

*Full Length Research Paper*

# Analysis of the Impact of education enhancement policy on female secondary education in Bangladesh

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The government of Bangladesh formulated the female secondary education enhancement policy in the mid 1990s with a view to increasing enrolment of female secondary students. The study has analysed the impacts of this policy on female secondary education. It has applied index number approach and used secondary data to analyse the policy-impacts through changes in the patterns of female secondary student enrolment - the gross enrolment ratio, net enrolment ratio, net attendance rate, and gender parity and disparity indices in secondary education. It has found that this policy has positively impacted on the the rate of enrolment with a significant increase in student numbers but failed to reduce the drop-out rate. The government should formulate complementary education policy to achieve the quantity and quality in female secondary education. The findings and implications of the policy analysis of this study may be of interest to researchers, development practitioners and policy makers.

**Key words:** Gender, female, secondary education, education policy, Bangladesh

## INTRODUCTION

Gender parity in education has been an important aspect of development policy analysis in recent years. It plays an important role in socio-economic development of each country where the government policies and appropriate measures are paramount factors for its sustainability. In the world, many developing countries like Bangladesh are trying to achieve gender parity in education with a view to enhancing socio-economic development. Bangladesh has been striving to achieve gender parity in education since its independence in 1971 but the achievement is considered as insignificant. This non-achievement is partly due to socio-economic factors such as poor families prefer children's works to schooling and sons are preferred to daughters in terms of alternative options for education because of parents' dependence on sons in their old age etc.

Bangladesh is a poor country. Nearly 40 percent of the population live below the poverty line (BBS, 2007: 58). Female secondary education has got a high opportunity cost in terms of forgone household works for poor families in Bangladesh. This is because of the fact that

poor families depend on children's work for their livelihoods. Therefore, there is a strong trade-off between education and work of children in poor families (BEPS, 2002: 23; Canals-Cerda and Ridao-Cano, 2004: 1, 2). Moreover, secondary education is not free in Bangladesh. It involves a lot of costs including admission fee, monthly tuition fee, examination fees (two or more exam per annum), others fees (sports, picnic and recreation) text books, stationery, dress (uniforms), transportation costs etc. The poor families could not afford costly education for their all children. Thus, they put preferential choice for male education over female one. The persistent poverty kept generations of families from sending their children to school and without education either because parents could not afford books and other materials, or because the children contributed to their family's livelihoods (Ahmed and Arends-Kuenning, 2006: 665).

Therefore, gender discrimination begins at home in Bangladesh. Parents have a natural and selfish selection to prefer male's education to female's one due to socio-

cultural and economic reasons. This selection is partly due to poverty and illiteracy of parents as well as their dependence on son, not on daughter during their old age (ADB, 2001: 4). A daughter usually leaves parents' house after marriage and live with her husband's family. These socio-economic factors generated gender discrimination in secondary education in Bangladesh. Gender disparity in secondary education has impacted female enrolment adversely and created a large gap between the number of male and female students.

Against the backdrop of the above situation and realising the fact that gender neutral policy in secondary education is not neutral at all rather it is crowding out female students due to parents' preferential treatment for sons against daughters, and to overcome these socio-economic constraints the government formulated the female secondary education enhancement policy and started to implement it through female secondary stipend programmes (FSSP) in the mid 1990s with a view to increasing enrolment of female secondary students. This study has attempted to analyse the impact of this education policy.

The following sections contain objectives and research questions of this study, literature review, methodology, context of female secondary education policy, results discussion and analysis, and conclusions and policy recommendations. The literature review section has covered theoretical (concepts and contextual) framework of the study. The methodology section has outlined the research design and data sources. The context of female secondary education policy section has analysed the scope and the policy implementation programmes. The results discussion and analysis section has illustrated and interpreted the findings of the study and compared the results between pre-policy and post-policy scenarios with a view to drawing conclusive remarks and policy recommendations.

## **Objectives and Research Questions**

The main objective of this study is to analyse the impact of the female secondary education enhancement policy on female secondary education in Bangladesh. The study analysed these policy-impacts through changes in the pattern and trend of female secondary student enrolment and the indices of gross enrolment ratio (GER), net enrolment ratio (NER) and net attendance ratio (NAR). It has also analysed gender disparity index (GDI) and gender parity index (GPI) in secondary education to achieve its objective. It has attempted to address the following research questions:

1. Has the female secondary education enhancement policy affected the enrolment of female secondary students in Bangladesh?
2. Has it improved gender disparity in secondary education?
3. Has it influenced all potential female secondary students?
4. Has it ensured both the quantity and quality of female secondary education?
5. Is this policy enough to bring about expected impacts on female secondary education?

## **Literature review**

Many studies attempted to shed light on this issue. However, they are partial by nature of analytical context either analysing only the extent and scopes of policy measures (programmes and projects), or changes in female secondary student enrolment, or some indices related to student enrolment. Some of these studies focused only problems whereas others analysed policy implications without in-depth analysis of female secondary education in Bangladesh.

## **General Education Policy in Bangladesh**

Bangladesh has been striving to develop a comprehensive education policy since its independence but failed to formulate such policy that could contribute to the development of the economy. This failure is partly because of either a faulty policy or international policy influence or weak implementation process and procedures (Alam, Hoque, Rout *et al.*, 2010: 770). It is argued that besides domestic institutional weakness, the international pressure in the form of policies and technologies imposed by developed countries or donor agencies makes the education policy in developing countries very difficult - surrounded by a complicated structure, and with a large deviation from the reality (Alam, Hoque, Rout, *et al.*, 2010: 770; Asadullah and Chaudhury, 2008: 2). Alam, Hoque, Rout *et al.* (2010) argued that international education policy, particularly, education for all (EFA), influenced domestic education policy significantly in the form of rapid institutional change – an increase in the number of both student and education providers. However, government education policy only increased the quantitative benefit in terms of an increase in the number of enrolment but failed to achieve qualitative gains from expansion of education resulting in a high drop-out at all levels of education

(Alam, Hoque, Rout, *et al.*, 2010: 770; Alam, Khalifa, and Shahjamal, 2009: 570, 571). Due to lack of sound education policy in Bangladesh, the drop-out rate is high including at the level of secondary education. Therefore, the government should focus on technical and vocational education to absorb the dropped-out secondary students for providing them with employable technical skills (Alam, 2008: 34).

It is argued that modernisation of education with a greater emphasis on technical and vocational skills is crucial to support dropped-out secondary students who could ultimately contribute to socio-economic development. Alam, Khalifa and Shahjamal (2009) conducted a survey on the role of different levels of education in Bangladesh. They found that secondary education generated a great contribution to social development but a small contribution to economic development. This was partly because of the fact that secondary education did not provide the students with essential technical skills for employment in Bangladesh. However, secondary education was critical for enrolment into higher education. They argued that secondary education was basically theory oriented, not practical or application focused, suggesting that the government should formulate policies to strengthen secondary education for two reasons: it is the foundation for higher education, and the main driving-force of working population of the economy. Therefore, the government should facilitate training and technical education for dropped-out secondary students (Alam, 2008: 32; Alam, 2009: 1260; Alam, Khalifa, and Shahjamal, 2009: 574, 575).

Alam (2009) argued that technical education plays an important role in supplying skilled workforce that contributes to economic development. In Bangladesh, the secondary and post secondary technical and vocational education faced different problems and failed to produce workforce with employable skills. Lack of appropriate government policy to support secondary education was responsible for this situation. In the age of networking and globalisation, the government should incorporate science and technology education in formulating an education policy (Alam, 2009: 1260, 1262). Similarly, Alam, Hoque and Oke (2010) argued that education policy could not bring desired success in many countries including Bangladesh because of weaknesses in the education system and perceived judgment over education by receivers (students) – education as their right not as their assets and property. They suggested a new paradigm shift from traditional education to vocationalisation that could bring a change in the current psychological and mental setup of underprivileged students, particularly, dropped-out

secondary students in Bangladesh. This new paradigm would see a difference between achievement and non-achievement of educational goals in terms of minimising the variation in quantity and quality education (Alam, Hoque, and Oke, 2010: 1202).

Education is an important sector in Bangladesh. Alam, Hoque, Ismail *et al.* (2010) argued that, in Bangladesh, education sector was far larger than many other sectors and its problems had their own distinct characteristics. The structure and system of education, the fundamental factor, was not based on sound foundation. Policies, legislative provisions (rules and regulations, etc.), and formal and informal governance could serve as complementary units to support the education structure and system. However, the absence of or weak national education framework with abundance of complementary units caused problems instead of bringing about solutions in education sector in Bangladesh (Alam, Hoque, Ismail *et al.*, 2010: 3414).

Alam and Hoque (2010) noted that the government should not only emphasise the enhancement of educational development but also should create employment opportunities and safe working environment to prevent migration of skilled workers to foreign countries. Skilled-workers migrated to overseas for settling and living there permanently that was considered as 'brain drain,' which caused a loss for developing countries like Bangladesh because skilled-workers used a large proportion of national resources but contributed less remittance back to home country than that of unskilled workers (Alam and Hoque, 2010: 534). The government should focus on the enhancement of education policy and employment opportunities together so that skilled workers (national human resource) could contribute to domestic socio-economic development.

### **Female Secondary Education Policy in Bangladesh**

Education is a fundamental right for both sexes - males and females. Education facilitates women on the path to socio-economic empowerment and provides the society with numerous positive impacts such as an increase in female employment, female's contribution to family income, an increase in female's participation in decision making process etc. (BBS-UNICEF, 2007: 9). The female secondary education enhancement policy was formulated to increase the number of female student enrolment. The government undertook female secondary stipend programmes (FSSP) to implement this policy. Mahmud (2003) argued that FSSP significantly influenced female secondary student enrolment but the programme would be unsustainable and uncertain due to its dependence on

foreign donors. Parents may not continue to send their daughters to schools if stipends are withdrawn. On the other hand, sometimes donors influenced domestic education policies that became dysfunctional or reverse-functional because of either inappropriate way of influence or weak institutional capacity to implement a policy (Alam, Hoque, Rout, *et al.*, 2010: 770).

Raynor and Wesson (2006) concluded that the FSSP clearly impacted on increasing female student enrolment. While the FSSP was widely-acclaimed as a model for achieving gender parity of enrolment; little was known about its impact beyond access to schools. Alam, Hoque, Rout *et al.* (2010) supported this view. They argued that education policy increased the quantity (number of enrolment) at both micro and macro levels but failed to achieve the quality.

Similarly, Hove (2007) found that FSSP was instrumental in expanding the number of female student enrolment. However, without raising the number of teacher, an increase in enrolment resulted in overcrowding students in both classes - six and seven. Moreover, FSSP could not ensure quality education thus resulting in a higher drop-out of female students than that of male students. In consistence with this fact, Asadullah and Chaudhury (2008) argued that the number of drop-out of female secondary students in the rural areas was relatively large as compared to that of the urban areas in Bangladesh. NGOs absorbed some of them to provide formal education but a large number of student remained outside of formal education. BEPS (2002) argued that the government started to implement the FSSP in the early 1990s and by the end of 2002 the gender gap in access to education seemed to have disappeared and the equity was declared. However, it was not observed in the real case rather the disparity continued to exist. One of the main reasons for gender disparity in secondary education was inadequate number of female teachers who could contribute to minimising gender disparity (Glick, 2008: 1). Other reasons that might be included were poorly trained teachers, learning environments that were not student friendly, static classroom practices, irrelevant curriculum, and the lack of a proper

assessment system (BEPS, 2002: iv). Even, the management practices maintained a status quo that limited women's ability to provide leadership in governance and education at every level (BEPS, 2002: iv).

The majority of these studies focused on secondary education in Bangladesh from the general perspective, not on the specific issues related to the impact of female secondary education enhancement policy on female secondary education in Bangladesh. This study has attempted to present a wider picture of these scenarios

and to contribute to this literature through a comprehensive analysis of the impact of female secondary education enhancement policy.

## **METHODOLOGICAL APPROACH**

### **Research Design and Empirical Aspects**

The study is designed in such a way to achieve its main objective - the impacts of the female secondary education enhancement policy on female secondary education in Bangladesh. It has applied an index numbers approach to investigate these policy-impacts. Index numbers play an important role in research and decision making. Index number approaches are widely used in social sciences such as economics (Ogwang, 1995: 373). Recently, index number approaches are used in a wide range of disciplines (including education, environment, sociology etc.) for conducting research (Bellenger and Herlihy, 2009: 2216; Färe, Grosskopf, and Hernandez-Sancho, 2004: 343, 344). The UNESCO developed and used index number approaches to measure and analyse impact of socio-economic policies such as education policy, population policy etc. It considered index number approaches as universal methods because they are simple by nature and easily applicable to any country context (UNESCO, 2010: 10).

This study has analysed the impacts of the female secondary education enhancement policy on female secondary education through changes in the patterns and trend of female secondary student enrolment and the indices of gross enrolment ratio (GER), net enrolment ratio (NER) and net attendance ratio (NAR). Here, the GER measures the total enrolment in secondary education, regardless of age, expressed as a percentage of the population in the official age group corresponding to this level of education. Therefore, the GER can exceed 100 percent due to late entry or/and repetition (UNESCO, 2004: 395). Similarly, the NER measures the enrolment of the official age group for secondary education, expressed as a percentage of the population in that age group. The NAR measures the number of students in the official age group for secondary education who attend school in that level, expressed as a percentage of the population in that age group (UNESCO, 2004: 395; UNESCO, 2010: 10). These ratios are widely used in research to measure and compare enrolment in a particular group of students (UNESCO, 2010: 10). This study has also analysed gender disparity index (GDI) and gender parity index (GPI) in secondary education. It has used and interpreted these indices as used and defined by UNESCO (2004) and UNESCO (2010).

The total enrolment of female secondary students and the ratio of male and female secondary students represent only a partial analysis of the total scenarios. Therefore, it is necessary to analyse the indices of gross enrolment ratio (GER), net enrolment ratio (NER) and net attendance rate (NAR). According to the UNESCO (2004) and UNESCO (2010) these indices are defined and calculated as follows:

$$GER = \frac{x_e}{x_A} \times 100 \quad (1)$$

where  $x_e$  = total enrolment in secondary education, regardless of age; and

$x_A$  = total number of population in the official age group for secondary education.

$$NER = \frac{x_e}{x_A} \times 100 \quad (2)$$

where  $x_e$  = total enrolment of the official age group for secondary education.

$$NAR = \frac{x_e}{x_A} \times 100 \quad (3)$$

where  $x_e$  = total number of students in the official age group for secondary education who attend secondary schools.

The GER explains the overall trend of student enrolment from both inside and outside of the age-group for secondary education. On the contrary, the NER includes only the enrolment of students from the official age group for secondary education. The NAR explains the rate of attendance of students in the official age group for secondary education who are attending secondary schools.

The study has used these indices as a basis of comparison as well as a foundation of in-depth analysis of the impacts of the female secondary education policy with a view to drawing concluding remarks and policy implications.

Similarly, it has used gender disparity index (GDI) and gender parity index (GPI) to measure the impact of the female secondary education enhancement policy and how FSSP impacted on female secondary education. As defined by UNICEF (2008), the indices of GDI and GPI are calculated as follows:

$$GDI = NAR_m - NAR_f \quad 4$$

where,  $NAR_m$  represents the NAR of male secondary students and  $NAR_f$  represents the NAR of female secondary students. The GDI can be interpreted as follows:

- > 0 : males have a higher access to education than females;
- GDI = 0 : no gender disparity; and
- < 0 females have greater access to education than males

Similarly,

$$GPI = \frac{NAR_f}{NAR_m} \quad 5$$

The GPI can be interpreted as follows:

- > 1 : more females than males in secondary education;
- GPI = 1 : equal male and female in secondary education; and
- < 1 less females than males in secondary education

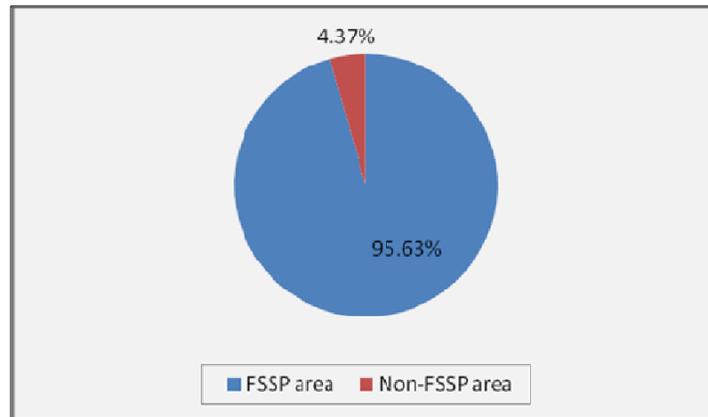
Therefore, in this study, GDI and GPI measure the differences and proportional shares of male and female students in secondary education respectively.

## Data Source

The study has used panel nature of data from secondary sources. It has collected published data from various sources of governmental, non-governmental and international organisations. These sources include the Ministry of Education (Government of Bangladesh), the United Nations Children's Fund (UNICEF); and other published documents such as books, articles etc.

## Context of Female Secondary Education Policy

In order to support the female secondary education enhancement policy, the government, donor countries, international development agencies and NGOs launched female secondary stipend programmes (FSSP) nationwide in Bangladesh. These programmes targeted the rural areas where female secondary student enrolment was very poor. In the context of the FSSP, female secondary education was viewed as a means to improve the status of women in the society, curb population growth through late or delayed marriage, and enhance



**Figure 1:** Proportion of Female Secondary Stipend Projects (FSSP) area and Non-FSSP area in 2002.

Source: Authors' calculation from text of (Mahmud, 2003)

**Table 1:** Stipend and other assistance to female secondary students: 2000 (in taka) (\$US1=63 taka)

Class	Monthly Stipend	Monthly Tuition Fee	Book (annual)
VI	25	15	
VII	30	15	
VIII	35	15	
IX	60	20	250
X	60	20	

Source: Data compiled from Table 3, (Mahmud, 2003: 6)

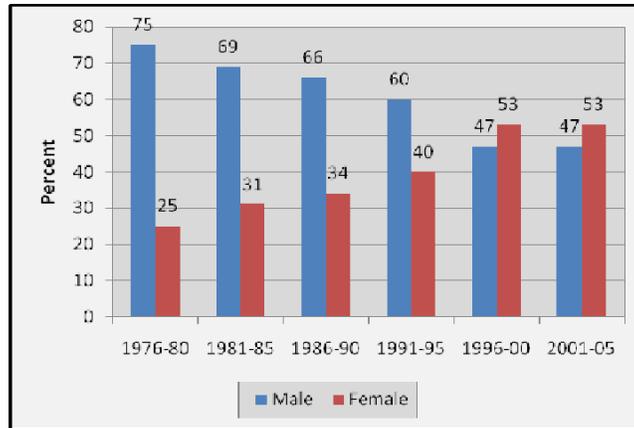
women capabilities of contribution to socio-economic development (Hove, 2007: 1; Muhmud, 2003: 3). The main objective of these projects were to implement the female secondary education enhancement policy with a view to achieving the following outcomes: to enhance and retain female students in the secondary stage and thereby promoting female education; reduce population growth by motivating the stipend clientele groups to refrain from marriage till completion of the SSC examination or until the attainment of 18 years, increase involvement of women in socio-economic development activities, increase women's self-employment for poverty reduction, and assist in improving the status of women in the society (Hove, 2007: 15, 16; Muhmud, 2003: 3).

The Ministry of Education coordinated and implemented these nation-wide programmes through the following four different projects during 1993-2002: Female Secondary School Projects (FSSPs) in 270 upazilas (sub-districts) financed by the Government of Bangladesh; Female Secondary School Assistance

Programme (FSSAP) covering 118 upazilas financed by the World Bank; Secondary Education Development Project (SEDP) covering 53 upazilas financed by the Asian Development Bank; and Female Secondary Education Stipend Project (FSESP) covering 19 upazilas financed by the Norwegian Agency for Development Co-operation (NORAD) (Hove, 2007: 15, 16; Muhmud, 2003: 3).

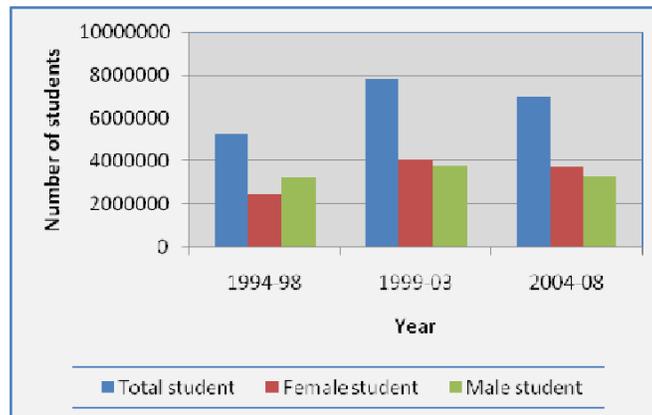
In fact, the FSSP was a massive programme. In 2002, it covered 460 upazila (sub-district) out of the total 481 upazila in Bangladesh, covering more than 95 percent of the rural areas of the country as shown in Figure 1.

The FSSP provided the beneficiaries with monthly stipends, costs of text books and free tuition as incentives to attend secondary schools as well as a compensation of forgone household works due to female secondary students were attending school as shown in Table 1.



**Figure 2:** Average ratio of male and female secondary students in Bangladesh: 1976-80 to 2001-05

Source: Authors' calculated from database, the Ministry of Education, Bangladesh and Table 2, (Mahmud, 2003)



**Figure 3:** Average number of secondary students enrolled: 1994-98 to 2004-08

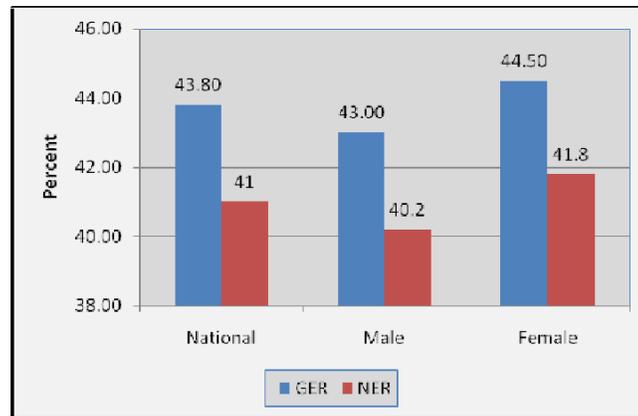
Source: Authors' calculation from database, Ministry of Education, Bangladesh and Table 2, (Mahmud, 2003)

## RESULTS, DISCUSSION AND ANALYSIS

The FSSP changed the pattern of women's participation in secondary education. It impacted on female secondary student enrolment positively. Comparing the pre-FSSP (before 1990) and the post-FSSP (after 1990) scenarios, it is clear that the ratio of female secondary students increased significantly during the post-FSSP as shown in Figure 2. During 1976-80, the average male and female secondary students' ratios were 75 and 25 percent respectively. Although the increase in the average ratio of

female secondary students during the pre-FSSP was slow; it got a momentum during 1990s and exceeded the average male student ratio during 1996-00. The average ratio of female student enrolment was 40 percent during 1991-95 and this ratio increased to 53 percent during 1996-00.

Considering the total number of enrolment, the FSSP contributed to an increase in the number of female secondary student during the post-FSSP period as shown in Figure 3. The average number of female



**Figure 4:** Gross Enrolment Ratio (GER) and Net Enrolment Ratio (NER) by gender in 2004

**Source:** Authors' calculation from UNICEF database, (UNICEF, 2008: 3)

secondary student exceeded the average number of male student during 1999-03.

It is clearly evident that the total enrolment of female secondary students and the ratio of male and female secondary students increased in the post-policy period. However, it is only a partial analysis of the total scenarios. Therefore, the study has considered to analyse the indices of gross enrolment ratio (GER), net enrolment ratio (NER) and net attendance rate (NAR) with a view to presenting a better picture of female secondary education in the post-policy era.

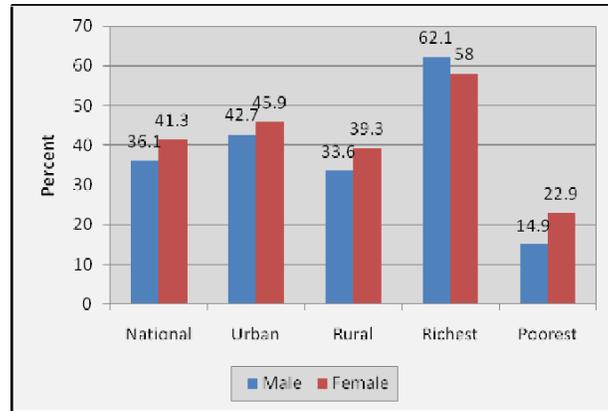
In 2004, the GER for male and female students were 43 and 44.5 percent respectively as shown in Figure 4. As the GER explains the overall trend of student enrolment from both inside and outside of the age-group for secondary education, this result indicates that the total enrolment of female student from outside the range of the age group for secondary education was higher than that of male students suggesting that many female students enrolled in secondary education should actually be from the age group of higher secondary students. This is because of the fact that students in the age group for primary education cannot enrol in secondary education due to minimum age restriction for a particular level of education in Bangladesh.

On the other hand, the NER for female students was higher (41.8 percent) than that of male students (40.2 percent) implying that the rate of enrolment of female students within the age group for secondary education exceeded that of the rate for male students in 2004, as the NER only includes enrolment of students from the official age group for secondary education.

The NAR measures the rate of attendance of students who are in the official age group for secondary education and are attending secondary schools. The decomposition of the NAR into national, urban and rural, and also into richest and poorest depicted the scenarios of male and female secondary students attending in their own education levels as shown in Figure 5. Except the richest group, the NAR for female secondary students was higher than that of male students suggesting that the female secondary education enhancement policy positively impacted on the attendance of female students in secondary schools in 2006. The richest group is not included in FSSP. In the richest group the NAR for male was higher (62.5 percent) than that of female students (58 percent) in the same year. This result also supports the hypothesis that education enhancement policy has positively influenced female secondary education significantly.

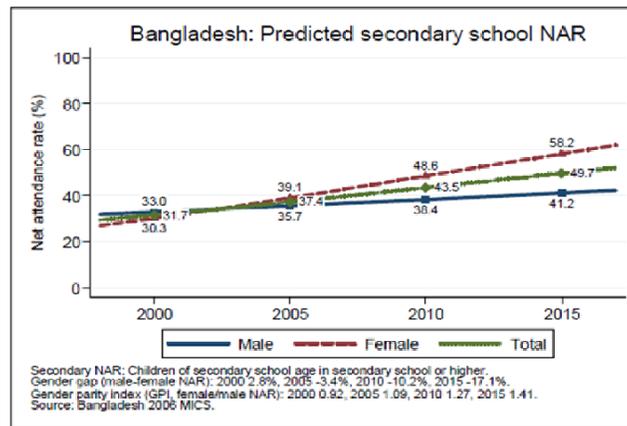
The projected values of NAR suggests that the net attendance rate of female will prevail over that of male students by 2015 due to the influence of FSSP as shown in Figure 6. The projected trends of NAR indicate that the gaps between the rate of attendance of female and male students will be wider gradually showing that the education enhancement policy will continue to impact on the NAR of female secondary students by 2015.

Similarly, gender disparity index (GDI) and gender parity index (GPI) support the view that the female education enhancement policy and FSSP impacted on female secondary education positively as expected. The GDI is a measure to illustrate whether overall access to education is being shared equally by male and female



**Figure 5: Net Attendance Rate (NAR) by gender in 2006**

**Source:** Authors' calculation from UNICEF database, (UNICEF, 2008: 6)



**Figure 6: Projected Secondary School NAR in Bangladesh by 2015**

**Source:** UNICEF statistics, (UNICEF, 2008: 7)

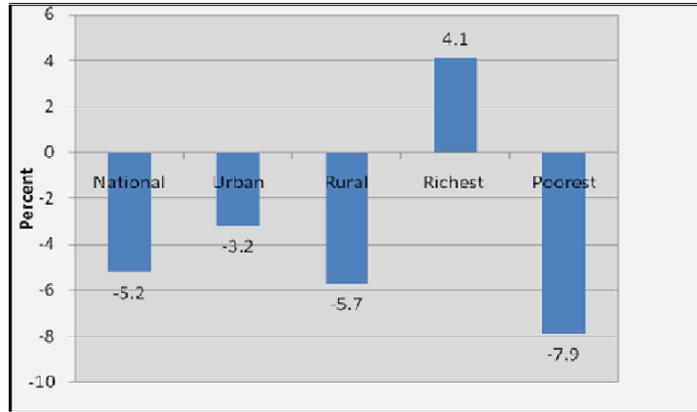
secondary students. It measures the differences between the ratios of NAR for male and female students in secondary education.

The GDIs for national, urban, rural and poorest students were negative (less than zero) in 2006 as shown in Figure 7. As interpreted in the methodology section, this situation indicates that FSSP created gender disparity in favour of female students giving them more access to education than male students at the secondary level.

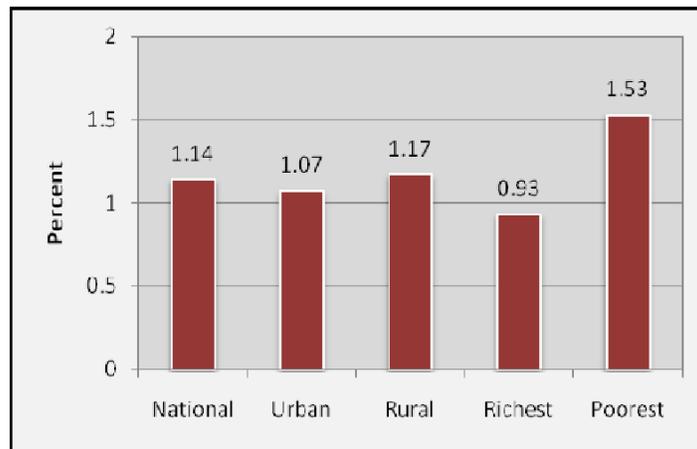
Similarly, the gender parity index (GPI) measures the relative access to education for male and female students. It is a ratio of females' NAR to males' NAR. In

Bangladesh, the GPIs are greater than unity in secondary education for all groups of students except in the case of the richest group in 2006 as shown in Figure 8. As per interpretation given in the methodology section, the GPIs indicate that there were more female secondary students than that of male in 2006. The richest female secondary students were not included in the FSSP. Therefore, it is a clear indication that the female education enhancement policy had positive impacts on female secondary education in Bangladesh in the post-policy era.

Therefore, the study suggests that the female education enhancement policy shaped the gender parity in favour of female secondary students. However, the



**Figure 7:** Gender disparity index (GDI) in secondary education: 2006  
**Source:** Author's diagram using data from (UNICEF, 2008: 6)

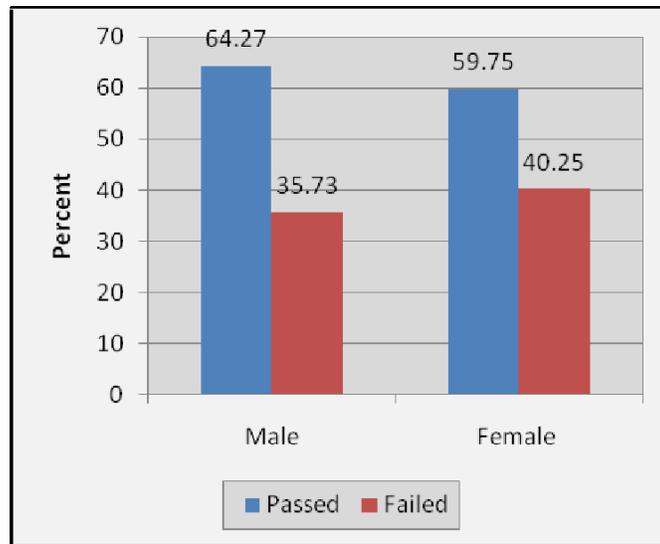


**Figure 8:** Gender parity index (GPI) in secondary education in 2006  
**Source:** Authors' calculation from UNICEF statistics, (UNICEF, 2008: 5)

values of the GER, NER and NAR for both male and female secondary students are quite low, less than 50 percent indicating that a large number of potential secondary students neither enrolled nor attended schools. For instance, in 2004 the GER for the national level was 43.8 percent; therefore, 56.2 percent of potential students were not enrolled in secondary education considering GER. Although, FSSP boosted up the enrolment of female secondary students in terms of both total number and ratio of male and female students; considering the GER, 55.50 percent of potential female students were not enrolled in 2004. This figure is even higher (58.2 percent) in the case of NER in the same year. This situation suggests that the education

enhancement policy could not influence the majority of potential female secondary students leaving them outside education. BEPS (2002) found the following main reasons for not enrolling at all: parents did not want (42 percent), both parents and children not interested (42 percent), could not meet educational expenses (34 percent) and trade-off between work and education (15 percent). Moreover, the FSSP could not ensure the quality in education as reflected by higher rate of drop-out and failed female students than that of male students as shown in Figure 9.

In 2006, amongst the male students 64.27 percent passed and 35.73 percent failed in the Secondary School Certificate (SSC) examination; whereas the figures of



**Figure 9:** Ratio of passed and failed students by sex in secondary school certificate (SSC) examination in 2006

**Source:** Authors' calculation from (Raynor and Wesson, 2006: 7)

passed and failed female students were 59.75 and 40.25 percent respectively indicating that the government should formulate policies to ensure quality education.

In a study, BEPS (2002) found that the main reasons for female students' drop-out from secondary education were manifolds such as parents could not meet educational expenses (31 percent), students got married during study (21 percent), parents did not want to continue female students' education due to high foregone opportunity cost - not contributing to livelihood and household works (20 percent) etc.

## CONCLUSIONS AND POLICY RECOMMENDATIONS

The findings and above analysis suggest that the female secondary education enhancement policy and FSSP have positively impacted on female secondary education. Comparing the pre-FSSP and the post-FSSP scenarios, it is clear that both the total number and the ratio of female student in proportion of total secondary students increase significantly. The GER and NER support this argument. Similarly, the NAR reflects similar results. The GDI and GPI suggest that FSSP reshaped gender parity in favour of females in secondary education in Bangladesh.

However, low levels of GDR, NER and NAR indicate that the female education enhancement policy could not

influence the majority of potential students of the age group for secondary education. This study argues that secondary education has a high opportunity cost for parents in terms of foregone works of students that could be done otherwise to support their poor families. Similarly, other socio-economic factors (such as high education costs, tradition of early marriage etc.) crowd out potential students from enrolling in education or attending schools. Moreover, the study has revealed that the policy could not ensure and enhance quality education as exposed by a higher number of failed or drop-out females than that of males.

This study argues that in addition to the female secondary education enhancement policy the government should formulate and implement the following complementary policies to get full benefit from FSSP:

These policies may include motivation for education, employment guarantee for poor students who will achieve good results in SSC examination and education loans for poor students.

The government should formulate policy to incorporate both theoretical and jobs oriented (practical) course in secondary education that will contribute to easily-getting a job by dropped-out students.

Similarly, the government should formulate complementary policy related to vocational and technical education to incorporate dropped-out female students

who can consider themselves for enrolling to a short vocational course to acquire technical skills that are required for getting an employment.

These complementary policies will improve the effectiveness of the female secondary education enhancement policy. This study argues that formulation and implementation of the above mentioned policies would work as complementary policies to the female secondary education enhancement policy in Bangladesh.

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