2021 as well by scoring GP Index 1.03 and 1.00 respectively. Neelum stands as the least-performing district getting a GPI of 0.82 in 2008 and retains its ranking as the lowest-performing district in 2021 with a GP Index of 0.91. However observed a 0.09 percentage point gain in GPI, which is a positive indication of prudent efforts for removing the gender gap at the district level in AJ&K. Sudhnoti and Bhimber are found as the second best performers in 2008 not only in getting

precise gender parity by scoring GP I 0.99 each but maintaining its sustainability in 2021 as well by having GP Index 0.99 and 0.98 respectively. Mirpur also enjoyed a GPI of 1.05 in 2008 indicating slight gender disparity in favour of girls but it thrives in getting a GPI of 0.99 in 2021, indicating a precise gender parity in the district. The district Bagh also works well moving successfully ahead from GPI 0.87 in 2008 to GPI 1.01 in 2021 indicating a successful shift from disparities disadvantaging girls to exact gender parity in the district. The positive trend in GPI overtime enables all the districts to get on exact gender parity (0.97-1.03) except Neelum with a GPI of 0.91 and Haveli GPI of 0.93 referring to existing gender bias against females that sustains over time. Fig. 5 portrays AJ&K working in leveling out gender disparity at the district level during the last 14 years. The results of MICS 2020-21 are reflected in Fig. 5 shows some gains in GP by all districts towards gender parity in AJ&K at the primary level, endorsing AJ&K's better performance in gender parity dispersed in previous work including MICS 2008, PSLM 2014, ASER 2015, Farooq and Kia (2016), etc.

marking GPI 0.98 and 1.00 respectively while the students having mothers with primary education suffer from disparity disadvantaging girls with GPI 0.89 means 11% girls still need mainstreaming.

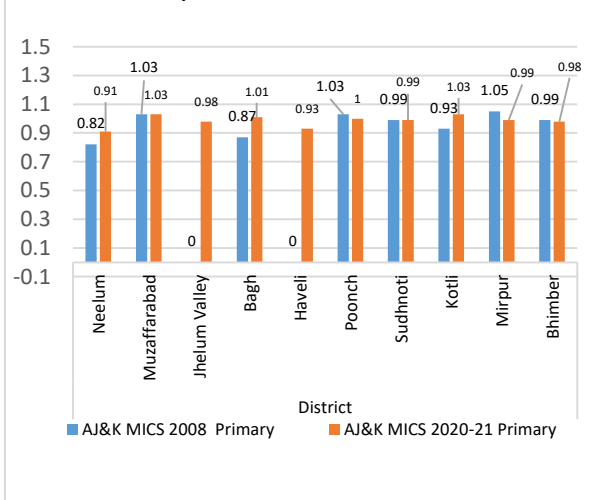
**Table 2: Comparison of Mother Education and Wealth Quintile in Gender Parity AJ&K**

Mother Education and Wealth		MICS 2008			MICS 2020-21		
		Primary	Middle	Secondary	Primary	Middle	Secondary
Mother Education	None	0.98	1.07	0.83	0.95	0.91	0.90
	Primary	0.89	1.29	0.36	0.97	1.18	0.88
	Middle	-	-	-	1.05	1.04	1.03
	Secondary	1.00	0.98	0.91	1.00	1.12	1.07
	Higher Secondary	-	-	-	1.07	1.15	1.06
Wealth Quintile	Poorest	0.85	0.77	0.84	0.95	0.85	0.76
	Second	0.98	0.68	0.84	0.96	1.04	1.12
	Middle	0.97	1.30	0.69	1.13	1.10	1.02
	Fourth	1.05	1.18	0.78	1.02	1.05	1.01
	Richest	1.00	1.25	0.76	0.97	1.12	0.95

Sources: Prepared from MICS AJ&K 2008 and 2021 page

Contrary to this in 2021, the primary school students with mothers having Primary and Secondary level education witnessed gender parity with GPI of 0.97 and 1.00 respectively while the girls having mothers with no education observed slight inequality disadvantaging them with a GPI of 0.95, which to Farooq and Kai (2016) is almost gender parity. While the boys with middle or high/higher secondary school level education mothers witness gender disparities with a GPI of 1.05 and 1.07 respectively indicating gender bias favoring girls with a slight margin. The boys in middle school level having mothers with no or primary education were victims of disparities with a GPI of 1.07 and 1.29 respectively in 2008 indicating inequalities favoring girls while the students with mothers having secondary education witnessed gender parity with a GP score of 0.98. On the other hand, in 2021, the middle school level students having illiterate/no education mothers observed disparity with a GP Index of 0.91 indicating disparities disadvantaging girls while the students having mothers with primary education enjoyed gender parity with a GPI of 1.03. However, the students with mothers having middle, secondary, and higher secondary education witness disparity with a GPI of 1.07, 1.06, and 1.15 respectively referring to disparities disadvantaging boys with variant extent. It also indicates that a growing extent of disparities for boys implies out-of-school boys with a growing risk of child labor. The girls at the Secondary school level with mothers

**FIG . 5: Comparison of District Wise GPI in AJ&K**



**Mother Education**

Mother education also plays a divisive role in reshaping gender parity at primary middle and secondary levels in the world and an area like AJ&K. The data in Table 2 reveals that in 2028 the primary school students with illiterate mothers or having no or secondary education witness gender parity by

having no, primary or secondary education witnessed GPI 0.83, 0.36, and 0.91 respectively demonstrating the occurrence of disparity disadvantaging females in 2008. It persists even in 2021 as well for those girls having mothers with no or primary education with a GP index of 0.90 and 0.88 respectively though the extent of disparity declines in 2021. On the other hand, the students having mothers with middle-level education witnessed gender parity with a GPI of 1.03 in 2021 but the students with mothers having secondary-level education observed a GPI of 1.07 in 2021 indicating disparity disadvantaging boys persists yet.

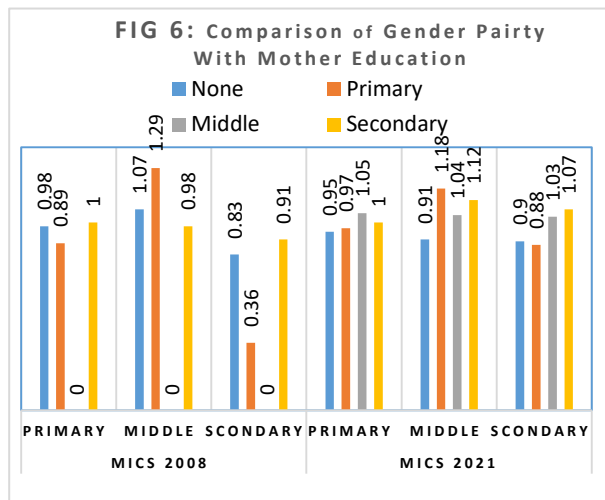


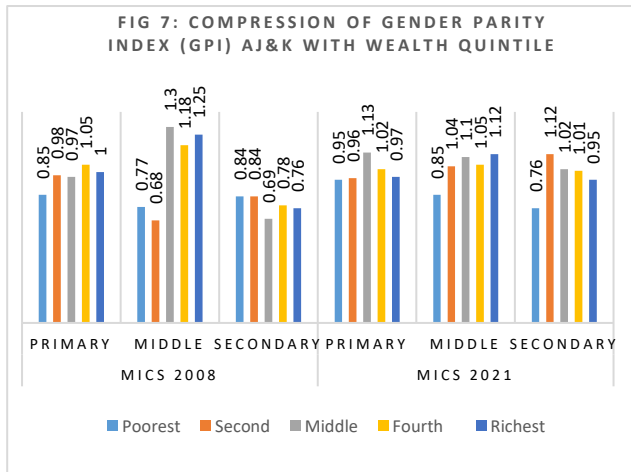
Figure 6 portrays AJ&K's successful working in the gender parity regarding mother education wherein girls with mothers having no education are mostly at a disadvantaged stage at primary, middle, and secondary levels in 2021 instead of girls having mothers with no education at secondary level in 2008. Figure 6 also shows that the GP index in overall terms has improved at all levels in 2021 when compared with the results of MICS 2008.

**Comparison of Gender Parity with Wealth Quintile**

The gender parity comparison with the reference to Wealth Quintile in AJ&K in Table 2 above reflects that disparities disadvantaging girls persist for those who live in the poorest households in 2008 as well as in 2021 but the extent of deprivation has declined over time as GPI increased with a gain of 0.10 percentage point from 0.85 in 2008 to 0.95 in 2021, which is approaching gender parity (Farooq and Kai,

2016). While the boys and girls living in other households (i.e. Second to the richest) witnessed gender parity in 2008 with a GPI between 0.98 and 1.00. While the students living in fourth quintile households get GPI 1.05, slightly above the gender parity range indicating some deprivation of boys living in these households. In 2021, the girls living in fourth and richest households enjoy gender parity with GPI 1.02 and 0.97 and the girls living in second wealth quintile households are slightly deviating from gender parity with GPI 0.96 but being close to the range 0.97-1.03 taken as gender parity (Farooq and Kai, 2016). The students of primary school living in middle-wealth quintile households also observed gender disparity with GPI 1.13 favoring girls but disadvantaging boys in 2021 against the gender parity (GPI 0.97) observed in 2008. In general, the students in these households witness a declining trend in GPI with a few exceptions during the period under investigation. At the middle level, the girls living in second quintile households in 2008 suffered from gender disparity with the lowest GPI of 0.68 followed by the girls of the poorest households with a GPI of 0.77 while the gender disparities disadvantaging boys living in other households (middle to richest). In 2021, the gender disparities disadvantaging girls persist for those who live in the poorest households (GPI 0.85) while boys in all other households are victims of gender disparity with different magnitudes with GPI varying between 1.04 - 1.12 as reflected in Table 2. At the secondary school level, the girls living in all households were victims of gender disparity in 2008 but the girls of middle wealth quintile households were at the worst standing with a GPI of 0.69. On the other hand, the disparities disadvantaging girls in 2021 with a GPI of 0.76 who live in the poorest households followed by girls living in the richest households having a GPI of 0.95. There is no gender discrimination for the students (boys and girls) living in middle and fourth wealth quintiles households as they enjoy gender parity with GPI 1.02 and 1.01 respectively. However, the boys residing in the second wealth quintile households observed gender disparity harming them in 2021 compared to 2008 when gender disparities were disadvantaging girls instead. Figure 7 helps to have a clear understanding of gender parity prevalence regarding the wealth quintile in AJ&K in 2008 and 2021.

FIG 7: COMPRESSION OF GENDER PARITY INDEX (GPI) AJ&K WITH WEALTH QUINTILE



### FACTORS RESPONSIBLE FOR GENDER PARITY IN AJ&K

Historically, the education sector in AJ&K remained neglected from 1947 until the initiation of the development process in the early 1970s. However, AJ&K witnessed progress in terms of education indices, including gender parity despite critical bottlenecks including weak financial resources, poor basic infrastructure – building, allied facilities, etc., and an unconducive teaching environment. (PSLM, 2014; Farooq and Kia, 2016; Tahir, 2016; PAGE, 202; and SERRA 2022). Nevertheless, AJ&K gets better results in terms of gender parity backed by some vibrating factors including:

#### Improved Share of Girls' Schools

GoAJ&K's firm pledge helps increase the number of girl's schools in the state ensuring greater openings for girls remain deprived since 1947. At the primary level, the girls' share increased from 1.7% in 1947 to 47% in all schools in 2021. The female share also improved significantly as they shared 50% colleges, 20% universities, and 50% training institutions (GoAJ&K, 2020 & 2021). Girls' permission to join mail schools/institutions is also instrumental here.

#### Placement of Untrained Teachers

Govt. of AJ&K deployed a unit comprised of 1700 untrained teachers including middle-pass female teachers in primary schools in AJ&K and were provided on-the-job training in elementary schools in AJ&K (GoAJ&K, 1977). Presently, females claim a 48% share in a total of 30,465 teachers working in

government schools having a key role in augmenting gender parity in AJ&K (GoAJ&K, 2021).

#### Unprecedented Community Support

Focused community support could also play a pivotal role in promoting education development in a country or area (Rahman and Uddin, 2009; Farooq and Kai, 2016). In AJ&K the wakeful community plays a decisive role in promoting education. It helps in achieving gender parity by denoting free land or one room for a school. Almost all the primary schools (> 4094 with 1819 females) are built on free donated land in urban and rural areas of AJ&K.

#### FINANCIAL ALLOCATIONS

School education constitutionally is the main responsibility of the state and therefore, it is vital to make every possible effort within its means to allocate all necessary inputs for its promotion through development and recurring budget (Rahman and Uddin, 2009). AJ&K despite its' financial paucity allocates 30 to 33% of recurring and 9% of its development budget to education (Tahir, 2016 and Farooq and Kai 201). This generous financial help in opening male and female schools even in remote areas. However, a meager 1.51% financial share for the primary level in the budget allocation may imply the sustainability of achieved GPI index "1" in the future, and therefore the budgetary provision of primary schools has to be improved in the future.

#### Improved Access to Education

Enhanced access to education by cutting distances helps increase children's intake and their integration at the primary school level as well as reduce the number of out-of-school children implying gender parity and child labor (Guarcello and others, 2014). GoAJ&K's proactive efforts helped improve accessibility from one school in almost 45 km<sup>2</sup> in 1947 to 2.6 km<sup>2</sup> in 2021, wherein girl's access to education improved manifold (GoAJ&K, 2021).

#### Better Student-Teacher Ratio

The student-teacher ratio is a vital input for ensuring gender parity in primary education, which improved in AJ&K from a trivial stage in 1947 to 16.04, 18.11, and 25.63 at school, college, and university levels respectively in 2020 (GoAJ&K, 1997; and 2020).

## FINDINGS

The analysis of this research study on GP in primary school net attendance ratio in AJ&K brings forth several key findings including: **a)** AJ&K education system works well despite its fragile status - financial and institutional capacity - in accessing gender parity at primary school education level and maintains consistency in its progress since 2008 in AJ&K and urban – rural and division level in 2022; **b)** Gender parity gap at district level in AJ&K is also reduced as 8 districts in 2022 achieved precise gender parity against 4 districts during 2008 in which gender disparities disadvantaging girls persisting but with reduced extent; **c)** AJ&K is the only region in Pakistan successful in achieving MDGS 3.1 and SDGs 4.5.1 targets in the stipulated time; **c)** AJ&K also remains proactive in attaining GPI 1.00 and sustaining it during the last one and half decade; **d)** At middle and secondary level AJ&K though witnesses good progress yet gender disparity disadvantages either girls or boys persist; **f)** Financial paucity and weak infrastructure may not restrict accessing GP when strong government commitment and community support remains intact for education sector; **d)** The gender disparities disadvantaging girls continues even in 2021 for those having mothers with no education or living in the poorest households; **e)** The meager share (>1%) for primary education may have implications for slow progress in achieving GP and quality education (Farooq and Kai 2016); and **f)** At middle and secondary level GP Index above 1.03 may soar the number of out of school boys implying to child labor, child trafficking, and child abuse (Guarcello and others, 2014).

## CONCLUSIONS

The main conclusion includes: **a)** AJ&K achieves gender parity despite its weak standing that stresses the need to explore the factors enabling it to become a better performer under the same policies and education system; **b)** Resource scarcity, poor economic standing, and weak infrastructure set-up do not matter in getting Gender parity if strong govt. commitment and community backing are consistently available. Both should be retained in future for getting gender parity at middle and secondary levels and ensuring its sustainability at primary level (Rahman and Uddin, 2009; WEF, 2021; Iqbal, 2021); **c)** Improved teaching - learning

environment is instrumental for attaining gender parity in sustainable manner (Farooq and Wai, 2016; Shabbier and Kei, 2014 and 2015); **d)** Focus efforts are essential to identify the reasons behind persistently underperforming district like Neelum and Haveli in getting desired GP; **e)** Hands-on efforts for promoting primary education could lead to timely get SDGs 4.5.1 like targets, ensuring sustainability (Farooq and Kai, 2016); **f)** The existing system needs focusing on quality education rather than extending supply of poor school set up; **g)** Introduction of accountability with restriction on political maneuvering can pay dividend in both quantity and quality education (Shabbier and Kei, 2014 and 2015); **h)** Judicious financial allocations for Primary level education could help improve better service delivery towards quality education and sustained gender parity (Farooq and Kai, 2016; Tahir, 2016); **h)** Improved economic profile and mother education could also pay dividends in getting GP in AJ&K in future, and **i)** AJ&K also needs focusing on quality education along with quantity.

## REFERENCES

- AEPAM (2013), "Pakistan Education Statistics (2013)" National Education Management Information System NEMIS: Academy of Education Planning and Management AEPAM, Government of Pakistan.
- AEPAM (2014), "Pakistan Education Statistics 2014, National Education Management Information System NEMIS: The Academy of Education Planning and Management (AEPAM), Islamabad
- Alif Ailaan Pakistan District Education Rankings Report 2015, <http://asERPakistan.org> Accessed on January 15, 2022
- ASER (2020) Annual Status of Education Report 2019 ASER-Pakistan (2020) Idara-e-Taleem-o- Aghahi (ITA) Lahore, [www.asERPakistan.org](http://www.asERPakistan.org) Retrieved on March 15, 2022
- Carrin Guy (1984), "Economic evaluation of health care interventions: A review of alternative methods" Journal of Social Science & Medicine, Volume 19, Issue 10, 1984, Pages 1015-1030, [https://doi.org/10.1016/0277-9536\(84\)90304-6](https://doi.org/10.1016/0277-9536(84)90304-6) Accessed on 4 March 2021.

- Express Tribune (2013) "AJ&K Leading in Education but Lacking in Quality", March 14, 2021, <https://tribune.com.pk/> Accessed on 14 March 2021
- Farooq, M.S and Kai Y.T. (2016), "Acritical Study of Primary Education Situation in AJ&K State", International Online Journal of Primary Education Vol.5, issue 1, p-40-50 [www.iojpe.org](http://www.iojpe.org). Accessed on July 4, 2022
- GoAJ&K (1977), "Azad Kashmir Key Indicators", P&DD AJ&K, Muzaffarabad, AJ&K
- GoAJ&K (1997), AJ&K At A Glance different Issue and Statistical Year Book (1997)
- GoAJ&K (2008) Multiple Indicators Cluster Survey (MICS) AJ&K 2008, Key Final Report , Muzaffarabad AJ&K, P&DD GoAJ&K , 2009
- GoAJ&K (2020), AJ&K At A Glance, BOS, P&DD AJ&K
- GoAJ&K (2021), AJ&K At A Glance, BOS P&DD AJ&K
- GoAJ&K (2022) Multiple Indicators Cluster Survey (MICS) AJ&K 2020-21, Survey Finding Report (SFR)", BoS, P&DD AJ&K, 2022
- Government of Pakistan, (1970) "Office Memorandum on Development of AJ&K", Cabinet Secretariat (Cabinet Division) Islamabad, 20<sup>th</sup> June 1970
- Government of Pakistan, (1971) "D. D. No. 8/9/70", Cabinet Division GoPAK" Islamabad, 11<sup>th</sup> May 1971
- Government of Pakistan (2010), "Economic Survey of Pakistan" Annual Report (2010-11)", Islamabad <http://www.fincnce.gov.pk/srvey-1011.html>. Retrieved on Jun 15, 2022
- Guarcello I., Lyon S., and Rosati F. (2014); "Child Labor and Out of School Children: Evidence from 25 Developing Countries", All in School: Out-of-School Children Initiative. UNICEF & UNESCO Institute for Statistics 2014 <https://www.allinschool.org> Retrieved on 12-01-2022
- Hicks John (1989), "The Assumption of Constant Returns to Scale," Cambridge Journal of Economics, Oxford University Press, vol. 13(1), p 9-17
- Iqbal Nasir (2021), "The Gender Gap", The Pakistan News, April 12, 2021, Accessed on January 30<sup>th</sup>, 2022
- Kazmi SGH (1995), Foreign Aid and Health in Pakistan Unpublished PhD Thesis University of Bradford UK
- Kazmi SGH (1997) "Foreign aid as Determinant of social sector expenditure in Pakistan" Paper presented in Business Leadership Seminar "Setting Agenda for Change" July 29-30, 1997, ILM Lahore.
- Kazmi SGH (2005), "Foreign Aid as Determinant of Health Expenditure in Pakistan" Paper in International Conference in LUMs Lahore 2005
- Kazmi SGH (2009), "Role of Kind of Foreign Aid (Kinds) in Determining Health Status in Developing Countries: A case Study of Pakistan" 5<sup>th</sup> International Conference of Mahdism Doctrine 5-6 August 2009 TEHRAN, Iran
- Kazmi SGH (2010); "Structure Loan are determinant for Health Expenditure in Pakistan: An Evidence from Time Series data, Kashmir Development Review 2010, General of Kashmir Studies University of Azad Jammu and Kashmir Muzaffarabad Azad Kashmir
- Khan, Ghazala Murad (2017), "Literacy and Pakistan" October 17, 2107 Newspaper – Down Com,
- Khan, Zahid Ahmed (2023), Gender Equality: Role in National Development" The Express Tribune April 19, 2023 <https://tribune.com.pk> Accessed on April 20, 2023
- Knowles, LL., Maddison, W.P., (2002) Statistical phylogeography. Mol. Ecol. II (12), 2623-2635
- PAGE (2021), Pakistan Alliance for Girls Education –PAGE (2021), "Status of Girls Education in AJ&K and GB", PAGE Report November 2021
- PSLM (2014), Pakistan Social Living Standards Measurement -PSLM (2014), Pakistan Bureau of Statistics (PBS), Islamabad
- Rahman A.U. and Uddin S. (2009) Statistical analysis of different socio-economic factors affecting the education of NW FP (Pakistan),

- J. Appl. Quant. Methods, 4 (1) (2009), pp. 88-94
- Rashid A., Bibi Zainab & Siraj-ud din (2012) "Assessing the progress of Gender Parity in Education through achieving Millennium Development Goals: A Case Study of Quetta District Balochistan" Bulletin of Education and Research December 2012, Vol. 34, No. 2 pp.47-58
- Shabbir, Mohammad and Wei Song (2014), "Job Satisfaction Status of Public and Private School Teachers: A Case of Pakistan Administrative Kashmir", European Journal of Educational Sciences, 1(4) 56 -71
- Shabbir, Mohammad and Wei Song (2015) "An Empirical Research on Teaching Job Related Stress A Case Of Azad Kashmir Public School Teachers", Science Int. (Lahore) 27(2) 1528-1532 January 2015
- Singh, Sanajan (2018) "Illiteracy – Essay, Speech, Article, Paragraph [The Social Issue]", <http://www.myeducorner.com/illiteracy-essay-speech-article-paragraph/> Retrieved on January 15, 2022
- State Reconstruction and Rehabilitation Authority – SERRA (2021), Annual Work Plan 2021-22, Muzaffarabad Azad Kashmir
- Swenson, Haley (2017), "What Is 'Gender Parity'?" New America. <https://www.newamerica.org/weekly/what-gender-parity/> Retrieved 07-01-2021
- Tahir. P (2016), "Education Spending in AJ&K", Published in The Express Tribune, July 28, 2017
- The Daily Time (2022) Staff Reporter, July 22, 2022
- UNESCO (2005). "Education For All (EFA) Global Monitoring Report". UNESCO, Paris.
- UNESCO (2010) "Gender Parity in Primary and Secondary Education" UNESCO Institute of Statistic (UIS) Fact Sheet, Sept. 2010, No. 4 <https://uis.unesco.org/sites/default/files/documents/fs4-gender-parity-in-primary-and-secondary-education-en.pdf> Retrieved on December 8, 2022
- UNESCO (2022), Gender Parity Index (GPI), UNESCO's International Institute for Education Planning (IIEP) Learning Portal, <https://learningportal.iiep.unesco.org/en/global/gender-parity-index-gpi> Retrieved on June 10, 2022
- UNICEF (2020); "Gender and Education" UNICEF DATA. Monitoring the situation of Children and Women, February 2020 <https://data.unicef.org/resources/dataset/gender> Retrieved on January 12, 2022
- World Bank (2012). Gender Equity and Development. World Development Reports. Washington D, C. Wright, S. P., Horn, S. P [https://documents.worldbank.org/en/publication/document-reports/documents\\_detail/492221468136792185/main-report](https://documents.worldbank.org/en/publication/document-reports/documents_detail/492221468136792185/main-report) Retrieved January 25, 2022
- World Bank (2018), "Data Bank: World Development Indicators". World Bank; 2018 <http://databank.worldbank.org/data/home.aspx> Retrieved on July 17, 2022
- World Economic Forum –WEF (2021), "Global Gender Gap Report 2021", Insight Report March 2021 <http://reports.weforum.org/global-gender-gap-report-2021/datexplorer> Retrieved on March 31, 2022
- World Economic Forum –WEF (2022), "Global Gender Gap Report 2021", Insight Report July 2022 <http://reports.weforum.org/global-genderweforum.org/global-gender-gap-report-2022/datexplorer> Retrieved on July 7, 2022
- World Health Organization (2023), Gender Parity Index in primary level enrolment; WHO 2023 <https://www.who.int/data/nutrition/nlis/info/gender-parity-index-in-primary-level-enrolment> Accessed on April 20, 2023