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GENDER INEQUALITY INDEX: A COMPARATIVE STUDY BASED ON DISTRICTS OF WEST BENGAL

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ABSTRACT

Gender bias is a very sensitive issue in developing countries like India. This paper throws light on the level of gender bias across the districts of West Bengal, a state of India, and also its impact on the overall development potential of the districts. Gender Inequality Index introduced by UNDP in 2010 is presented here in order to study the extent of gender inequality at the district level. This index highlights the complexities of gender related development. The comparative analysis is entirely based on the secondary data. Thus the paper shows how the assimilation of multiple factors in an intertwined manner has affected the final trajectory of gender development across the districts. Attempts have been made to comprehend how this index can be utilised as tools to focus on the gaps and loopholes in the already implemented programmes in order to improvise them.

KEYWORDS: *Gender Development, Gender Inequality, Poverty, Women, Empowerment, Economic Resources.*

I. INTRODUCTION

Though our country has progressed at a rapid pace, women still constitute the oppressed section of the society. Disparity persists widely among males and females in almost all spheres of life; whether it be health, education, income or political field. Women often face different constraints that translate into fewer entitlements and provide lesser choices in determination of their capacities.

In 1990, United Nations Development Programme introduced **Human Development Index** to account for the quality of life for both sexes. However, statistics revealed that development is not gender neutral. To focus on deprivation of women two indices, namely, **Gender related Development Index** and **Gender Empowerment Measure** were introduced in 1995. Both of them are based on the differential status of the women in all strata of their lives. Though these two indices could capture the genre of gender development, they fail to account for inequality in the process. So in 2010 Human Development Report came up with the gender inequalityindex to arrest the non-uniformity and to capture the inequalities between the two genders in decision making process and empowerment issues.

West Bengal, which is the fourth most populous state of India, portrays a region of great diversity in terms of social, cultural and political issues in India. In many districts of West Bengal women are grounded in both poverty and patriarchy. Women's mobility in West Bengal is constrained due to their limited ownership and control of property and other economic resources. Moreover their access to education and information is hindered and they are excluded from decision making. There is a high rate of drop out in West Bengal among girls. Girls get married at an early age. Girls getting married before the age of eighteen is also an important issue relative to GII in terms of Adolescent fertility rate. The work participation rate also appears to be low because most of them are engaged in the unorganised sector. Thus various aspects that are dealt with in this project are that of gender discrimination,opportunities and constraints faced by women in West Bengal. All the districts of West Bengal are dealt here except Kolkata, considering it to be an outlier.

II. DIMENSIONS OF GENDER INEQUALITY INDEX

DIMENSIONS	WOMEN	MEN
Reproductive Health	Maternal Mortality Ratio (MMR)	Not Applicable
	Adolescent Fertility Rate (AFR)	Not Applicable
Empowerment	Secondary or higher level of education attained by adults (25+)	
	Shares of parliamentary seats	
Labour Market	Labour force participation rates (Ages 16+)	

III. COMPUTATION OF GENDER INEQUALITY INDEX

- STEP 1: **Gender specific index for each dimension:**

FEMALE GENDER INDEX

$$G_F = [\{(1/MMR).(1/AFR)\}^{1/2} . (PS_F . HE_F)^{1/2} . LFPR_F]^{1/3}$$

(GM has been used for partial substitution between dimensions, where AM plays the role of perfect substitution.)

MALE GENDER INDEX

$$G_M = [1. (PS_M . HE_M)^{1/2} . LFPR_M]^{1/3}$$

- STEP 2: **Aggregating across gender groups, using the Harmonic Mean :**

$$HARM(G_F , G_M) = [\{(G_F)^{-1} + (G_M)^{-1}\}/2]^{-1} .....\{A\}$$

(To create **Equally Distributed Gender Index**, Harmonic Mean is uesd. It captures the inequality between male & female and adjusts the association between dimensions.)

- STEP 3: **Calculating the Geometric Mean of the Arithmetic Means (denoted by *) for each Indicators:**

$$G^*_{FM} = (H^* . E^* . LM^*)^{1/3} .....\{B\}$$

Where: $H^* = [\{(1/MMR . 1/AFR)^{1/2} + 1\}/2]$

$$E^* = [\{(HE_F.PR_F)^{1/2} + (HE_M.PR_M)^{1/2}\}/2]$$

$$L^* = [(LPR_F+LPR_M)/2]$$

- STEP 4: **Calculating the GII by using {A} & {B}:**

$$GII = 1- [\{HARM (G_F,G_M)\}/G^*_{FM}]$$

IV. ANALYSIS OF GII

From Table 1 we can easily conclude about the Gender Inequality for each districts.

Table 1: Ranks of women for three separate indicators in GII

Districts	Rank in Health	Rank in Empowerment	Rank in Work Participation	Rank in GII
Darjeeling	2	7	10	2
Jalpaiguri	8	12	7	6
Cooch Bihar	11	13	9	10
S. Dinajpur	15	15	6	12
N. Dinajpur	17	5	5	14
Malda	16	16	4	9
Murshidabad	14	14	12	16
Birbhum	10	11	11	13
Bardhaman	7	6	14	11
Nadia	3	8	15	7
N. 24 Parganas	5	4	17	15
Hoogly	1	1	13	3
Bankura	6	10	3	4
Purulia	13	17	2	5
Medinipur	9	2	8	8
Howrah	4	3	1	1
S. 24 Parganas	12	9	16	17

Source: Data analysed from several sources

Table 1 suggests that in terms of GII, Howrah fares the best across the districts, while North 24 Parganas rank the lowest.

Coming to the break up of the indicators of GII, it can be seen that the health indices are found to be high for women for the districts of Darjeeling, Medinipur, Nadia and Howrah, and distinctly high for Hoogly. Empowerment index values to be high for the districts of Darjeeling, Bardhaman, Hoogly, Howrah, N.24 Parganas, N.Dinajpur and Medinipur. Comparing the empowerment indicesbetween the males and females across the districts, a low disparity for these districts can be captured. This resulted in a high reference index for the above mentioned districts. So, stronger is the empowerment of women, higher the reference index. The level of women empowerment is low for the districts S.Dinajpur, Murshidabad and Purulia, which brings down the value of the reference index.

The analysis for labour participation shows certain striking results. The rate of work participation is low for women in general for all districts. It is the lowest in districts like Nadia, Bardhaman and North 24 Parganas. Interestingly in case of Howrah, the women's work participation rate is higher than that of the men.

Table 2: Correlation Matrix between value of indices across districts in West Bengal

	Health index (women)	Empowerment index (women)	Work participation index (women)	GII
Health index (women)	1			
Empowerment index (women)	0.628495006	1		
Work participation index (women)	0.099656765		1	
GII	-0.693670418	-0.40993855	-0.721388459	1

Source: Data analysed from several sources

The above table shows the association between women's health and empowerment index values compared to that between health and work participation. The strong negative correlation between work participation and GII index value indicates that a unit change in work participation rate in the districts helps in lowering the value of GII more strongly compared to similar increase in health index and empowerment index.

V. CONCLUSION

HDI, GDI, and GII are tools that make it possible to identify deep-rooted gender disparities tearing the society apart and also identify the demand for remedial policies, programmes and schemes. From the educational perspective various programs have been undertaken viz Mahila Samakhya, District education program, Adult literacy mission etc. GII cannot capture the important issue

of "violence against women". However progress could be made if roots of such violence are eradicated from society.

Abbreviations used:-

GII	Gender Inequality Index
HDI	Human Development Index
GDI	Gender Development Index
GEM	Gender Empowerment Measure
MMR	Maternal Mortality Ratio
AFR	Adolescent Fertility Rate
HE	Higher Education
LFPR	Labour Force Participation Rates
PS	Share of Parliamentary Seats

REFERENCES

1. *Bagchi, Jasodhara and Dutta Gupta, Sarmistha : "The Changing Status of Women in West Bengal, 1970-2000" "essay by Mukhopadhyay, Ishita*
2. *Mukhopadhyay, Pallav : "Problem of Gender Inequality and Expansion of Education in West Bengal"*
3. *Nayak, Purusottan and Mahanto, Bidisha : "Women Empowerment In India"*
4. *Census data, 2001*
5. *Human Development Report 2010*

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