

## **Gender-Related Development Index For 64 Districts Of Bangladesh**

### **Introduction**

With gender equality being the subject of the concern among the policy makers of developing countries, the integration of women into the development process and therefore their participation in economic activities along with men, have been gaining importance in many national development plans.

Development planners initially assumed that overall economic development and the process of modernisation in the Third World would bring about an improvement in the status of women by benefiting both men and women equally (Lewina, 1999). However it has been recently recognised, mainly because of global awareness created during the UN decade of women, (1975-85) that women's contribution to development is essential to the success of national development.

In spite of this increasing awareness, appreciation of the economic and social values of women's role in a country's development falls far short of what is due. Despite extraordinary transformations in gender roles and relationships, there exist large differences in sex roles and circumstances. Overall women have made little gains in economic well being. It has been argued that the structural adjustment programmes of the World Bank and the IMF are creating problems for women by imposing greater burdens on them through the abolition of price controls and food subsidies, public service cutbacks and increased male unemployment. As a result the "feminisation of poverty" has become prominent in recent years (Lewina, 1999).

The lack of gender awareness in policy formulation has contributed to the failure of development programmes. Given the importance of sustainable development it is therefore imperative that raising gender awareness becomes part of development programs in general. The challenge is therefore to bring about a global awareness of the reality of women's contribution to national development.

In the case of Bangladesh, evidence indicates that deep gender discriminations exist in the country. According to Bangladesh HDR 1998, the gender gap has widened from

25 percent in 1994 to about 28 percent in 1995. Women face deprivation in many areas including education, health, nutrition, employment, credit, security as well as control over assets (see Annex 1). Gender disparities place Bangladesh at a disadvantage in international comparisons with the country ranking lower in Gender Development Index than in Human Development Index. According to Bangladesh HDR 1998, the most significant contribution to the existing gender gap is the difference in educational attainment. The 1995-96 LFS Report states that about 62 percent of women had no schooling while about 0.9 percent had higher education (degree and above, see Table 1B, Annex I). The net primary enrolment ratio for girls, in the year 1995, was 78 percent compared to 89 for boys; and girls' drop out rate was also consistently higher than that of the boys. As a result, the adult literacy rate for women in the year 1999 was roughly half than that of men (see Table 1A, Annex I). There is also gender disparity in nutrition's levels. From Table 2A, (Annex 1), it can be seen that about 49 percent of girl children were stunted compared to 46 percent of boys and this situation is more acute in rural areas compared to urban areas. From Table 2B, (Annex I) we see that although the gap in the nutritional status is gradually narrowing, higher percentage of girls continue to be subjected to malnutrition compared to boys.

Micro studies show that sex is the main determinant of infant nutritional levels irrespective of economic development, the situation becoming worse with increased poverty. Moreover while both boys and girls get less than the recommended daily dietary allowances, girls intake are even more deficient leading to related disorders and illnesses. It has been found that although female children are biologically stronger than boys, morbidity and mortality rates of the girl child are higher than that of boys because of neglect and lack of proper treatment at birth (Government of India, 1988, p: 99). From Table 3 (Annex I), we can see that although the neo-natal mortality is low among the female children, subsequently as the child grows the mortality rate becomes high for the female child compared to the male child.

There has been very limited investment in improving the basic capabilities of women and enabling them to take full advantage of the opportunities of life. Women in Bangladesh seldom have the options for participation in economically productive jobs, civil service appointments or parliamentary representation. (Huq, 1997). This fact is

also evident from Table 4A (Annex I) which shows that the percentage of women is higher in low income categories compared to men. Moreover, the average wage rate for female workers is much lower than that of male workers. According to the 1995-96 LFS Report the average wage rate for female day labourers is Taka 26 as compared to Taka 46 for male labourers. The situation is worse in rural compared to urban areas. Table 4B (Annex I).

In case of marriage and divorce, young woman's preferences are rarely taken into consideration. Although BBS records the mean age at marriage as 17-18 in 1990, evidence indicates that the age of women at first marriages is frequently below that age. Furthermore divorce rates, for females are much higher than that of males, the situation being worse in rural areas compared to urban areas. Table 6 (Annex I)

Economic opportunities for women are fairly limited. In Bangladesh, 62 percent of the women are economically active, which is not only the highest rate in South Asia but also ranks above the average of 50 percent for developing countries. But despite a high proportion of women in the labor force, the share of female in total earned income is less than one quarter. The proportion of women in administrative and managerial services is also negligible (see Table 5, Annex I).

While the neglect of women is a widespread phenomenon throughout Bangladesh, there are some important variations in the quality of life of men and women in different districts of Bangladesh. For the most part, the neglect is related to the perceived low status of women in society. There is an overwhelming preference for the male child in Bangladesh, a phenomenon observed all over the world. Although different studies have been done on gender disparities in the context of Bangladesh as a whole, we still have very little knowledge about the status of women in different districts of Bangladesh.

This paper attempts to calculate gender-related development index for the 64 districts of Bangladesh. The study identifies the districts those are lagging as well as those that are ahead in reducing gender disparities in Bangladesh. The paper identifies the causes and measures of success and failure in terms of gender differentials in economically active population, education and mean age at marriage in order to indicate the policy implications for each district. The study will help planners and policy makers to

create a supportive environment to uplift the deprived women in Bangladesh and to make changes in their quality of life through the adaptation of appropriate policies and programmes.

### **Data, Variables and Methodology**

Since sex-disaggregated data at the district level are limited and seldom reliable, the study limits itself to three variables, namely, total population, literacy rate and proportion of economically active population. However, since sex-disaggregated data on economically active population are not available for the four districts of Bandarban, Meherpur, Sherpur and Rajbari the GDI has been estimated for 60 of the 64 districts of Bangladesh. The main sources of data for the study are the Bangladesh Statistical Yearbook, 1998, and the Bangladesh Labour Force Survey, 1995-1996. As earlier data are not available, the study uses 1995 as the base year.

An attempt was made to calculate GDI on the basis of methodologies used in the various UNDP Human Development Reports. However, due to limitations in district level data availability and reliability, a simple multivariate technique known as Principal Component Analysis (PCA) was applied to estimate the GDI at the district level.

### **The Methodology of Principal Component Analysis**

The main objective of the PCA methodology is to determine the principal components that explain the maximum variation in the data with the least number of factors. PCA transforms the original set of variables into a smaller set of linear combinations that account for most of the variations in the original set. The first component yields the linear combination of the variables having the largest variance, subject to the condition that the sum of squares of the coefficients is unity. The result does not provide a mean value, but the procedure has the merit of widening the distances among districts to the maximum extent, so that borderline cases are clearly demarcated.

It may however be noted that a principal component analysis does not always succeed in reducing a large number of original variables to a small number of transformed variables. Indeed, if the original variables are uncorrelated, then the analysis will not yield any result at all. The best results are obtained when the variables are correlated, positively or negatively. One merit of the PCA is that increasing number of variables

for deriving a composite index imposes very little cost on the analysis and many

related variables for deriving the principal components is easily accommodated in the process. Moreover, the method of principal component provides an easy procedure for letting the data determine the optimal weights that capture the largest fraction of the variance.

It should be mentioned here that the study has originally included life expectancy as one of the variables, but since the difference in life expectancy between males and females was found to be insignificant according to the available data, the variable was dropped and the three afore-mentioned variables retained for the analysis.

### **District Level GDI**

Table 1 (Annex II) shows the gender disparity in 60 districts of Bangladesh. The first component explains about 70 percent of the variations in the case of males and about 67 percent of variations in the case of females (see Tables 2 & 4, Annex II). Further, it is important to note here that of the three variables, the proportion of economically active population is the most dominant factor in explaining gender disparity in Bangladesh (see Table 3 & 5, Annex II). Table 1 (Annex II) shows that Dhaka and Chittagong have the highest GDI scores, indicating that females are least deprived in these two districts. The main reasons for these phenomena are the comparatively high age at marriage, high literacy rate and high proportion of economically active population for both males and females in the districts of Dhaka and Chittagong. Among the other districts, females are comparatively less deprived in Barisal, Rajshahi, Barguna and Bagerhat.<sup>1</sup>

In contrast, both males and females are most deprived in Khagrachari where the economically active population (both male and female) is one of the lowest among the districts, mean age at marriage is comparatively lower both for male (25.6 year) and female (17.4) year) and also the literacy rate for both male and female is among the lowest.

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<sup>1</sup> It should be mentioned here that a separate GDI is also calculated using the density of population (separately for male and female) rather than using total population. But the ranking of districts in terms of gender disparity based on total population (separately for male and female in each district) seems to be the best compared to the ranking of districts based on density of population.

The highest gender disparity was found in the two districts of Satkhira and Gazipur where age at marriage for women was recorded to be 18.2 years and 17.5 years respectively which was much lower than that of males (26.7 years and 26.2 years respectively) and the female literacy rates (21.0 and 29.3 respectively) compared unfavourably with that of males (39.7 and 43.2 respectively).

The proportion of economically active females is also comparatively lower in these two districts. If we look at the fertility level in these two districts, we find that TFR is less than the average in these two districts (around 3.4). Therefore, it seems that it is not the level of fertility rather than early marriage leading to dropout from educational institutions, which results in consequent low participation of females in the labour market compared to males.

In Narayanganj also, the age at marriage is lower for females (16.9 years) compared to males (25.6) and the difference in educational attainment between male and female is comparatively large. The proportion of economically active population (both male and female) although is comparatively lower compared to Dhaka and Chittagong, this proportion is absolutely lower for females in this district.

In other districts such as Kishoreganj, Joypurhat, Nawabganj, Sariatpur (lowest age at marriage for females, 15.9 years), Thakurgaon, Jamalpur (highest age at marriage for females, 20.8 years) and Rangamati, the age at marriage although is comparatively higher than that in Khagrachari (except Sariatpur), it differs significantly between males and females. Conclusion to be drawn from these observations is that early marriages for women result in dropping out of school and losing opportunities for economic activities.

However, the case of Jamalpur demonstrates that increasing the age at marriage although necessary is not sufficient to induce increased female participation in the labour market. Other factors, such as malnutrition may be responsible for low literacy rates (16.0 for females) and low proportion of active females in the labour market in this district. Available data indicate that not only is the gender disparity in nutritional levels highest among the districts, but also, the proportion of women suffering from malnutrition is highest among the districts.

### **Factor Analysis**

In addition to PCA, the data were subjected to factor analysis (FA) in order to single out the factors which best explain the gender disparities. The factor pattern matrix in this case was subjected to varimax and oblique rotations. The varimax and oblique factor pattern matrices along with unrotated factor pattern are given in Table 6 and Table 7. The results from all the rotations are quite similar. Finally, analysis based on the most commonly used varimax factor pattern matrix, found that three variables, namely total population, economically active population and literacy rate explain most of the variations in the original data. The other factors responsible for existing gender bias include prevalence of malnutrition, mean age at marriage and incidence of diarrhoea. In the case of females, three factors explain 62 percent of the variation in original data. The first factor, comprising total female population, female literacy rate and proportion of females among total economically active population explain about 30 percent of the variation; the second factor, comprising female malnutrition and female mean age at marriage, explain about 17 percent of the variation; and the third factor, comprising life expectancy and incidence of diarrhoea, explain about 15 percent of the variations in the original data. In the case of males, three factors were also identified explaining about 63 percent of the variation in the original data. The first factor, comprising total male population, male literacy rate and proportion of male among total economically active population, explain about 30 percent of the variation; the second factor comprising malnutrition, mean age at marriage and incidence of diarrhoea, explain about 18 percent of the variation; and the third factor, comprising life expectancy, explain about 15 percent of the variation in the original data.

### **Gender Disparity of the Division level**

When we analyse gender disparity by division, we see that Barisal is the least deprived region where the disparity between male and female is the lowest. In Khulna division, the most deprived district is Satkhira followed by Khulna and Kushtia. In Dhaka division, the most deprived districts are Gazipur, Jamalpur, Kishoreganj, Shariatpur, and Narayanganj followed by Munshiganj, Gopalganj and Netrokona. In Chittagong division, districts with medium disparity are Cox's Bazar, Rangamati, Brahmanbaria, Chandpur, Feni and Laxmipur. The most deprived districts in Rajshahi division are Thakurgaon and Nawabganj followed by Panchagarh, Nilphamari and Natore. And in

Sylhet division, Sunamganj and Sylhet have been categorised as districts having medium disparity between male and female (see Table 8, Annex II).

The methodologies used in this study give a meaningful but limited picture of existing gender disparities in Bangladesh at the district level. A more detailed picture would have been possible if additional reliable indicators would include gender disaggregate GDP per capita at the district level and IMR. According to Huq (2000), “a gender disaggregated accurate database is a must for analytical and policy formulation purposes. Nowhere is the paucity of database, as acute as in the area of women’s economic activities”. However, in spite of the shortcomings, the results of the present study provide a basis for policy makers to begin the process of eliminating gender disparities at the district level.

### **Discussions and Conclusion**

Gender disparity is a worldwide phenomenon, nowhere more acute than in the third world countries such as Bangladesh, where most of women’s activities take place in the non-market economy for the purpose of household consumption. In Bangladesh, women are deprived in many areas including education, health, nutrition, employment, marriage and divorce, access to credit, security as well as control over assets and technology (See Annex 1). Although gender gaps in some areas like education and life expectancy are slowly narrowing give trends the findings of the study show that women remain less educated and less economically active and earn lower income than men in most of the districts. Thus despite considerable advances in gender equality in recent decades, gender discrimination remains pervasive in many dimensions of the life of women, especially in the districts of Gazipur, Satkhira, Narayanganj, Kishoreganj, Nawabganj, Thakurgaon, Jamalpur, and Sariatpur.

Although the causes of persistent inequality between men and women are only partially understood, most studies have focused attention on the inequalities in the allocation of resources at the household level such as the higher share of education, health and food expenditures received by boys in comparison to girls (World Bank, 1995, p: 2). Thus it is evident that gender discrimination starts from birth and within the family. Moreover, early marriages and consequent early motherhood are handicaps to women’s efforts to

economically compete with men, as achieving success in paid work requires greater sacrifices by women.

The study shows that early marriage is one of the main factors for low educational attainment of females leading to low participation in economic activities. Thus low female participation seems to be the result of prevailing gender bias in Bangladesh. In Bangladesh, although the mean age at marriage is recorded as 17-18 years as for 1990, it is observed that in case of females, numerous marriages occur below that age. Early marriage therefore acts as one of the deterrents to continuation of education for women. This is especially evident if we look at the deprived districts identified in this study. Although the movement for female emancipation largely depends on the advance of marriage age, the question of age of marriage is still an issue in Bangladeshi law today. However, raising the ages of marriage in the statutory legislation appear to have some impact on the upper or middle strata of society, where the indirect effect of giving higher education to the girl child has led to higher age at marriage. But in rural Bangladesh, girls are disadvantaged, secluded and are not allowed to have their own independent opinion as regard to whom they will marry, as marriage is often arranged by their parents. Practically the Child Marriage Restraint Act of 1929 has never been truly effective particularly in rural areas where even today such marriage are quite common, retaining parda and the honour of patriarchal family showing the dichotomy between law and life (Monsoor, 1999, p: 154-155). Therefore raising the age of marriage alone is not sufficient to increase the enrollment of girls in educational institutions. Registration of marriage can be made compulsory to reduce child marriage at least to some extent although no one can challenge the validity of age at marriage where there was no birth registration.

As Huq (2000) observes, low female participation in the education system in most South Asian regions is primarily the outcome of two factors: low parental demand for girls' schooling and public and private sectors' supply of educational services that do not respond to the communities' need. In Bangladesh, demand related factors seem to be more important than supply related factors in increasing educational attainment of girls.

Moreover, since girls perform more chores at home than boys, the opportunity cost of sending them to school is often higher than boys. Parents assess whether the benefits of sending the children to school outweigh the costs. The poorer the family, the more difficult it is to bear both direct and opportunity costs of education. Therefore, where resources are limited priority is given to boys (Huq, 2000). Therefore poverty has enormous bearing on girls' chances of schooling.

According to available data, in Gazipur district the main cause of dropout from educational institutions is 'want of money' (57percent) followed by 'pressure of family works' (17.24percent). It seems that distance to educational institutions is not the cause of dropout in this district. In Satkhira also, major cause of dropout is want of money (48.3percent) followed by pressure of family works (14.6percent). From the findings of the study we also see that in Sariapur which has the lowest age at marriage for females, the literacy rate is extremely low compared to males and proportion of economically active population is also extremely low in this district with females having absolutely low proportion compared to males. By contrast, in Jamalpur, although the age at marriage for females is the highest, they are less educated and less economically active than men because of low parental demand for girl's education because of want of money and also due to their domestic obligations (BBS, 1998). The same is true for other deprived districts identified in this study.

One of the most significant factors that inhibit women's access to education in South Asia is the perception that the investment in educating a girl will not benefit her parents once the girl gets married. Although governments pay for much of the educational expenses, parents usually bear the costs for books and clothing. Parents also incur opportunity costs because they lose their children's availability for household chores and wage labour. Moreover, the practice of dowry seems to introduce further 'hidden cost' of female education. Allowing girls' to continue in education means to give up resources saved for dowry. Because in traditional society where men expect to marry less educated women than themselves, parents will have to pay more dowry to their daughter marrying more educated men. Therefore since parents need to save resources for a girl's marriage, this might lead to taking the resource away which might otherwise be available for girls' education or oblige girls' to enter the labour market

without education to save towards marriage (Tilak, 1991, cited in Baden and Cathy Gran, p:32). This is particularly true in the rural areas of Bangladesh because as mentioned earlier, where the resources are limited, priority is given to boys' education. Evidence shows that when there is widespread poverty, education of sons is given preference to that of daughters, as sons are perceived to support parents in their old age while girls are likely to leave their own families after marriage. According to Household Expenditure Survey of 1988-89 in Bangladesh, all income group in rural areas discriminate against girls by spending only 27percent of total household education expenditure for their daughters, compared to 73percent for their sons (Huq, 1998, p: 88)

The other causes of low attainment of education of girls compared to boys is that the proportion of females suffering from malnutrition (9.0) in Gazipur district is comparatively higher than that for males (0.9) and available data show that distribution of monthly expenditure on major food item per household is one of the lowest in Gazipur district compared to Dhaka where distribution of monthly expenditure on major food items is one of the highest. In other deprived districts also, especially, Jamalpur, Natore, Thakurgaon and Brahmanbaria, the distribution of monthly expenditure on major food items is much lower compared to that in Dhaka district (see Table 10, Annex II)

Available literature shows that malnutrition arises from inadequate food intake and illness. UNICEF has categorised the underlying causes of malnutrition into three general areas: household food security (including availability and access to food), child caring practices and health service/health environment. Studies show that maternal malnutrition in Bangladesh is clearly associated with household socio-economic status. Proper sanitary facilities is likely to be associated with household socio-economic status, reflected in type of sanitation/toilet facilities, parental education and access and use of communication sources such as TV and radio (L, Kiess et al, 2000).

According to available data, main source of drinking water in Gazipur district is tube well (98 percent) followed by well (1.6 percent). About 20 percent use sanitary toilet and about 8.4percent has access to pucca toilet, majority of people use kuntcha toilet (52.8 percent) followed by open field and other (19 percent). In this district, the major

source of fuel is straw/leaves or cow dung followed by wood/bamboo. A very negligible proportion has access to gas supply. The same is true for other deprived districts except Narayanganj where major source of fuel is wood/bamboo followed by straw/leaves or cow dung. A certain proportion of households (23 percent) also has access to gas supply. The most deprived district in this regard is Nawabganj which solely depends on straw/leaves or cow dung for the purpose of fuel (BBS, 1998). Thus in most cases, females, especially girl child has to spend most of their time in collecting wood/ bamboo, leaves for the purpose of fuel collection; and they often have to go to distant places for collecting water for cooking and other purposes, thus spending much time in performing household chores.

It is, therefore, found that in most of the districts, rural poor women are deprived of education and have few alternative job opportunities due to early marriage. Their domestic obligations reduce their scope for engaging in existing economic activities. Further as evident from Table 9 (Annex II), in all of the deprived districts except Narayanganj, a very negligible proportion has access to electricity and proper sanitary facilities, which reflect poor socio-economic condition of people in such districts. In case of sanitary facilities, Thakurgaon district seems to be the most deprived where 75 percent of the population use open field for sanitary purposes.

Public policy can therefore address inequalities by undertaking supporting initiatives in this regard by rearranging expenditure priorities in the deprived districts identified in this study by the provision of gas, water and electricity and by introducing proper sanitary facilities. This will reduce the amount of time women traditionally devote to household maintenance and family care. Such policies can also have indirect effect on reducing environmental degradation by reducing the consumption of wood/bamboo for the purpose of fuel by households. A cross-country study by World Bank (1995) on gender equality also suggests that redirecting public policies to such investments can have high social returns and can increase women's labor productivity, thereby contributing directly or indirectly to reducing gender inequalities. The present analysis by specifically identifying the deprived districts will certainly help policy makers to undertake investment priorities with targeted intervention in such districts.

Finally, it is evident from Table 9 (Annex II), that a certain proportion of households in

the districts lagging behind have access to radio and a very negligible proportion has access to TV reflecting poor access to mass communication sources and also poor socio-economic condition in the deprived districts. Thus, increasing economic empowerment of women seems to be one significant step in reducing gender disparities in the deprived districts. This is because increasing economic empowerment can have three-fold effect on reducing gender disparities in household allocation of resources: (I) by increasing the expenditure on major food items, (II) by increasing resources needed for girls education (iii) by increasing capacities to buy radio and TV.

Therefore, economic empowerment of women seems to be a necessity to uplift the status of rural women in lagging districts. But evidence shows that strengthening the economic capacity of women by giving them access to financial resources alone cannot reduce gender inequalities in the allocation of household services. A qualitative study reviewing several targeted credit programs in Bangladesh cautions against over-generalizing the benefits of giving women access to credit. The study finds that it is difficult to infer that increased borrowing alone improves women's bargaining power, because in many rural Bangladeshi households, the question of who controls the resources is quite complex (BRDB, p: 21).

It is often found that although women are in many cases the recipients of credit, it is quite often that it is the men who take the decisions within a household because of men's traditionally stronger role within the household. In this case, credit does not seem to contribute to the economic empowerment of women to the extent it was intended and believed to do. Therefore, while economic empowerment alone cannot change Bangladeshi women's present situation where they are in general subordinate to men, awareness raising among men is needed in order to support women in gaining access to available resources and hence to change women's present situation. In many cases rural women are completely unaware of improved technologies which could assist them. Even when information reaches the village level, it is usually men who receive it. This is because most extension workers and sales agents in rural areas are men who by choice or custom, tend to communicate only with other men, even if the information relates to work carried out by women. And sometimes technologies are inaccessible to women because their use demands time inputs, which are simply not

available to them because they have to spend much time in performing household chores (Carr, 1997).

Therefore, although access to credit provides an opportunity for these women to undertake their own income generating activities, it is only one component to increase the empowerment of rural poor in general and empowerment of women relative to men in particular (BRDB, p: 24-25). The other components such as increasing their access to education by delaying marriage and specialized technical and non-technical training and improving their easy access to available resources and technology must be ensured. More NGOs should therefore come forward to uplift the status of the rural women with especial emphasis on human resource development, skill formation and social mobility rather than on mere provision of micro finance.

The media and various forms of communication can also take steps to improve the status of women by creating awareness among the masses regarding the necessity of educating girls so as to prepare them to effectively contribute to the socio-economic development of the country and to strengthen their economic capacities. If awareness regarding education of girls can be created, this will have indirect effect on raising the age at marriage. Special programmes on radio/TV based on everyday life of the community and on providing advice on health, education, childcare, nutrition, vocational training and job opportunities relating to women can meet the specific communication needs of women in rural areas.

To conclude, despite the fact that gaps in gender issues are slowly narrowing, and that the Bangladeshi women become more vocal than in the past, still continuing differences between men and women in health, education, access to assets as well as access to and control over technology, personal security and participation in political process indicate that development investments and programmes do not benefit women equitably. Efforts made so far in removing gender gaps have mainly focused on economic empowerment of women as well as of men. In the present context of Bangladesh, economic empowerment is although undoubtedly a necessary condition, is not a sufficient condition for their full emancipation from their subordination (BRDB, p: 9). Since discrimination against girls and women starts from the beginning of their life in their own family, studies suggest that sincere action of making changes towards

equality in the private sphere is necessary to advance equality in the public sphere. This is because the capacity of women to participate equally in the public sphere is related to the conditions in the private sphere. Women who have no control over resources of their own or whose lives are circumscribed by customs and traditions which confine them to child bearing and domestic activities have little power to overcome barriers to participation whether in the economy, in social and cultural activities or in politics and representation (France, 2001, p: 48). Since practical gender needs relate to women's daily experiences from the sexual division of labour and their constant struggle for survival, the promotion of equality and transforming of gender roles in the family also requires the sharing of parenting and familial responsibility by men, so that women can participate in economic activities to increase their economic as well as social empowerment.

The study, therefore, suggests that efforts should be made both to increase economic empowerment of women as well to increase their access to education and training (both technical and non-technical) to gain control over their resources and to available technology both at home and workplace. This particularly implies the improvement of home technology in rural areas of Bangladesh so that girls and women can spent less time in performing household chores and therefore can have free time to enroll in schools, participate in economic activities and gain control over available technologies at workplace with required skills. The study thus strongly suggest to improve the socio-economic status of deprived women in Bangladesh by the provision of gas and electric supply in remote areas of Bangladesh, by encouraging households to introduce sanitary toilets and improving their access to safe drinking water, so that they can perform domestic chores requiring less time as well as by increasing their access to mass communication such as radio/TV so that they can have adequate information on education, nutrition and health easily.

The study, therefore, shows that as because women's entry into the labour market and other spheres of the economy is directly affected by the extensive time they devote to household maintenance and family care and since existing inequalities resulting from extreme poverty constrain women's choices and limit girl's enrollment in schools, policies as mentioned above are therefore essential for reducing gender inequalities and

improving the well being of all members of the society. Since studies on existing gender inequalities at the district level are yet not available, the present study will certainly help local level planners and programmers to carry out appropriate policies with targeted interventions in the deprived districts to uplift the status of the rural women in such districts.

**ANNEX -1**

**Table 1A: Gender Disparity in Case of Education**

Category	Year (1995)		Year (1999)	
	Male	Female	Male	Female
Adult Literacy (percent)	49	24	51.7	29.3
Net Primary Enrolment	89	78	-	-
Combined Enrolment	45	34	41	33

Source: Human Development in South Asia, 1998 and Human Development Report, 2001.

**Table 1B: Percentage Distribution of Labour Force Aged 15 Years and Over by Level of Education and Sex**

Level of Education	Male	Female
No schooling	44.3	62.0
Class I-IV	26.4	22.7
Class V-VIII	9.6	7.1
Class IX-X	6.9	3.8
SSC-HSC equivalent	9.0	3.5
Degree and above	3.8	0.9

Source: BBS, 1996 Labour Force Survey of Bangladesh

**Table 2A: Gender Disparity in case of Nutrition**

Categories	Boys	Girls
No. of Children	155	144
percent of stunted children	45.6	48.8
percent of underweight children	57.0	57.5

Source: BBS 1997, Child Nutrition Survey of Bangladesh, 1995-96

**Table 2B: Prevalence of Malnutrition by Gomez Classification**

Nutritional status	Boys	Girls
Severe or 3 <sup>rd</sup> degree malnutrition	2.4	2.5
Moderate or 2 <sup>nd</sup> degree malnutrition	34.3	35.1
Mild or 1 <sup>st</sup> degree malnutrition	51.6	49.8
No malnutrition	11.0	12.1

Source: Child Nutrition Survey of Bangladesh, 2000

**Table 3: Gender Disparity in case of Health**

Category	Year 1995		Year 2000	
	Male	Female	Male	Female
Neo-Natal Mortality	60.3	49.0	54.7	45.9
Post Neo-Natal Mortality	34.7	35.2	27.5	31.1
IMR	95.0	84.2	82.2	76.9
CMR	36.9	47.0	28.4	37.7

Source: BBS, 1996, Report of LFS in Bangladesh, 1995-96

**Table 4A: Gender Disparity in case of Earning of Income: Percentage Distribution of Paid Salaried Workers by Weekly Income and Gender**

Weekly Income	Male	Female
<250	11.9	51.6
250-500	33.8	27.0
951-1050	3.0	1.8
1051-1150	0.9	0.1
Tk 1151	17.8	4.7

Source: BBS, 1996, Report of LFS of Bangladesh, 1995-96

**Table 4B: Average Wage Rate (Taka) of Day Labourers by Sex and Residence**

Residence	Male	Female
Bangladesh	46.0	26.0
Rural	44.0	25.0
Urban	60.0	36.0

Source: BBS, 1996, Report of LFS of Bangladesh, 1995-96

**Table 5: Gender Disparity in case of Major Occupation**

Category	Male	Female
Professional, technical	1.2	0.5
Administrative, managerial	0.2	0.0
Clerical workers	1.1	0.1
Sales workers	5.7	0.4
Service workers	0.8	1.1
Agri. forestry, fisheries	17.9	3.0
Production, transport, labourers & others	6.4	2.0

Source: Report on Labour Force Survey Bangladesh, 1995-96

**Table 6: Gender Disparity in case of Marriage and Divorce**

Category	RURAL	
	Male	Female
Never Married	45.0	28.6
Currently Married	53.6	62.2
Widowed/Divorce/separate	1.4	9.2
	URBAN	
Never Married	50.4	36.6
Currently Married	48.1	55.1
Widowed/Divorced/Separated	1.5	8.3

Source: BBS, 1997, Statistical Year Book of Bangladesh

**Table 1: Ranking of Districts according to Gender Disparity by using PCA  
(based on Total Population by sex)**

Districts	Score	Ranking (M)	Score	Ranking (F)	Difference
Dhaka	7.04	1	5.31	1	0
Chittagong	5.06	2	4.49	2	0
Comilla	2.62	3	3.01	4	1
Mymensingh	2.01	4	3.09	3	1
khulna	1.60	5	0.97	9	4
Barisal	1.52	6	1.72	6	0
Tangail	1.18	7	1.75	5	2
Bogra	0.96	8	1.15	7	1
Jessore	0.84	9	0.83	11	2
Rajshahi	0.83	10	0.90	10	0
Dinajpur	0.60	11	0.74	13	2
Narayanganj	0.48	12	0.14	23	11
Chandpur	0.45	13	1.05	8	5
Sirajganj	0.39	14	0.63	16	2
Barguna	0.37	15	0.67	15	0
Noagaon	0.35	16	0.55	17	1
Sylhet	0.30	17	0.78	12	5
Noakhali	0.25	18	0.40	20	2
Bagerhat	0.24	19	0.41	19	0
Gazipur	0.23	20	-0.30	32	12
Pirojpur	0.13	21	0.27	22	1
Rangpur	0.12	22	0.28	21	1
Kishoreganj	0.04	23	0.70	14	9
B.Barua	-0.02	24	0.46	18	6
Satkhira	-0.14	25	-0.53	37	12
Jhalkhati	-0.16	26	-0.02	25	1
Patuakhali	-0.22	27	-0.05	26	1
Gaibandha	-0.23	28	-0.15	27	1
Feni	-0.28	29	-0.44	34	5
Maulavibazar	-0.32	30	-0.19	28	2
Narshindi	-0.37	31	-0.23	30	1
Jamalpur	-0.37	32	-0.01	24	8
Pabna	-0.39	33	-0.49	35	2
Bhola	-0.47	34	-0.23	31	3
Gopalganj	-0.48	35	-0.76	42	7
Netrokona	-0.51	36	-0.22	30	6
Kurigram	-0.58	37	-0.70	40	3
Kushtia	-0.60	38	-0.40	33	5
Munshiganj	-0.61	39	-0.86	45	6
Habiganj	-0.65	40	-0.54	38	2
Laksmipur	-0.67	41	-0.53	36	5
Faridpur	-0.68	42	-0.83	44	2
Jheneidah	-0.76	43	-0.90	46	3
Nilphamari	-0.81	44	-1.11	48	4
Sunamganj	-0.83	45	-0.54	39	6
Thakurgaon	-0.84	46	-1.39	54	8

*Table 1 Contd.*

Districts	Score	Ranking (M)	Score	Ranking (F)	Difference
Natore	-0.89	47	-0.75	41	6
Madaripur	-0.89	48	-1.20	50	2
Cox'sBazar	-0.90	49	-0.82	43	6
Magura	-1.02	50	-1.25	51	1
Panchagarh	-1.06	51	-1.43	55	4
Rangamati	-1.12	52	-1.83	59	7
Narail	-1.15	53	-1.43	56	3
Manikganj	-1.20	54	-1.32	53	1
Chuadanga	-1.23	55	-1.25	52	3
Nawabganj	-1.28	56	-1.11	47	9
Shariatpur	-1.28	57	-1.18	49	8
Joypurhat	-1.29	58	-1.45	57	1
Lalmonirhat	-1.42	59	-1.67	58	1
Khagrachari	-1.82	60	-2.14	60	0

*Table 2: Eigenvalues and Accounted for Variance (for females)*

Components	Eigenvalues	Proportion	Cumulative Prop.
PRIN1	1.9837	0.6612	0.6612
PRIN2	0.8898	0.2966	0.9579
PRIN3	0.1265	0.0421	1.0000

*Table 3: Eigenvectors (for females)*

Variables	Component 1
POPF	.6615
LITF	.3234
ECOF	.6766

*Table 4: Eigenvalues and Accounted for Variance (for males)*

Components	Eigenvalues	Proportion	Cumulative Prop.
PRIN1	2.0879	0.6960	0.6960
PRIN2	0.8428	0.2809	0.9769
PRIN3	0.0692	0.0231	1.0000

**Table 5: Eigenvectors (for males)**

Variables	Component 1
POPM	<b>.6422</b>
LITM	<b>.3702</b>
ECOM	<b>.6712</b>

**Table 6: Factor Matrices (for females)**

Variables	Unrotated Factors			Varimax Rotation			Oblique Rotation		
	f <sub>1</sub>	f <sub>2</sub>	f <sub>3</sub>	f <sub>1</sub>	f <sub>2</sub>	f <sub>3</sub>	f <sub>1</sub>	f <sub>2</sub>	f <sub>3</sub>
Total Population	.89	.00	-.09	.89	.06	-.15	.89	.00	-.09
Literacy Rate	.44	-.33	.25	.52	-.11	.29	.54	-.13	.32
Malnutrition	-.00	.79	.31	-.17	.83	.00	-.19	.84	.03
Diarrhoea	-.03	-.17	.73	.05	.11	.74	.08	.14	.75
Life Expectancy	.21	.33	.54	.09	.13	-.65	.06	.10	-.64
Age at Marriage	.37	.57	.29	.23	.67	-.03	.22	.66	.01
Economically Active	.94	-.05	-.00	.93	.14	-.11	.93	.08	-.05

**Table 7: Factor Matrices (for males)**

Variables	Unrotated Factors			Varimax Rotation			Oblique Rotation		
	f <sub>1</sub>	f <sub>2</sub>	f <sub>3</sub>	f <sub>1</sub>	f <sub>2</sub>	f <sub>3</sub>	f <sub>1</sub>	f <sub>2</sub>	f <sub>3</sub>
Total Population	.92	.14	-.04	.92	.10	.13	.93	.11	.11
Literacy rate	.54	-.55	.37	.54	-.36	-.53	.52	-.31	-.51
Malnutrition	-.05	.73	.24	-.04	.77	.07	.03	.78	.01
Diarrhoea	-.10	.27	.45	-.09	.43	-.31	-.06	.47	-.36
Life Expectancy	.17	.25	-.79	.14	-.08	.83	.14	-.16	.85
Age at Marriage	.17	.50	.21	.18	.54	.01	.23	.55	-.05
Economically Active	.97	.08	.02	.97	.06	.05	.98	.08	.03

**Table 8: Gender Disparity in Bangladesh by Division**

<b>Division</b>	<b>Low Gender Disparity (0-3)</b>	<b>Medium Gender Disparity (4-7)</b>	<b>High Gender Disparity (8-12)</b>
<b>Barisal</b>	Barisal		
	Bhola		
	Patuakhali		
	Jhalkhati		
	Pirojpur		
	Barguna		
<b>Khulna</b>	Jessore	Khulna	Satkhira
	Jheneidah	Kushtia	
	Magura		
	Narail		
	Bagerhat		
	Chuadanga		
<b>Dhaka</b>	Dhaka	Munshiganj	Gazipur
	Manikganj	Gopalganj	Kishoreganj
	Narshingdi	Netrokona	Shariatpur
	Faridpur		Jamalpur
	Madaripur		Narayanganj
	Mymenshingh		
	Tangail		
<b>Chittagong</b>	Khagrachari	Cox's Bazar	
	Chittagong	Rangamati	
	Comilla	Brahaman Baria	
	Noakhali	Chandpur	
		Feni	
		Laksmipur	
<b>Rajshahi</b>	Bogra	Panchagarh	Thakurgaon
	Joypurhat	Nilphamari	Nawabganj
	Dinajpur	Natore	
	Pabna		
	Sirajganj		
	Naogaon		
	Rajshahi		
	Kurigram		
	Lalmonirhat		
Rangpur			
<b>Sylhet</b>	Habiganj	Sunamganj	
	Maulavi Bazar	Sylhet	

**Table 9: Percentage Distribution of Selected Socio-economic Characteristics for Selected Districts**

**Causes of Dropout**

District	Without Electricity	Gas supply	Want of money	Pressure of family work	Radio	Television	Sanitary toilet	Kunch toilet	open field
Gazipur	89.0	0.2	57.5	17.2	25.0	6.6	19.8	52.8	19.0
Satkhira		1.0	48.3	14.6	31.0	10.6	10.6	55.0	19.8
Narayanganj	37.6	23.0	43.3	18.3	28.0	9.6	6.0	50.0	9.4
Kishoreganj	85.0	1.8	65.6	15.6	22.4	7.8	8.8	51.2	31.8
Jamapur	87.0	1.0	34.7	13.9	13.0	6.2	5.4	50.0	36.8
Sariatpur	92.0	0.0	47.2	13.5	26.6	3.8	10.4	68.8	13.6
Munshiganj	61.4	1.8	37.4	11.3	22.8	13.0	10.8	62.4	13.0
Netrokona	83.5	7.4	48.7	18.4	18.0	8.2	5.8	61.8	25.6
Nawabganj	89.4	0.0	32.8	17.4	22.0	7.6	5.4	30.4	58.4
Natore	74.0	0.4	28.0	37.3	26.4	2.4	11.0	53.0	26.2
Thakurgaon	88.4	0.0	45.8	25.0	10.2	6.0	13.4	10.4	74.4
Cox's Bazar	83.6	0.4	66.1	15.4	22.8	7.2	19.2	46.0	28.6
B- Baria	87.4	1.4	53.7	20.3	16.9	2.9	4.8	66.5	15.8
Khagrachari	88.0	0.0	44.5	8.1	19.6	2.6	8.8	65.2	21.0
Rangamati	79.6	0.2	38.9	12.9	22.2	12.4	9.4	70.0	10.2
Sunamganj	84.4	5.2	52.5	17.8	20.8	10.6	13.2	61.8	16.4
Dhaka	31.2	52.8	66.2	5.6	28.8	40.0	28.2	36.8	0.2
Chittagong	58.4	2.6	38.9	29.7	14.4	13.6	13.4	57.2	8.4
Barisal	85.6	0.2	53.1	15.3	23.7	4.6	28.1	51.9	3.0

Source: BBS, 1998

**Table 10: Distribution of Monthly Expenditure on Major Food Items Per Household (Tk) in Selected Districts**

Districts	Monthly Expenditure (TK)
Dhaka	2640.87
Chittagong	2389.39
Gazipur	1780.32
Satkhira	1763.79
Narayanganj	2227.97
Kishoreganj	2235.78
Jamalur	1436.37
Sariatpur	2211.46
Munshiganj	2262.02
Netrokona	1847.23
Nawabganj	1768.57
Natore	1625.11
Thakurgaon	1555.02
Cox's Bazar	2808.40
Brahman Baria	1450.35
Khagrachari	1892.80
Rangamati	2301.75
Sunamganj	2392.67
Barisal	2101.49

Source: BBS, 1998

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