

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

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ABSTRACT

Azad Jammu & Kashmir (AJ&K) is an area with a population of 4.02 million residing in 13,297 square kilometers making significant progress in attaining gender parity at the primary school level. AJ&K its weak economic status and delicate education system, it is successful in getting Gender Parity Index (GPI) in primary school net attendance ratio at the state, division, district, urban, and rural levels in the stipulated time. The acquired achievements witness steady progress in last decades, eventually can be attributed to different factors like government commitment, and community involvement, improved access, better student teacher ratio and increased share of girl's schools despite limited financial resources and weak institutional capacity. This study highlights the importance of improving the overall learning environment to sustain gender parity at the primary school in AJ&K. It must also make proactive efforts to get Gender parity and further enhance it at the middle and secondary levels of education in AJ&K. This study is preamble for exploring progress overtime in gender parity at primary school along with middle and secondary school level in AJ&K by analyzing MICS AJ&K 2008 and 2020-21 data, The study intended to historically examine the prevalence of gender parity at various levels in AJ&K comparing MICS AK&K 2008 and 2020-21 data with reference to the MDGS and SDGs. It also studies examines occurrence of gender parity in urban rural areas and it segregation at division & district level in the past decades. It also examines the mother education and family economic standing in shaping the gender parity in AJ&K. It also enlists the contributing factors helping AJ&K in getting to gender parity in primary attendance ratio at diffident levels. The Secondary data for this study were obtained from MICS 2008 and MICS 2022 in AJ&K. Different graphical tools are operated to show the prevailing of gender parity/disparity with regards to different contributing factors. In particular, the gender parity/disparity at net attending ratio at different educational levels is examined in historical prospect with reference to divisions and districts of the Northern areas and the State. It is also investigated with respect to mother education and income status of the households. The analysis has been carried out using SPSS-26 and MS-Excel. The gender parity though emerged as an important indicator of education performance but remains neglected in AJ&K for many decades. However, the historical account of GP Index in AJ&K witnesses' growth in it reaching to precisely "1" in MICS 22 from 0.97 recorded in MICS 2008. The study also infers that AJ&K should emphasis on sustainability of GPI "1" at state and division level together with urban rural areas. It also needs preemptive measures to bring the 2 lacking districts at par as well as the girls having illiterate mother or residing in poor households. AJ&K despite economic position and weak education system is moving well towards getting Gender Parity in primary school attendance ratio at state, divisional, and district level as well as in urban and rural areas with strong govt. commitment and community support while some deviation are exists at middle and secondary level. Moreover, the girls having illiterate mother or residing in the poorest household are suffering from disparities and need special focus.

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

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; and 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, the education remained overlooked 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. However, this postulated trickle-down effect proved to be unsuccessful, leading to a paradigm shift in development initiatives, focusing on human resource development through education and health sectors. Education and health are considered a fundamental right and a basic human need that should be promptly fulfilled. 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 of 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 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; and Farooq and Kai, 2016). However, female¹ participation in education in AJ&K remained limited until the early 1970s (GoAJ&K, 1997).

For assessing performance in education sector, there are alternative measures² widely underuse including Gender Parity (GP) in primary school Net Attendance Ratio (NAR) education measured through Gender Parity Index (GPI), a very common tool to measure educational performance and historical account. (World Bank, 2012 & 2018; Haley, 2017; UNESCO, 2005, 2010 & 2022; PAGE, 2021; and 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 while with minor variations in indicator values, GPI is generally presumed to be within the range of 0.97 and 1.03 that also indicates parity between the genders (UNESCO, 2010 & 2002). "UNESCO's Internal Institute Education Planning (2022) refer it a ratio of women to men values of the given indicator. GP Index within 0.97 and 1.03 refers to parity between the genders while GPI < 0.97 indicates a disparity disadvantaging and deprivation of girl's by triggering their denial to skill, education and job opportunities. The GPI > 1.03 on the other hand indicates a disparity disfavoring males means inequalities harming boys and thus augment the number out of school boys implying to soaring child labour (UNESCO, 2005, Guarcello and others 2014; WEF, 2021& 2022; PAGE 2021). However, Gender Parity in primary education is although key to redress gender discrimination but hardly explored in developing countries like Pakistan leaving the research work on GPI in Pakistan trivial while in AJ&K non-existing. A low female participation is evident in all sectors of AJ&K economy but education sector was the prime victim in AJ&K since independence due to inherited

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

² That is literacy, enrolment, retention, student teacher ratio, etc.

defined and ill managed education system with 250 primary schools. The girls share was only 4 girl's schools in it referring to female deprivation in AJ&K leading to extreme gender disparity. The situation was more critical at middle and secondary level where females get one school in 29 middle schools and no at secondary level (GoAJ&K, 1977 & 1997; and Farooq and Kia, 2016). A limited budgetary allocations until 1970s associated with poor learning environment and weak institutional capacity prove hostile for girl's education implying to GP disfavoring them in AJ&K (AEPAM, 2013 & 2014; Farooq and Kai 2016; and Shabbir Wei 2015). Starting development process during 1970s backed by governments' Will and community support helps altering the unusual situation prevailing in AJ&K since 1947. The new development proved instrumental in improving education indices including GPI with dividend for female in the last few decades. Nevertheless, the lack of research 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 gender parity in primary education in AJ&K making historical comparison.

There is a wider perception that AJ&K is not only better performer but also outstrips Pakistan and regions/areas in education indices including gender parity at primary school level (Alif Ali 2015; Shabbir and Wei, 2015; Farooq and Kai, 2016; Tahir, 2016; ASER, 2020; and PAGE, 2021). However, this kind of general assertion needs validated with sound evidence based on analysis of the statistical data. So far the major research work the historical context on AJ&K's education performing in general is too small while in the context of Gender parity at primary school level in the historical context is almost non-existing. Therefore, this preamble effort is to bridge the research gap pertaining to the GP in primary school level in AJ&K. The study is thus, intended to analysis and validate AJ&K performing in terms of GP in primary school net attendance ratio overtime. It also compares AJ&K's performing overtime using from different sources including PLSM and MICS data for making historical comparison with reference to MDGs and SDGs targets. The study is structure as: the statement of purpose, objectives, data collection

and research methodology are part of this section; section 2 provides an overview of previous work on gender parity at primary school level in AJ&K; the section 3 comprises of data analysis pertaining to Gender Parity in primary school net attendance ratio; the 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 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 in primary school enrolment between 2008 and 2020-21 at the state division, district, and urban-rural levels. By analyzing the data at different point of time, the study seeks to shed light on the progress made during the past almost one and half decade at the state, division and district as well as at urban-rural level in addressing gender gap and achieving gender parity in primary school education. 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 contribute to a comprehensive understanding of the education landscape in AJ&K. Additionally, the study attempts to discovers the factors enabling AJ&K to make notable progress in getting gender parity at primary, middle and secondary level in a similar education policy and education system.

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 performing in gender parity in terms of MDG and SDGs5 commitment
- Provide historical account of AJ&K's GPI for the state, divisions, districts and urban-rural areas
- Access GP in quality education - reading Urdu and English and numeracy skill in AJ&K

- Identify prospective source allowing AJ&K in early achievement of targeted Gender Parity in primary school net attendance ratio.

LITERATURE REVIEW

The initial development efforts prior to 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 investments enhance the quality of human resources and drive economic growth. The argument presented is that education, as reflected by key indicators like primary school attendance ratio, adult literacy, and gender parity, play a crucial role in accelerating the development process and improving the socioeconomic status of individuals and society. It also helps in fulfilling the basic needs, revitalizing human resource potential and thus improving overall well-being of the masses. (Carrin, 1984; Hicks, 1989; Kazmi, 1995, 2005, 2010; Rahman and Uddin, 2009; and 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 in achieving one's life aspirations. Therefore, the consensus of nations, societies, religions, etc., is on promoting 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 socio-economic standing of an area/people of a nation or a society. It also helps improving individual and family profile 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 widely in use to determine working of education sector and also conduct historical or regional comparisons. The developed countries allocate more funds to education than their developing counterpart and therefore, witness 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 inputs and lacking institutional capacity. However, the countries like Maldives, Sri Lanka, Cuba, Somalia, Kerala in India, and Vietnam despite their resource scarcity have managed better outcomes in 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 like targets in education including gender parity (Kazmi, 2005, 2010; Farooq and Kai, 2016). Consequently, Pakistan observes the lowest literacy rates with 55%, ranking it 160th in countries worldwide (UNESCO, 2022), and 144th in 159 countries as per World Economic Forum's Global Gender Gap Report 2021 (WEF, 2021). Gender parity also remains an ignored area in Pakistan and its provinces/ areas including AJ&K, heading towards insistent gender discrimination disadvantages girls but favoring males since independence (GoP, 2009; PSLAM, 2011-10; Farooq and Kia, 2016; Iqbal, 2021; and Khan, 2023). Many countries of the world make significant progress in terms of gender parity while several South Asian (including Pakistan), African and Middle Eastern are still victim of disparities disadvantage females. Pakistan, with GPI 0.84 lacks in gender parity indicating disparities disadvantaging girls still persist though smaller in Pakistan than Chad with GPI 0.78. It also refers the instant need of concerted efforts to redress prevailing gender discrimination and mainstreaming secluded 16% girls in primary education. A few studies infer that the GPI in Pakistan is improving

towards 1.00 (PLSM, 2013-14; Farooq and Kai, 2016; MICS, 2008 and 2021; PAGE, 2021) but a sluggish progress it may take several more decades to bridge the prevailing gap (Iqbal, 2021).

Abdul Rashid and colleagues (2012) launch a study relating to gender parity with reference to MDGs in Quetta district by utilizing secondary data (2000-2010) from the Govt. of Baluchistan Schools & Literacy Department. They witness a positive change in GP despite certain biases and challenges in Baluchistan. The study finds that adult education in Quetta district is favorable for boys and biased against women. It also observes that Baluchistan has achieved success in terms of literacy rates for individuals aged 10 years and above. It expects some drop in gender disparity at 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 of more financial and other inputs in primary education, establish more girls schools focusing on rural areas, and improve institutional capacity of government departments. Additionally, the study recommends more job opportunities in public sector for women along with 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 153rd 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 in terms of the Gender Parity Index. It is only slightly better than Iraq, Yemen, and Afghanistan, holding the 153rd position out of 156 countries. When it comes to economic opportunities, education attainment, health and survival, and political participation, Pakistan ranks at 152nd, 144th, 153rd, and 98th position, 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 144th in literacy rate (0.65), 145th in primary education enrollment (0.84) and 139th in secondary education enrollment (0.85) among 156 countries worldwide. Pakistan lags not only behind in the global context but also in the South Asian region, with Nepal outperforming it with a score of 0.895 and ranking 134th. At the global level, Pakistan is only ahead of a few countries such as Iraq (145th), Nigeria (146th), Yemen (152nd), Chad (155th), and Afghanistan (156th) 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, as "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 145th 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 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 153rd out of 156 countries globally and stands at the 7th 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 65th 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. In order 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 education.

Although presently no study specifically deliberates on gender parity in AJ&K's in primary school education yet a general perception is there that AJ&K in Pakistan outperforms provinces/areas in literacy, enrollment, and gender parity at primary school level (ASER, 2014 & 2020; Alif Ailaan 2015; Shabbier and Wei, 2014; PAGE 2021; and Tahir, 2016). Nevertheless, this sort of sweeping assertion needs validation by empirical analysis of the statistical data. In fact, the state of Azad Jammu and Kashmir like Pakistan suffers from a fragile education system since independence with a poor school set up, when it inherits only four girls' schools from the then princely state (GoAJ&K, 1977). It [education system] remains neglected for many decades, resulting into poor basic facilities in schools such as 41% schools lack in buildings, 87% in electricity, 73% in drinking water, and 82% in boundary walls having implications for achieving set targets in education (Farooq and Kia, 2016; and ASER, 2015). The PAGE report (2021) also points out 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 indicating poor teaching-learning environment, greatly disadvantages girls. Moreover, SERRA (2022) documents 800 education institutions are still working in outdated tents given to these for restoration of education activities just after 2005 deadly earthquake.

The situation in Azad Jammu and Kashmir (AJ&K) remained passive until the early 1970s when development process was initiated with improved education sector's allocations in development

endeavors, having positive impact for 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; and ASER, 2020). However, the focus of research on education working in Pakistan and AJ&K is emphasize on adult literacy and other indicators but no deliberation on gender parity at primary school level. Hence, the 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 cites AJ&K's Gender Parity Index (GPI) as simple reference without focusing on persistent gender gap at primary school level in AJ&K. However, a few national and international surveys refer statistical data without any deliberation. Although AJ&K undertakes some initiatives for improving education indices but focus of research on gender parity at primary level stands non-existing. Hence, a comprehensive research based study is required to ascertain the gender gap in AJ&K's and her AJ&K's working for its instant redressal.

The MICS AJ&K 2007-08 survey contains valuable insights for gender parity in AJ&K's primary education with GPI 0.97, indicating gender parity in Net Attendance Ratio at primary school level (UNESCO, 2022) While the GP Index 1.10 at middle level indicates gender disparity disadvantaging boys instead. There are also some variations at district level 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 GPI 0.85, which refer to disparities disadvantaging girls whereas the GPI 0.89 indicates gender disparity disadvantage girls whose mother 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. These findings emphasize the need to address gender disparities with focused efforts for removing the gender gap, particularly for the girls having disadvantaged backgrounds and mothers with no education.

The Pakistan Bureau of Statistics (PBS) "Pakistan Social Living Standards Measurement (PSLM)" survey 2014-15, indicates the Gender Parity Index (GPI) 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 terms overall terms with variations at urban and rural level. GPI 1.12 for urban areas and 0.90 for rural areas indicate disparities disadvantaging boys in urban areas while determinant for girls in the later. While in the year 2014-15, the GPI at primary school level does not witness a significant changes. It stands 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 while harming boys in urban areas. Similarly, the analyses of the data for the students aged 5-9 years in the same period, portrays 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. These 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 into a weak education system having implications for 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 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 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 a joint report 2015 of 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 female to male enrolment ratio at primary level 0.95 in AJ&K which "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 lead having GPI of 1.17, referring disparities hurting boys, while Neelum is the least performer indicating girls' lacking. 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 on towards MDGs targets, they underline AJ&K's as the only successful entity in Pakistan in achieving targeted GPI precisely "1" in the stipulated timeframe. However, they ignore comparing AJ&K's success in timely getting GPI and some other indicators with Pakistan and provinces/area.

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 slight 1 percentage point advantage for boys in both English reading as well as numeracy skills. This study though deliberates the data on provinces/areas but does not compare AJ&K with other reigns in terms of quality education (Express Tribune, 2013). It does not deliberate on almost one third students' failure in perform the simple tasks having a big question mark on the performance of education system in delivering quality education in AJ&K.

The MICS AJ&K 2002-21 survey while investigating the gender parity at primary school level in AJ&K, 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 variances in 2 districts. The survey also contains valuable data on GPI relating to mother education and family economic standing or in terms of wealth quintile. The girls having mothers

with primary education exhibit parity with GPI 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 disadvantaging persistent for girls in these groups. At divisions GPI varies in between 1.00 and 1.01, indicating prevalence of gender parity in all three divisions - Muzaffarabad, Mirpur and Poonch. Mirpur. Similarly eight out of the ten districts exhibit gender parity with better scores except Neelum and Haveli districts which lack in it stating disparities disadvantaging girls in these 2 districts. AJ&K has also witnesses progress in getting on gender parity at middle and secondary levels though gender disparities still persist at the overall level. Gender Parity has also been witnessed in rural at the middle level and urban areas at the secondary level. These findings stress on enduring the need for focused efforts for eliminating disparities across all educational levels in AJ&K.

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. The education is not only receiving a low share but a significant part of it (2/3) also is earmarked for infrastructure development. In case of primary school enrollment, AJ&K surpasses the national figures with 98% enrollment rate for boys and 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, might have implication for growing child labor (Guarcello and others, 2014). The study also points out some challenges in making 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 on the gender disparities at the division level, the study finds wide variations as Poonch division is leading with a GPI of 98.07 while Muzaffarabad division is at bottom with a GPI at 91.58. In districts there is substantial diversity as 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 deliberate on GPI in Gilgit Baltistan. The variations in Northern area

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

LITERATURE REVIEW

In the previous paragraphs offers some valuable insights on AJ&K's efforts for achieving gender parity through some better working in the state but fails to deliberate the progress in AJ&K with reference to gender parity. Moreover, the literature ignores delving into historical comparisons at state, division and districts as well as at urban 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 special focus on AJ&K's performing in 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 seek to identify the contributing factors enabling AJ&K as a better performer in the given timespan.

Historical Comparison

The historical comparison of Gender Parity in AJ&K is based on the data from surveys including MICS AJ&K surveys 2008 and 2002-21 containing sound statistical information on GP Index pertaining to AJ&K 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 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 primary level. The analysis of data reveals that a precise gender parity is prevailing in AJ&K at primary level in total terms that improves from GPI 0.97 in 2008 to precisely GPI 1.00 with 0.03 point gain in 2021. At urban level disparity favoring female was also removed as GPI dropped from 1.05 in 2008 to 1.01 indicating 0.04 point intent gain. Similarly GPI for rural areas of AJ&K GPI also improved favoring girls by increasing GPI from 0.96 in 2008 to 1.00 in

2021, indicating realization of precise gender parity at rural level in the give timespan as well. At district level the data found slight variations as Neelum despite 0.09 point gain retains as least performer in 2021 with GPI 0.91 against 0.82 in 2008 while Muzaffarabad enjoys a lead with GPI 1.03 in both the periods as reflected in table 3.1.

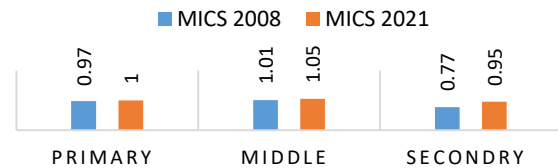
Table 3.1
Areas-wise Comparison of Gender Parity Index (GPI) AJ&K

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

At middle and secondary school levels in AJ&K GPI improved from 1.10 and 0.77 in 2008 to 1.05 and 0.95 in 2021, respectively indicating a favourable decline supporting boys at middle level and favoring girls at secondary level. The analysis of data in table 3.1 also demonstrates that females get dividend overtime at primary and secondary levels with 0.03 and 0.18 points gain in GPI respectively in 2021. While at middle level GPI observe slight departure from gender parity favoring girls with GPI 1.01 in 2008 to 1.05 in 2021. However, GPI improving trend in last two decades (2008 to 2021) favors girls, indicating AJ&K's success in removing gender disparities successfully as displayed in the following Figure 3.1.

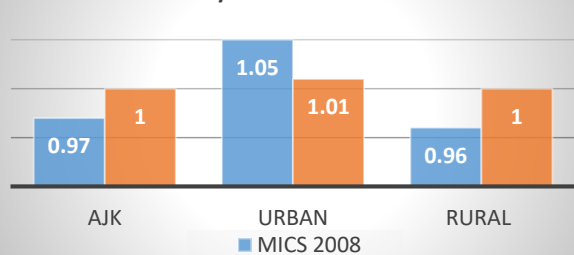
FIG 3.1: Comparison of GPI At Primary, Middle and Secondary Level



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

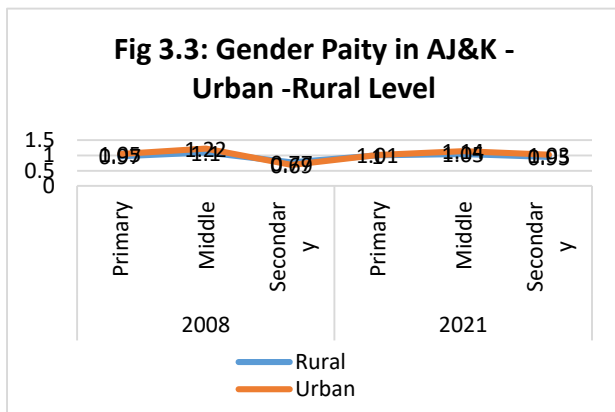
The analysis of MICS AJ&K 2008 and 2020-21 data in table 3.1 above further reveals that gender parity at primary school level in AJ&K is sustaining overtime with GPI 0.97 in 2008 and 1.00 in 2021 indicating prevalence of precise gender parity at AJ&K level. AJ&K also witnesses improvement in GPI in 2021 at urban and rural level. For urban areas, it [GPI] was 1.05 in 2008 indicates 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 improves from 0.96 in 2008 to 1.00 in 2021 indicating precise gender parity in rural areas favoring girls instead. The overall picture of gender parity is portrayed in Figure 3.2.

Fig 3.2: Arrea Wise Comprson of GPI At Primary School Level in AJ&K



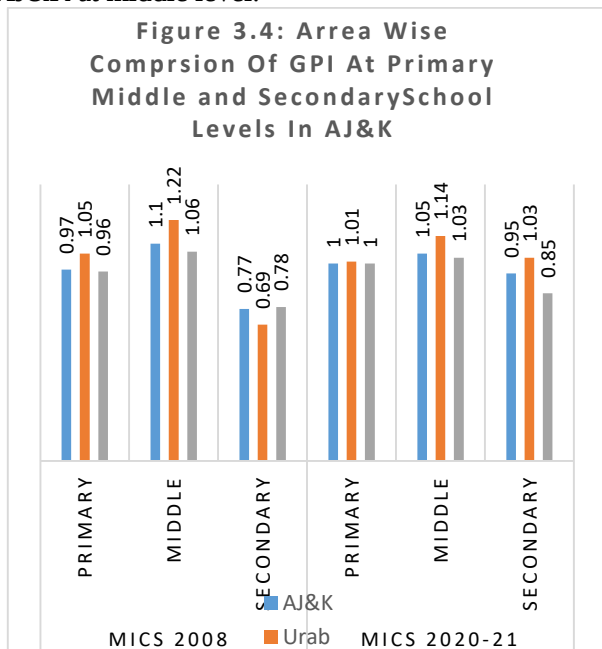
Furthermore, the gender parity comparison also speaks for AJ&K's prudent efforts for gaining precise gender parity in AJ&K by redressing gender disparities prevailing in 2008. Its efforts not only bring improvement in GPI but also ensures sustainability in GP at primary level in AJ&K and in urban - rural areas in 2021 as reflected in table 3.1 and Figure 3.2 & 3.3.

Fig 3.3: Gender Paity in AJ&K - Urban -Rural Level



At middle levels the GPI in AJ&K along with its urban and rural areas in 2008 GPI as per table 3.1 was 1.10, 1.22 and 1.06 respectively indicating a wide gender discrimination disadvantaging boys in the state and its areas. However, the GPI observes 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 a decline in disparities disadvantaging boys in AJ&K and its urban areas in the past. The data analysis also confirms eliminating of gender disparities at rural level with a vital GPI 0.07 gain, endorsing prevalence of precise gender parity in rural area of AJ&K at middle level.

Figure 3.4: Arrea Wise Comprsn Of GPI At Primary Middle and SecondarySchool Levels In AJ&K



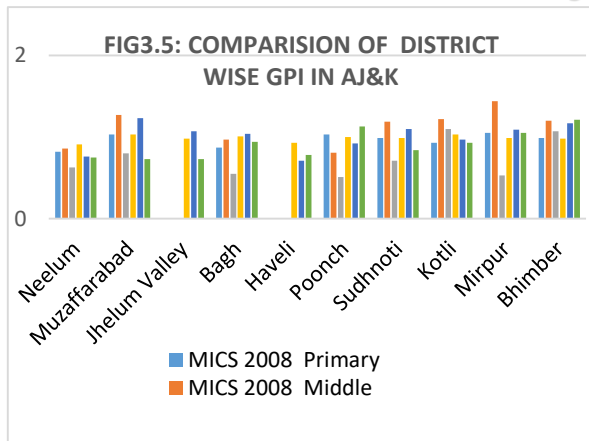
At secondary level, the data in 2008 refer to wide disparities favoring boys at AJ&K, urban and rural level with GPI 0.77, 0.69 and 0.78 respectively but the situation improved in 2021 heading towards gender parity as GPI for AJ&K and rural area witnessing GPI 0.95 and 0.85 respectively. While the urban areas has successfully achieved gender parity with GP Index 1.03 at secondary school level. The data also demonstrate vital gains at primary and secondary school levels in 2021 as compared to 2008 as portrayed in Figure 3.4 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 3.1 witness precise gender parity at primary level in all three divisions including Muzaffarabad, Poonch and Mirpur with GP Index 1.00, 0.99 and 1.01 respectively. While at middle level only Poonch division gains gender parity with GPI 0.98 while Muzaffarabad and Mirpur division experience gender disparities disadvantaging boys instead of girls with GPI 1.13 and 1.06 respectively. The data also show that against 100 boys in Muzaffarabad and Mirpur division 113 and 106 girls are attending middle schools respectively. This situation indicates presence of out of school boys as well as some drop out in both the divisions that may have implications for child labor in the area. At secondary level Poonch division is also in lead with GP score 0.98 while gender disparities are disadvantaging girls in Muzaffarabad division with GPI 0.72 and harming boys in Mirpur division with GPI 1.06. The situation is indicative of a wide gender discrimination at secondary level as 28 girls are still out of schools against 100 boys.

The data in table 3.1 also demonstrate district level variations as Poonch and Muzaffarabad are found the best performers each with GP Index 1.03 in 2008, demonstrating 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. While Neelum district stands as the least performing district getting GPI 0.82 in 2008 and retains its ranking as least performer in 2021 with GP Index 0.91 but it observed 0.09 point gain in GPI, which is an positive indication of judicious efforts for removing gender gap at level in

AJ&K. Sudhnoti and Bhimber are found as the second best performer in 2008 not only in getting precise gender parity each scoring GP I 0.99 but maintaining its sustainability in 2021 as well by having GP Index 0.99 and 0.98 respectively. Mirpur also enjoys GPI 1.05 in 2008 indicating slight gender disparity in favour of girls but it thrives in getting GPI 0.99 in 2021, a precise gender parity in the district. While district Bagh also works well moved successfully ahead from GPI 0.87 in 2008 to GPI 1.01 in 2021 indicating 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 (0.97-1.03) gender parity (0.97-1.03) except Neelum with GPI 0.91 and Haveli GPT 0.93 referring existing of gender bias against females that sustains overtime. The Fig. 3.5 portrays AJ&K working in leveling out gender disparity at district level during last 14 years. The results of MICS 2021 are reflected in Fig. 3.5 that show some gains in GP by all districts towards gender parity in AJ&K at primary level, endorsing AJ&K's better performing in gender parity earmarked previous work including MICS 2008, PLSM 2014, ASER 2015, Farooq and Kia (2016), etc.



Mother Education

Mother education plays divisive role in reshaping gender parity at primary middle and secondary level in an area including AJ&K. The data in Table 3.2 reveals that in 20028 the primary school students with illiterate mother or having no and secondary education witness gender parity by marking GPI 0.98 and 1.00 respectively while the students having

mother with primary education suffer from disparity disadvantaging girls with GPI 0.89.

Table 3.2

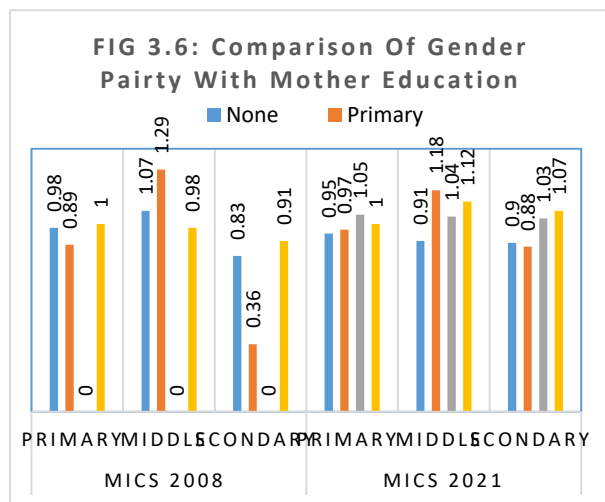
Comparison of Mother Education and Wealth Quintile in Gender Parity AJ&K

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 mother having Primary and Secondary level education witness gender parity with GPI 0.97 and 1.00 respectively while the girls having mother with no education observe slight inequality disadvantaging them with GPI 0.95, which to Farooq and Kai (2016) is almost gender parity. While the boys having mother with middle or high/higher secondary school level education witness gender disparities with GPI 1.05 and 1.07 respectively indicating gender bias favoring girls with slight margin (0.97-1.03). The boys in middle school level having mother with no or primary education victim of disparities with GPI 1.07 and 1.29 respectively in 2008 indicating inequalities favoring girls while the students with mother having secondary education witness gender parity with GP score 0.98. On the other hand in 2021, the middle school level students having illiterate/no education mother observe disparity with GP Index 0.91 indicating disparities disadvantaging girls while the student having mother with primary education enjoys gender parity with GPI 1.03. However, among the students with mother having middle, secondary and higher secondary education witness disparity with GPI 1.07, 1.06 and 1.15 respectively referring disparities disadvantaging boys with variant extent. It also indicates that growing greater extent of disparities for boys implies to out of school boys with growing risk of child labour. The girls at Secondary school level with mother having no, primary or secondary education witness GPI 0.83 and 0.36 and 0.91 respectively

demonstrating occurrence of disparity disadvantaging female in 2008. It persist even in 2021 as well for those girls having mother with no or primary education with GP index 0.90 and 0.88 respectively though the extent of disparity declines in 2021. On the other hand the students having mother with middle level education witness gender parity with GPI 1.03 in 2021 but the students with mother having secondary level education observe GPI 1.07 in 2021 indicating disparity disadvantaging boys persist yet.

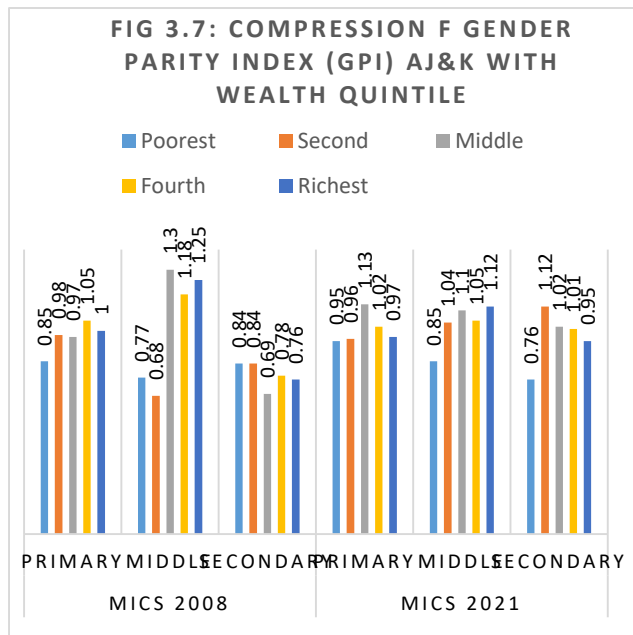


The Figure 3.6 portrays AJ&K successful working towards gender parity with reference to mother education wherein girls with mother having no education are mostly at disadvantage stage at primary, middle and secondary levels in 2021 instead of girls having mother with no education at secondary level in 2008. The Figure 3.6 shows that the gender parity index in overall terms has improved at all level in 2021 when compared with results of MICS 2008.

Comparison of Gender Parity with Wealth Quintile

The gender parity comparison with reference to Wealth Quintile in AJ&K in Table 3.2 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 overtime as GPI increased with a gain of 0.10 point from 0.85 in 2008 to 0.95 in 2021m 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 GPI in between 0.98 to 1.00. While the students living in fourth wealth quintile households get GPI 1.05, slightly above the gender party 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 range 0.97-1.03 is 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 witnesses a declining trend in GPI with a few exceptions during the period under investigation. At middle level the girls living in second quintile households in 2008 suffered from gender disparity with the lowest GPI 0.68 followed by the girls of the poorest households with GPI 0.77 while the gender disparities were 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 victim of gender disparity with different magnitude with GPI varying between 1.04 - 1.12 as reflected in the table 3.2. At secondary school level, the girls living in all households were victim of gender disparity in 2008 but the girls of middle wealth quintile households were at the worst standing with GPI 0.69. On the other hand the disparities disadvantaging girls in 2021 with GPI 0.76 who live in the poorest households followed by girls living in the richest households having GPI 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 observing gender disparity disadvantaging them in 2021 against 2008 when gender disparities were disadvantaging girls instead. The Figure 3.7 helps to have a clear understanding of gender parity prevalence with reference to wealth quintile in AJ&K in 2008 and 2021.



Factors Responsible for Gender Parity in AJ&K

Historically, the education sector in AJ&K remains neglected since 1947 until the initiation of development process in 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 unconducive teaching environment. (PLMS, 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 girl's schools

GoAJ&K firm pledge help increasing number of girl's schools in the state ensuring greater opening for girls deprived since 1947. At primary level, the girls share increased from 1.7% in 1947 to 47% in all schools in 2021. The females share also improved significantly such as they are sharing 50% colleges, 20% universities and 50% training institutions (GoAJ&K, 2020 & 2021). Females are also allowed to join mail institutions as well.

Placement of Untrained Teachers

Govt. of AJ&K deployed a unit comprising of 1700 untrained teachers including middle-pass female

teachers in primary schools in AJ&K who were provided on-the-job training in elementary schools in AJ&K (GoAJ&K, 1977). Presently, the female claim 48% share in total 30,465 teachers working in government schools, playing instrumental role in augment gender parity in AJ&K.

Unprecedented community Support

The focused community could play a decisive role in promoting education development in an area (Rahman and Uddin, 2009; and Farooq and Kai, 2016). In AJ&K the wakeful community plays a decisive role in promoting education and achieving gender parity by denoting free land or one room for school. All the primary schools (> 4094 with 1819 female) are built on free donated land in urban and rural areas of AJ&K.

Financial Allocations

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

Improved Access to Education

Enhanced access to education by cutting distances helps increasing children intake and their integration at primary schools level as well as reduce the number of out-of-school children implying to gender parity and child labor (Guarcello and others, 2014). GoAJ&K proactive efforts help improving accessibility from one school in almost 47 km² to 2.6 km² in 2021, wherein girl's access to education improves manifold (GoAJ&K, 2021).

Better Student-teacher ratio

The student-teacher ratio is a vital input for ensuring gender parity in primary education, which improves

in AJ&K from trivial stage in 1947 to 16.04, 18.11, and 25.63 at school, college and university level 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 has brought forth several key findings including: a) AJ&K education system works well despite its fragile status 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 in 2008 wherein 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 2022 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); f) Gender Parity in quality education at the primary level is also observed in AJ&K but failure of more than one-third students put a question mark on AJ&K's education system. Extensive political interference, poor infrastructure and absent of accountability may imply to quality of education at primary level and Gender Parity at middle and secondary level in AJ&K (Farooq and Kai 2016); and g) at middle and secondary level GP Index above 1.03 soars 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 on the need to explore the factors enabling it 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 is 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 districts like Neelum and Haveli in getting 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); g) 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); and h) Improved economic profile and mother education could also pay dividend in getting GP in AJ&K in future.

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