Global Journal of human social science
Volume 12 Issue 7 Version 1.0 April 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-460X & Print ISSN: 0975-587X

A Comparative Analysis of Gender Related Development Index and Gender Empowerment Measures of Nepal (With Reference to NHDR 1996 to 2009)

By Mukesh Kumar Mishra
NIMS College T.U.

Abstract - Human development paradigm is one of the emerging development models which is widely accepted all over the world. This paper tries to shed light on the methodology applied by Nepal for calculating GDI and GEM and it also focuses on the trend and pattern of GDI and GEM in Nepal. The primary objective of this study is to examine the change in pattern of GDI and GEM of Nepal over the last 10 years from 1996 to 2006. This study is based on the secondary source of information collected from the Nepal Human Development Reports (NHDR) 1998 to 2009A.D. The study indicates that desegregation of GDI and GEM at sub national levels has enormous differences in terms of human development especially from gender perspective. The level of both, GDI and GEM has increased over the time (the value of GDI has improved from 0.267 in 1996 to 0.499 in 2006. Likewise, the value of GEM has also increased form 0.191 in 1996 to 0.496 in 2006) but still it has not reached in satisfactory level, particularly while comparing the status of these two indicators in development regions , there is wide gap. This study can be effective for policy intervention and further planning for women empowerment.

GJHSS-C Classification: FOR Code: 130308, 169901

Strictly as per the compliance and regulations of:

A Comparative Analysis of Gender Related Development Index and Gender Empowerment Measures of Nepal
(With Reference to NHDR 1996 to 2009)

Mukesh Kumar Mishra

Abstract - Human development paradigm is one of the emerging development models which is widely accepted all over the world. This paper tries to shed light on the methodology applied by Nepal for calculating GDI and GEM and it also focuses on the trend and pattern of GDI and GEM in Nepal. The primary objective of this study is to examine the change in pattern of GDI and GEM of Nepal over the last 10 years from 1996 to 2006. This study is based on the secondary source of information collected from the Nepal Human Development Reports (NHDR) 1998 to 2009A.D. The study indicates that desegregation of GDI and GEM at sub national levels has enormous differences in terms of human development especially from gender perspective. The level of both, GDI and GEM has increased over the time (the value of GDI has improved from 0.267 in 1996 to 0.499 in 2006. Likewise, the value of GEM has also increased form 0.191 in 1996 to 0.496 in 2006) but still it has not reached in satisfactory level, particularly while comparing the status of these two indicators in development regions , there is wide gap. This study can be effective for policy intervention and further planning for women empowerment.

I. Introduction

The term 'human development' has come to be accepted in the development literature as an expansion of human choices, an enhancement of freedom and fulfillment of human rights. Human development is the process of enlarging people choices. Enlarging people's choices is achieved by expanding human capabilities and functioning. At all level of development, there are three essential capabilities of human development - to lead long and healthy life, to be knowledgeable and to have a decent standard of living. If these basic capabilities are not achieved, many choices are simply not available and many opportunities remain inaccessible. But human development further goes on; political, economic and social opportunities for being creative and productive to enjoying self respect, empowerment and a sense of belonging to a community.

The human development paradigm is a holistic development model. The development must put people at the center of its concern. The purpose of development is to enlarge all human choices not just income. The human development paradigm is concerned both with building up human capabilities (through investment on people) and with using those human capabilities fully (through an enabling framework for growth and empowerment). It defines the ends of development and analyses sensible option for achieving them. Human development has four essential pillars - equity, sustainability, production and empowerment.

Since the birth of human development, it was criticized to be less attentive to gender issues. Owing to the criticism, the beginning Human Development Reports were devoted to discover gender issues subjectively. However, the need of gender sensitive development measurement was realized by all development practitioners.

The reason for demanding gender sensitive development measure was sustained, particularly in case of human development which stood on the principle of equity. Equitable human development can be achieved with providing equal opportunities for gender. There are explicit evidences that demonstrate gender differences or/and inequality in both biological and social ground. Biologically, sex ratio at birth is higher for male children, 1.05 per female live birth, but female lives longer than male by about 5 to 7 years on the average (life expectancy at birth).The evidences suggest that if males and females receive similar health care, nutritional opportunities, and so on, women tend to have significantly lower death rates at most age groups, and end up living much longer than men do. On the basis of social, cultural and economical sphere, "women and men share many aspects of living together, collaborate with each other in complex and ubiquitous ways, and end up often enough – with very different rewards and deprivations" (Anand and Sen, 1995).

This is because, unequal treatment in access to food, health care, education, employment and income earning opportunities. There may a systematic anti-female bias in the distribution of health care, nutrition, and other ingredients of living. Gender bias exists, both within the households and in public sphere – in labour market, in access to public health services. At the result, lower life expectancy of females than males in many parts of the world (especially in Asia and North Africa).

Author : NIMS College T.U. *E-mail :* call.mishra@yahoo.com

Difference between male and female educational achievements is important both because of questions of justice and because of the practical importance – confirmed in many empirical studies – of the long run impact of women's education on the social well-being of both women and men. Therefore, Gender desegregation is necessary in human development. Human development index is well-suited to examining gender inequalities that result from such unequal treatment.

The Human Development Report 1995 highlighted that if development is not engendered, is endangered. In 1995, two composite indexes were constructed to account for gender inequalities. They are Gender-related Development Index (GDI) and Gender Empowerment Measure (GEM). In estimating the GDI, a measure is constructed for the overall achievements of women and men in the three dimensions of the HDI- life expectancy, educational attainment and adjusted real income after taking note of inequalities between women and men. In other words, the GDI is the HDI adjusted for gender inequality.

The gender empowerment measure concentrates on participation economic, political and professional. It seeks to determine how much women have been empowered or enfranchised to take part in different aspects of public life in comparison with men. It focuses on only three variables; economic- earning power, share in professional and managerial jobs and share of parliamentary seats.

II. Objectives

The primary objective of this study is to discuss the methodology of calculation GDI and GEM followed by Nepal as well as compare these indices over past. The specific objectives are :

- To shed light on the methodology adopted by Nepal to calculate GDI and GEM over past.
- To compare and analyze the level and pattern of GDI and GEM of Nepal between 1996 to 2006 A.D.

III. Measurement of Human Development

With the annual editions of Human Development Reports (HDRs) that are proving influential in re-orienting development minds to re-found objective. It was increasingly felt that national reports could best reflect national concerns and serve better the identification of state-specific priorities. It was believed that national report helps to search on policies that directly improve the capabilities of people and reduce human deprivation. On the basis of importance of national report, Nepal has produced four NHDRs to date. The first NHDR was published in 1998, second in 2001, third in 2004 and last one published in 2009 A.D. NHDR 1998 and 2004 provide regional as well as district level of measurement of HD, while the reports of 2001 and 2009 provide only regional level measurements with using the latest data available. This report measures the HD using the following measurements - Human Development Index (HDI), Gender Development Index (GDI), Gender Empowerment Measure (GEM), Human Poverty Index (HPI) and Human Empowerment Index (HEI).

a) Methodology to Calculate GDI and GEM

i. Gender related Development Index(GDI)

In Nepal, GDI measures achievements in the same dimensions and variables as the HDI (HDI is a composite index based on three indicators – longevity measured by life expectancy at birth; educational attainment measured by combination of adult literacy (two-third weight) and the combined gross primary, secondary and tertiary enrolment ratio (one-third weight); and standard living measured by gross domestic product (GDP) per capita (PPP US$).), but takes into account inequality in achievements between women and men. The greater the gender disparity in human development, the lower in the country's GDI compared to its HDI. In other words, higher value corresponds to the higher gender equality or higher level of achievements made by both men and women. The GDI is simply the HDI adjusted downwards for gender inequality. GDI falls when achievements levels of both women and men in a country go down or when the disparity between their achievements increases. While calculating GDI, dimension index is computed by transforming original values into normalized scores separately for male and female. The equation is

$$\text{Dimension Index} = \frac{\text{Actual} - \text{Minimum}}{\text{Maximum} - \text{Minimum}}$$

Using the above relation, three indices are computed – life expectancy (LEI), educational attainment (EAI), and GDP index (GDPI). For EAI, first, compute the dimension index of both adult literacy and combined gross enrolment separately for male and female; then take the average with two-third weight of adult literacy and one-third of gross enrolment or mean years of schooling. The formula is, Educational attainment index = {2/3*ALI} + {1/3 * MYS}, where, ALI is adult literacy index and MYS is mean years of schooling index. At last, Income index is obtained by logarithmic transformation, since income is treated as a proxy of decent living. The formula is; Income index = log (Actual) – log (Min)/ {log (Max) – log (Min)}.

The second step involves computation of "equally distributed index". The formula is

$$\text{Equally Distributed Index} = \left(p_f \times X_f^{-1} + p_m \times X_m^{-1}\right)^{-1}$$

Where, pf and pm respectively refer to the proportional share of female and male in the population,

and xf and xm respectively the male and female indices computed in the first step.

By using this formula, we have to estimate; an equally distributed index of life expectancy at birth (EDILE), an equally distributed index of educational attainment (EDIEA) and an equally distributed index of income (EDII).The notion of "equally distributed equivalent" achievement between women and men plays an important role in developing gender-equality sensitive indicators.

Finally GDI is calculated as the simple average of these three equally distributed indices, such as;

$$GDI = \left(\frac{1}{3}\times EDILE\right) + \left(\frac{1}{3}\times EDIEA\right) + \left(\frac{1}{3}\times EDII\right) \quad OR = \frac{EDILE + EDIEA + EDII}{3}$$

ii. *Gender Empowerment Measure (GEM)*

As the GDI, the GEM seeks to determine how much women have been empowered or enfranchised to take part in different aspects of public life in comparison with men. It measures the relative empowerment of women and men in political and economic activities. Empowerment is measured by participation with decision making power. Percentage share of men and women in parliamentary seats and participation of men and women in local elections at VDC and municipality levels represent political empowerment. Percentage share of men and women in the administrative and managerial positions and in the professional and technical positions and income represent economic empowerment.

It focuses on women's opportunities rather than capabilities. The opportunities are related to economic and public participation and decision-making. Then, the GEM captures gender inequality in three key areas. 1. Political participation and decision-making, it measured by female and male percentage shares of parliamentary seats in 1998 NHDR reports and female and male percentage shares of parliamentary seats as well as local election in 2001 and 2004 NHDR. 2. Economic participation and decision-making, it is measured by the simple average of two indicators such as female and male percentages shares of positions as legislators, senior officials and managers, and female and male percentage shares of professional and technical positions. 3. Power over economic resources, it is measured as female and male estimated earned income (PPP US$). The first two dimensions concentrate on the political and economic sphere primarily from the perspective of participation – higher the participation, the higher the empowerment. The third is the power over economic resources.

For estimating GEM, at first Equally Distributed Equivalent Index (EDEI) are calculated for each three index. Equally distributed equivalent index is computed as according to the following formula, assuming that the value of ε is 2.

$$\text{Equally Distributed Index} = \left(p_f \times X_f^{-1} + p_m \times X_m^{-1}\right)^{-1}$$

Where, pf and pm respectively refer to the proportional share of female and male in the population, and Xf and Xm respectively the male and female indices computed in the first step.

To get final EDEI for participation and decision-making, divide each combined share by 50. The rational for dividing by 50 is an ideal society, with equal empowerment of the sexes, each combined share would equal 50% - that is, women's share would equal men's share. At last, GEM is calculated as the simple average of these three indices as follows;

$$GEM = \frac{EDEIPR + EDEIEP + EDEII}{3}$$

IV. Data and Methods

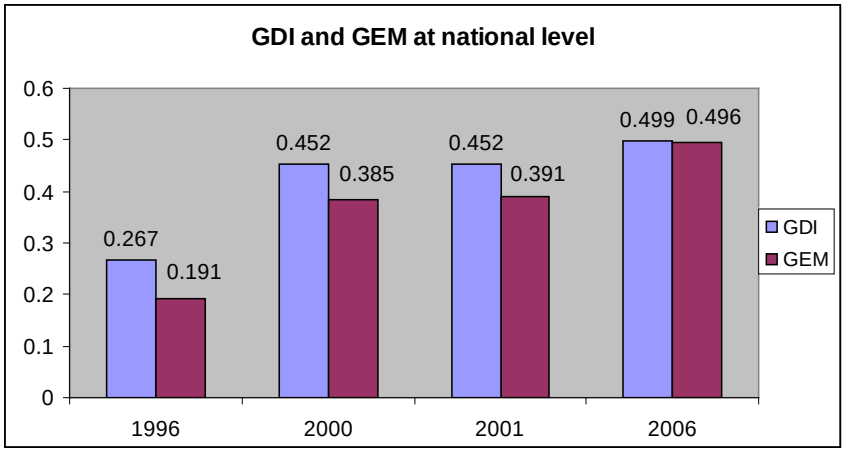
This article is based on Nepal Human development Reports 1998, 2001, 2004 and 2009 A.D which was published by United Nation Development Programme. The data obtained from the reports have categorized, tabulated, processed and analyzed using quantitative techniques. Simple statistical tools such as frequency distributions and percentage have used in presentation.

V. Result and Discussion

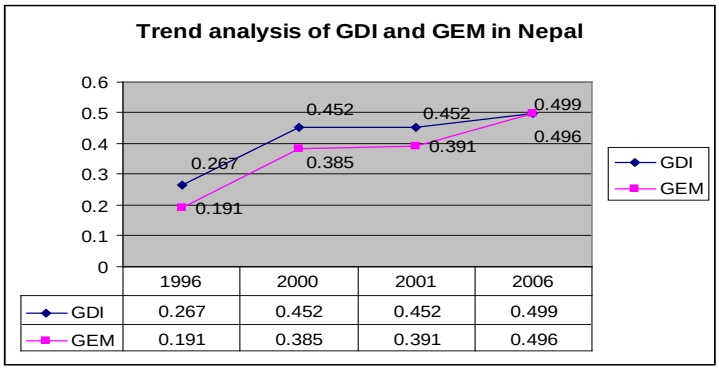
a) GDI and GEM at national level

The gender related development index is simply the HDI adjusted downwards for gender inequalities. The greater the value of GDI, the lower the degree of gender disparity in human development. Likewise gender empowerment measure indicates women's empowerment situation in terms of political participation, decision making and economic status in a nation.

Figure 1 : GDI and GEM of Nepal, 1996-2006 A.D.



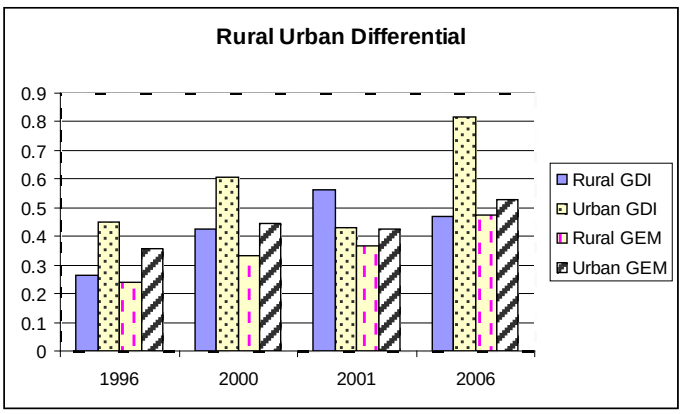
Source : NHDR, 1998, 2001 , 2004& 2009 A.D



The scores of GDI and GEM have improved over the years. The value of GDI has improved from 0.267 in 1996 to 0.499 in 2006A.D. Likewise the value of GEM has also improved form 0.191 in 1996 to 0.496 in 2006A.D. The value of GEM has significantly improved from 1996 to 2000. It was due to the methodological change. In 1996, political participation of women was measure by the percentage share of male and female in parliamentary seats. However, after 2000 A.D , it was measured by percentage share in local government election. In 2006, the score of GDI of Nepal 0.499 against the value of HDI 0.590 indicates that there was not a great gender disparity in obtaining opportunities. The gender empowerment measurement score of 2006 indicates that women are still less empowered than men in the political, economic and professional domains but gradual improvement is seen in this regard. It seems unusual that the GDI of Nepal was same during the publication of NHDR 2001 and NHDR 2004 A.D. It is so because there was only one year of gap in utilization of data. (figure 1).

b) Urban-rural differential in GDI and GEM

Figure 2 : Urban-rural differentials in GDI and GEM, Nepal, 1996-2006A.D.

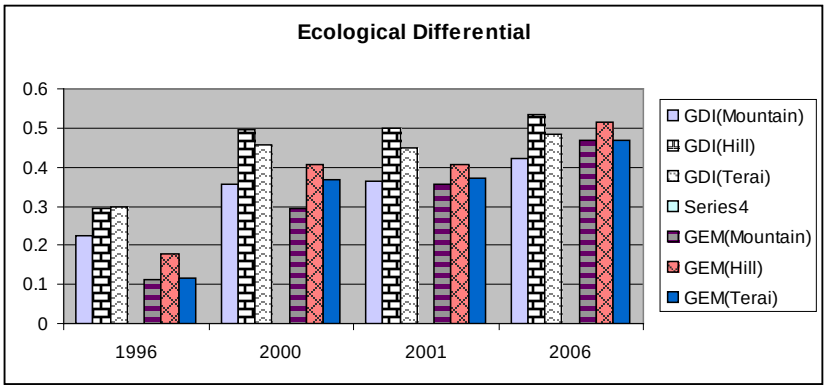


Source : NHDR, 1998, 2001, 2004 & 2009A.D

The gender inequality is higher in rural areas than that of urban areas as the report of NHDR 2006 shows the rural GDI of Nepal is merely 0.471 where as it is 0.819 for urban areas. Likewise, it also suggests that women in the rural areas are less empowered than that of women in urban areas. The value of GDI and GEM both are high in urban areas in each report in comparison with rural areas. However, the value of the GDI and GEM has improved in both urban and rural areas over the time period. Urban areas, in general, have higher GDI and GEM than their rural counterparts for obvious reasons, such as; better access to health care, better educational opportunities, income opportunities, opportunities for political participation and decision making

c) Ecological differential of GDI and GDM.

Figure 3 : Ecological differentials in GDI and GEM, Nepal, 1996-2006 A.D.



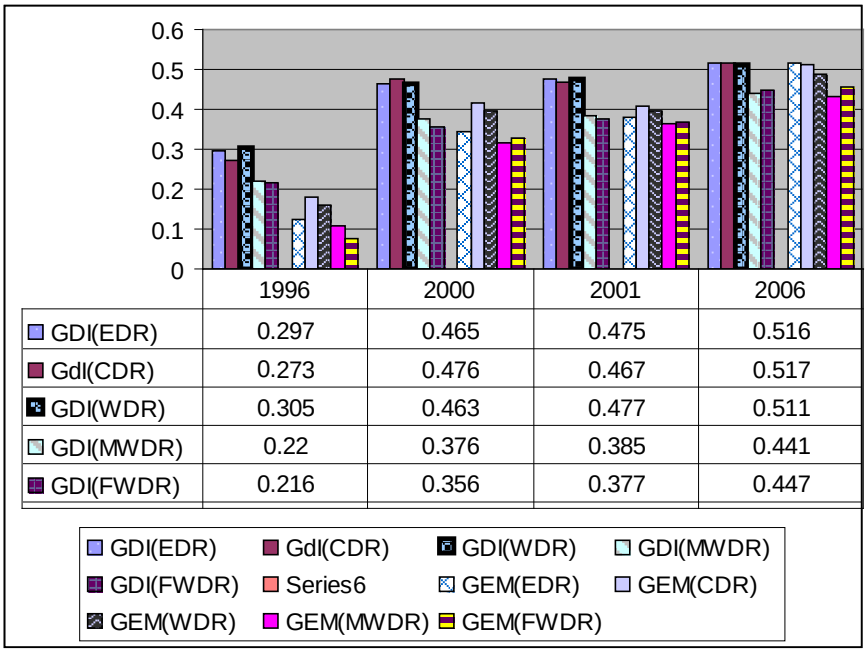
Source : NHDR, 1998, 2001, 2004 & 2009A.D

The values of GDI and GEM have improved over the years for each ecological region. The highest value of GDI and GEM was found in Hill region and lowest in Mountain region continuously from the year 2000 to 2006 A.D. It indicates that, there was less gender disparities in Hill region with compare to Tarai and Mountain region. It justifies that the women of Mountain and Terai are left behind the main stream of development in Nepal. It may be so because of several socio cultural factors existing in different corners of Mountain and Terai. Data also shows that the differences between the gaps of GDI and GEM have declined over the years in these ecological zones.

d) Development regional differential in GDI and GEM

The comparison between development regions hides the enormous intra regional gender disparities within the Hill, Mountain and Tarai in each development regions.

Figure 4 : Development regional differentials in GDI and GEM, Nepal



	1996	2000	2001	2006
GDI(EDR)	0.297	0.465	0.475	0.516
Gdl(CDR)	0.273	0.476	0.467	0.517
GDI(WDR)	0.305	0.463	0.477	0.511
GDI(MWDR)	0.22	0.376	0.385	0.441
GDI(FWDR)	0.216	0.356	0.377	0.447

Source : NHDR, 1998, 2001, 2004 & 2009 A.D.

The values of GDI and GEM have improved for each development regions over the time period. The value of GDI was higher for central development region in 1996 and 2000, but in 2001 the value of GDI was higher in western development region but again in 2006 the value of GDI was found Highest in CDR. Likewise, the far western development regions have least value of GDI for each year except in 2006, during this period MWDR had the least GDI.. Similarly, the value of GEM was higher for central development region till 2001 but in 2006 the EDR had highest value for GEM .Similarly the lowest value was found in mid western development region for each year respectively. It indicates that there was a high gender disparity and women were less empowered in Mid-western and Far-western development region in comparisons to other regions (figure 4).

Table 1 : Eco-development regional differential in GDI and GEM, Nepal, 1996-2006.

Eco-Region	**GDI**				**GEM**			
	1996	**2000**	**2001**	**2006**	**1996**	**2000**	**2001**	**2006**
Eastern Mountain	0.307	0.399	0.462	0.514	0.126	0.369	0.394	**0.538**
Eastern Hill	0.313	0.497	0.486	0.534	0.142	0.326	0.378	0.529
Eastern Tarai	**0.338**	0.473	0.469	0.508	0.123	0.355	0.380	0.483
Central Mountain	0.210	0.425	0.410	0.441	0.134	0.376	0.343	0.489
Central Hill	0.332	**0.499**	**0.528**	**0.589**	**0.224**	**0.452**	0.435	0.534
Central Tarai	0.256	0.443	0.416	0.463	0.098	0.372	0.349	0.467
Western Mountain	0.280	0.405	0.478	0.414	0.119	0.427	**0.511**	0.413
Western Hill	0.304	0.472	0.479	0.547	0.172	0.413	0.395	0.518
Western Tarai	0.308	0.411	0.474	0.455	0.136	0.377	0.386	0.391
Mid-Western Mountain	0.185	0.287	0.314	0.325	0.066	0.273	0.325	0.341
Mid- Western Hill	0.238	0.408	0.400	0.439	0.093	0.315	0.334	0.410
Mid- Western Tarai	0.266	0.439	0.422	0.477	0.137	0.364	0.387	0.488
Far- Western Mountain	0.185	0.246	0.319	0.325	0.052	0.322	0.309	0.315
Far- Western Hill	0.181	0.355	0.369	0.421	0.059	0.278	0.312	0.396
Far- Western Tarai	0.273	0.407	0.432	0.492	0.109	0.381	0.346	0.469
Nepal	**0.267**	**0.452**	**0.452**	**0.499**	**0.191**	**0.385**	**0.391**	**0.496**

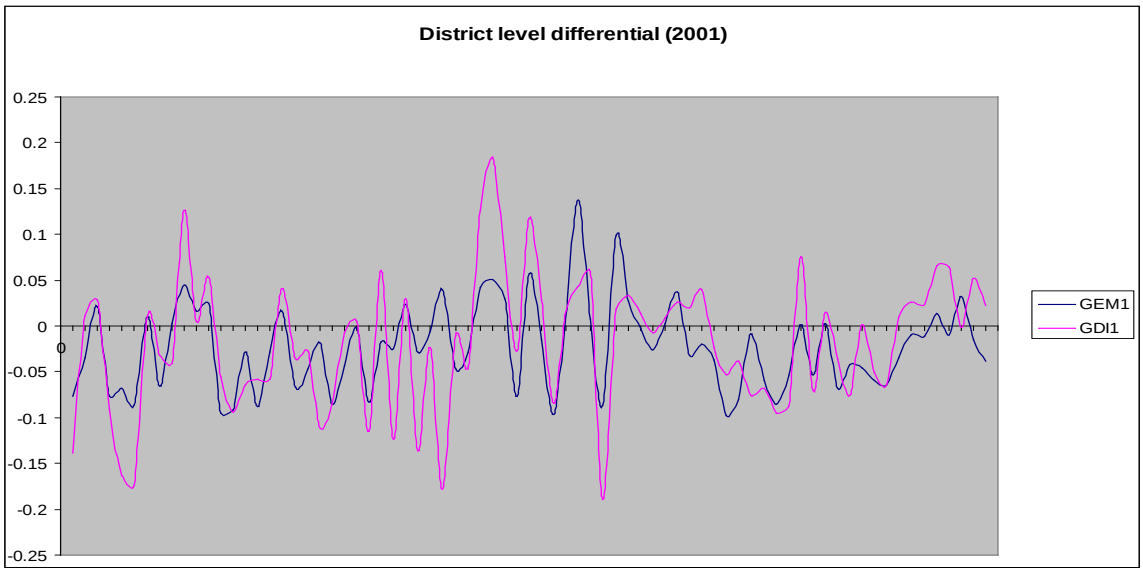
Source : NHDR, 1998, 2001, 2004 & 2009 A.D

The value of GDI was found highest in Central Hill continuously from 2000 to 2006 A.D. Likewise, the value of GDI was lowest in Far-western Hill, Far- eastern Mountain and Mid-western Mountain for 1996, 2000, 2001 and 2006A.D respectively. Similarly, the value of GEM was highest for central Hill in 2000A.D but it was higher in Western Mountain in 2001 A.D whereas it was found highest in Eastern Mountain in 2006 A.D in respectively but in 2001A.D the value of GEM was higher in Western Mountain. Likewise, the least value of GEM was found in Far- Western Mountain, Mid- Western Mountain and Far- western Hill for 1996, 2000 and 2001 respectively. There was less gender disparities in Central Hill. It may be due to location of the highly urbanized capital region Katmandu (Table 1)

e) Districts level differential

There was variation in values of GDI and GEM at the district level. For the majority of districts, the values of GDI and GEM have below the national level. Figure 5 shows the level of GDI and GEM of 75 districts in alphabetical order from left to right considering the national average a point '0' (0 indicate 0.452 for GDI and 0.391 for GEM).

Figure 5 : Districts by the values of GDI and GEM, Nepal, 2001.



Source : NHDR, 1998, 2001, 2004 &2009 A.D.

The classification shows that the values of GDI for 35 districts are greater than national average and remaining have below the national average. There was less gender disparity in Kathmandu district, followed by Kaski and Lalitpur respectively. Likewise, there is high gender disparity in Bajura, followed by Bajhang and Achham, respectively.

Similarly, the value of GEM for 24 districts is greater than that of national average and the value of remaining (majority districts, 51) is below the national average. Lalitpur has the highest value of GEM (0.448), followed by Kathmandu (0.442) and Kaski (0.433), respectively. Likewise, the women of Pyuthan district are least empowered followed by the women in Mahottari and Dadeldhura. It also indicates that districts having higher value of GEM have higher correspondingly value of GDI, except a few exceptions (Figure 5) (for more see Annex 1).

VI. Conclusion and Suggestion

Desegregation of GDI and GEM at sub national levels show enormous differences in human development from gender perspective. It can thus be observed that the intensity of discrimination against women at various socio-organizational levels - national, regional and district levels in basic capabilities formation in Nepal is quite high. Nepal, thus, faces the challenges of enhancing a more just distribution of these capabilities among men and women.

It can be inferred from the strong positive association between women's empowerment and their achievements in basic capabilities, that low GDI is the outcome of a relatively low level of empowerment among women. Although the line of caution between the development of women's capabilities and their empowerment may not be absolute, it appears that the best policy option is to empower women in order to enhance their capabilities even while working to close the gender gaps in capability. To narrow the gender gap further, it is important to concentration education, especially focusing on girls and women. It is equally important to expand opportunities and make them accessible to all – again, with special emphasis on women's participations.

To address this alarming marginalization, Nepal needs to enhance the education and training of women at higher levels. The government should also consider taking appropriate measures to increase women's participation in the political process and the recruitment of more women into professional and administrative jobs. This can be sustained only by increasing opportunities for women in both education and employment. Expanding economic opportunities will require a shift in the structure of the economy away from subsistence agricultural and thus a rise in income generating scope for both men and women.

References Références Referencias

1. Anand, Sudhir., and Sen, Amartya 1995, "*Gender Inequality and Human Development: Theories and Measurement",* New York: Human Development Office, United Nation Development Programme.

2. Mahub Ul Haq, 1995 "The Human Development Paradigm", Reading in Human Development, New York: Oxford University Press.
3. Nepal Human Development Report 2009, State Transformation and Human Development
4. UNDP, 1990, *Human Development Report* 1990, New York: Oxford University Press.
5. --------, 1991, *Human Development Report* 1990, New York: Oxford University Press.
6. --------, 1995, *Human Development Report* 1990, New York: Oxford University Press.
7. --------, 1998, *Nepal Human Development Report* 1998, Kathmandu : Pulchowk, http://www.undp.org.np.
8. -------, 2001, *Nepal Human Development Report* 1998, Kathmandu: Pulchowk, http://www.undp.org.np.
9. -------, 2004, *Nepal Human Development Report* 1998, Kathmandu: Pulchowk, http://www.undp.org.np.
10. --------, 2006, Nepal: Readings in Human Development Kathmandu: Pulchowk, http://www.undp.org.np.

Annex

Annex 2 : GDI and GEM at district levels, 2001

2001	GDI	GEM
Nepal	**0.452**	**0.391**
Districts (In alphabetic order)		
Achham	0.314	0.314
Arghakhanchi	0.463	0.356
Baglung	0.481	0.412
Baitadi	0.361	0.314
Bajhang	0.289	0.323
Bajura	0.277	0.304
Banke	0.463	0.401
Bara	0.420	0.326
Bardiya	0.411	0.394
Bhaktapur	0.578	0.436
Bhojpur	0.457	0.407
Chitawan	0.505	0.416
Dadeldhura	0.396	0.296
Dailekh	0.358	0.300
Dang	0.388	0.362
Darchula	0.394	0.303
Dhading	0.394	0.362
Dhankuta	0.493	0.407
Dhanusha	0.416	0.324
Dolakha	0.425	0.344
Dolpa	0.341	0.372
Doti	0.368	0.306
Gorkha	0.445	0.348

Gulmi	0.457	0.388
Humla	0.337	0.308
Ilam	0.513	0.374
Jajarkot	0.328	0.366
Jhapa	0.482	0.415
Jumla	0.316	0.362
Kailali	0.428	0.385
Kalikot	0.274	0.430
Kanchanpur	0.442	0.344
Kapilbastu	0.407	0.362
Kaski	0.578	0.433
Kathmandu	0.635	0.442
Kavrepalanchok	0.527	0.421
Khotang	0.425	0.314
Lalitpur	0.569	0.448
Lamjung	0.480	0.376
Mahottari	0.368	0.295
Makwanpur	0.468	0.403
Manang	0.495	0.528
Morang	0.511	0.399
Mugu	0.263	0.304
Mustang	0.470	0.490
Myagdi	0.486	0.418
Nawalparasi	0.466	0.388
Nuwakot	0.445	0.365
Okhaldhunga	0.461	0.393
Palpa	0.478	0.428
Panchthar	0.472	0.359
Parbat	0.492	0.371
Parsa	0.429	0.354
Pyuthan	0.399	0.293
Ramechhap	0.414	0.311
Rasuwa	0.376	0.382
Rautahat	0.384	0.331
Rolpa	0.357	0.306
Rukum	0.364	0.337
Rupandehi	0.527	0.392

Salyan	0.382	0.338
Sankhuwasabha	0.467	0.393
Saptari	0.416	0.323
Sarlahi	0.377	0.349
Sindhuli	0.453	0.345
Sindhupalchok	0.401	0.331
Siraha	0.388	0.327
Solukhumbu	0.462	0.356
Sunsari	0.478	0.381
Surkhet	0.475	0.380
Syangja	0.518	0.405
Tanahu	0.516	0.381
Taplejung	0.451	0.423
Terhathum	0.504	0.376
Udayapur	0.474	0.353

Source : NHDR, 2004