

Temporal-Spatial Comparative Analysis of Gender Indexes of India vis-a-vis other Countries (1995-2020)

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Abstract

Gender inequality and discrimination, which exist in all spheres of life, is a multidimensional and hard to quantify although scholars and intellectuals of various fields have always accepted the prevalence of it. Several authorities have even attempted to measure taking into account many variables. This paper delves into a comprehensive examination of gender indexes in India, aiming to shed light on the status of gender equality in comparison with developed nations and its neighbouring countries in comparison to global standards. The study is limited to six gender indexes-Gender development indexes, Gender Empowerment Measure (GEM), Global Gender Gap Index (GGP), Social Institution and Gender Index (SIGI), Gender Inequality Index (GII), Sustainable Development Goals Gender Index- of only 10 selected countries and data from as early as 1990s to 2020 have been taken into account which is a long time period to evaluate gender performance of countries. Most of the gender indexes highlights the differences between endowments of resources between men and women and reflects the inequality of outcomes; Equality of opportunity versus equality of outcomes is a separate much ponderable debate in this context.

1. Introduction

'To measure is to know' is popular statement given by physicist and engineer Lord Kelvin (William Thomson). It reflects the idea the measurement a phenomenon, nature of system or process can actually allow deeper understanding about it and also give prospect policies towards it betterment. Measuring gender inequality is an arduous task and it requires its deep understanding and has to be cognizant about discrimination and bias present in all fields of life.

Over the last past three decades, many gender based indices pertaining to different areas of life have been developed by many prominent organizations because of the efforts by the feminist scholars and women rights activists and the purpose of this is to illuminate the gender disparities that exist in our world. Some of them are purely regional like Gender equality index by European institute of gender equality (*Plantenga, J., Remery, C., Figueiredo, H., & Smith, M., 2009*) and African gender and development Indexes (*Charmes, J., Wieringa, S. E., Ruzvidzo, T., & Rosalie, G., 2023*).

Several efforts in past has been done to measure relative gender (in)equality like *Harvey, E. B., Blakely, J. H., & Tepperman, L. (1990)* developed GEI in line of Consumer Price index and *Ferrant, G. (2010)* formulated Gender Inequality Indexes using Multiple Correspondence Analysis.

Therefore, in this section six indexes and their indicators of ten countries have been discussed and compared. The Table I 2.1 enlists the indexes, its agency, publishing year and indicators used for calculation.

Table 2.1: Various Gender related Indexes

Index	Agency	Year	Indicators	
Gender Development Index (GDI)	United Nation Development Programme (UNDP)	1995	Distribution-sensitive measure that accounts for the human development impact of existing gender gaps in the three components of the HDI	
Gender Empowerment Measure (GEM)	United Nation Development Programme (UNDP)	1995	<ul style="list-style-type: none"> ▪ Proportion of seats held by women in national parliaments, ▪ Percentage of women in economic <u>decision making</u> positions (incl. administrative, managerial, professional and technical occupations) ▪ Female share of income (earned incomes of males vs. females). 	▪
Global Gender Gap Index (GGP)	World Economic Forum (WEF)	2006	Four components- <ul style="list-style-type: none"> ▪ Economic participation and opportunity ▪ Educational attainment ▪ Political empowerment ▪ Health and environment 	▪
Social Institution and Gender Index (SIGI)	Organisation for Economic Co-operation and Development (OECD)	2009	5 dimensions- <ul style="list-style-type: none"> ▪ Discriminatory family code ▪ Restricted physical integrity ▪ Son bias ▪ Restricted resources and assets ▪ Restricted civil liberties 	▪
Gender Inequality Index (GII)	United Nation Development Programme (UNDP)	2010	3 indicators- <ul style="list-style-type: none"> ▪ Reproductive health <ul style="list-style-type: none"> a. Maternal Mortality rate (MMR) b. Adolescent Fertility rate (AFR) ▪ Empowerment <ul style="list-style-type: none"> a. Share of Parliament Seats b. Higher Education attainment Levels ▪ Labor force participation <ul style="list-style-type: none"> a. Women Participation in Workforce 	b.
Sustainable Development Goals Gender Index	Equal Measure	2019	51 issues based on Sustainable Development Goals	

Source: Compiled by Researcher.

2. Research Methodology

In order to examine the status of women empowerment in India with respect to other countries, six internationally accepted indexes have been discussed in this section. It is impossible to consider of the indexes of 195 countries, therefore only ten countries including India have been selected for the study to evaluate and compare with India's indexes.

Norway and Iceland are randomly selected from the countries with highest ranks in almost all the indexes taken for study. United States and Japan are selected among the developed countries and lastly, five countries i.e. Nepal, China, Bangladesh, Sri Lanka, Pakistan, have been taken among all nine border sharing countries of India. Secondary data from WEF, UNDP, EQUALMEASURE 2030, about the gender indexes of all selected countries from 1990 till 2020.

One major limitation of this paper is that it deals with binary-men and women as no such kind of separate data is taken and available of other gender. Unfortunately, no institution releases data on socio-economic-political conditions of all gender.

2. Indexes and its Methodologies

2.1 Gender Development Index

Human development is about the realization of human potential, i.e., what people can do and become, and about the freedom they have to exercise real choices in their lives (*United Nation Development Programme, 2007*). It is more than the rise or fall of national income. It is about creating an environment in which people can develop their full potential and lead productive, creative lives in accordance to their needs and interests. The fundamental thing is to build human capabilities. The most basic capabilities for human development are to lead long and healthy lives, to be knowledgeable, to have access to the resources needed for a decent standard of living and to be able to participate in the life of the community (*UNDP, 1994*).

For years countries have traditionally measured their progress primarily based on growth or an increase, in Gross Domestic Product (GDP) per person. However, relying on GDP as an indicator of a country's development has proven to be insufficient. To address this limitation the Human Development Index (HDI) was introduced in 1990 within the UNDP Human Development Report. The HDI takes an approach to evaluate a country's wellbeing by considering three crucial aspects of human development; health, knowledge and a decent standard of living. While the HDI doesn't encompass all dimensions of development it provides a representation by incorporating indicators like life expectancy, education and income. It's important to note that the HDI doesn't account for factors such as participation, gender inequality and poverty rates. Nonetheless the HDI remains a tool for offering a holistic perspective, on overall national development (*UNDP, 2019*).

In 1995, United Nation Development gave two new indices-Gender-related Development Index (GDI) and Gender Empowerment Index (GEM), realizing that the true meaning of human development lies in three major component-1) Equality of opportunity for all people in society, 2) sustainability of such opportunities from one generation to the next 3) Empowerment of people so that they participate and benefit from development processes. The message was-"Human Development, if not engendered, is endangered." (*UNDP, 1995*)

The GDI measures gender gaps in human development achievements by accounting for disparities between women and men in three basic dimensions of human development—health, knowledge and living standards using the same component indicators as in the HDI. It is basically average of equally distributed Indexes of all the three dimensions. GDI is the average of equally distributed index of all three dimensions. The greater the gender disparity in basic capabilities, the lower a country's GDI compared to HDI. The GDI is HDI adjusted for Gender equality (*UNDP, 2009*).

2.2 Women Empowerment Measure

Gender Empowerment Index was first prepared by UNDP in 1995 along with GEM to measure the extent of gender disparities in various countries. GEM was calculated by using 3 dimensions-1) Political Participation and decision making: Female and Male shares in Parliamentary seats, 2) Economic participation and decision making: Female and Male shares of positions as legislators, senior officials and managers; Female and Male shares of professional and technical positions and 3) Power over economic resources: Female and Male estimated earned income. GEM is average of Equally Distributed Equivalent Percentage (EDEP) of all three dimensions (*UNDP, 2009*).

In 1995, India scored 0.226 with 101 out of 116 countries with comparable data for the three dimensions. Norway and Sweden ranked the top, followed by Finland and Denmark indicating the remarkable provision of basic capabilities of

women in Nordic countries and this trend still prevails. Pakistan, Afghanistan and Djibouti got least GEM score in 1995 (*UNDP, 1995*).

2.3 Global Gender Gap Index and its indicators

Global gender gap is published by The World Economic Forum (WEF) every year. It was first published in 2006 and latest is 2020 report (published in 2019). The aim of the GGI, introduced in 2005, is “to be a tool for benchmarking and tracking global gender-based inequalities on economic, political, education- and health based criteria” (*Hausmann et al., 2007*). Therefore, it is an alternative measure to the GDI and GEM – it combines both indices in one and provides additional information on gender equality.

Indicators of sub-indexes are as follows- 1) Economic participation and opportunity- Labour force participation rate (%), Wage equality for similar work, Estimated earned income (PPP, int.\$), Legislators, senior officials and managers (%) and Professional and technical workers (%)

2) Educational Attainment-Literacy rate (%), Enrolment in primary education (%) Enrolment in secondary education (%) and Enrolment in tertiary education (%) 3) Health and Survival Sex ratio at birth (%), Healthy life expectancy (years); 4) Political Empowerment-Women in parliament (%), Women in ministerial positions (%) and Years with female head of state (last 50), share of tenure years (*WEF,2020*).

2.4 Gender Inequality Index

The Gender Inequality Index (GII) is an index for measurement of gender disparity that was introduced in the 2010 on the Human Development Report 20th anniversary edition by the United Nations Development Programme (UNDP). The value of GII range between 0 and 1, with 0 being 0 per cent inequality, indicating women fare equally in comparison to men and 1 being 100 per cent inequality, indicating women fare poorly in comparison to men.

GII is made taken into consideration of three sub index-a) Reproductive Health and b) Empowerment and c) labor participation. Indicators used are 1) Reproductive Health-Maternal Mortality ratio and Adolescent Fertility Rate, 2) Empowerment- Share of Parliamentary seats and Higher educational attainment by each sex 3) Labor Participation-women’s participation in workforce. This dimension accounts for paid work, unpaid work, and actively looking for work.

2.5 Social Institution and Gender Index (SIGI)-OECD

The Organization for Economic Co-operation and Development (OECD) Development Centre’s Social Institutions and Gender Index (SIGI) is a cross-country measure of discrimination against women in social institutions (formal and informal laws, social norms, and practices) across 180 countries. The SIGI was first launched in 2009, and then updated in 2012 and 2014. The fourth edition of the SIGI was launched in December 2018.

Formal and informal laws, attitudes and practices that restrict women’s and girls’ access to rights, justice and empowerment opportunities are the discriminatory social institutions. These are captured in a multi-faceted approach by SIGI’s variables that combine qualitative and quantitative data, taking into account both the de jure and de facto discrimination of social institutions, through information on laws, attitudes and practices. The variables span all stages of a woman’s life in order to show how discriminatory social institutions can interlock and bind them into cycles of poverty and disempowerment (OECD, 2020)

Discriminatory social institutions intersect across all stages of girls’ and women’s life, restricting their access to justice, rights and empowerment opportunities and undermining their agency and decision-making authority over their life choices. As underlying drivers of gender inequalities, discriminatory social institutions perpetuate gender gaps in development areas, such as education, employment and health, and hinder progress towards rights-based social transformation that benefits both women and men.

The SIGI covers four dimensions of discriminatory social institutions, spanning major socio-economic areas that affect women’s lives:

- Discrimination in the family;
- Restricted physical integrity;
- Restricted access to productive and financial resources; and
- Restricted civil liberties.

2.6 Sustainable Development Goals Gender Index

The Sustainable Development Goals Gender Index has been developed by UK-based Equal Measures 2030, a joint effort of regional and global organizations including African Women's Development and Communication Network, Asian-Pacific Resource and Research Centre for Women, Bill and Melinda Gates Foundation, and International Women's Health Coalition. Equal Measure 2030 released report “Harnessing the Power of Data for Gender Equality-Introducing the 2019 EM2030 SDG Gender Index” According to this report 2.1 billion girls and women live in countries that won't reach key gender targets by 2030 at the current pace. **The 2019 SDG Gender Index finds that, with just 11 years to go until 2030, nearly 40 per cent of the world's girls and women – 1.4 billion – live in countries failing on gender equality.** Another 1.4 billion live in countries that “barely pass”. Even the highest-scoring countries have more to do, particularly on complex issues such as climate change, gender budgeting and public services, equal representation in powerful positions, gender pay gaps, and gender-based violence. No country in the world has reached the “last mile” on gender equality.

The SDG Gender Index 2019 provides a snapshot of where the world stands, right now, linked to the vision of gender equality set forth by the 2030 agenda. It measures the state of gender equality aligned to 14 of the 17 Sustainable Development Goals (SDGs) in 129 countries in five regions and 51 issues ranging from health, gender-based violence, climate change, decent work and others. Overall, the index finds that, across all the goals and indicators studied, no country has fully achieved the promise of gender equality.

4. Discussion

Table 2.2: Gender Development Index of Selected Countries (1995-2020)

Countries	1995(#)	2000(#)	2005(#)	2009**	2015(*)	2020(*)
Norway	0.911 (3)	0.932 (2)	0.960 (1)	0.961 (2)	0.996 (1)	0.990 (1)
Iceland	-	0.925 (5)	0.953 (2)	0.959 (3)	0.975 (1)	0.969 (2)
US	0.901 (5)	0.927 (4)	0.942 (8)	0.942 (19)	0.995 (1)	0.994 (2)
Japan	0.896 (8)	0.916 (9)	0.937 (14)	0.945 (14)	0.961(2)	0.978 (1)
India	0.401 (99)	0.545 (108)	0.586 (98)	0.594 (114)	0.795(5)	0.820(5)
Sri Lanka	0.660 (58)	0.727 (68)	0.747 (66)	0.756 (83)	0.948(3)	0.955 (2)
China	0.528 (71)	0.700 (79)	0.754 (64)	0.770 (75)	0.943(3)	0.957(2)
Bangladesh	0.334 (108)	0.441 (121)	0.514 (105)	0.536 (123)	0.917(4)	0.904(4)
Pakistan	0.360 (103)	0.489 (115)	0.508 (107)	0.532 (124)	0.726 (5)	0.745(5)
Nepal	0.310 (115)	0.449 (119)	0.511 (106)	0.545 (119)	0.908(4)	0.933 (3)

Source: Human Development Reports, United Nation Development Programme (UNDP), USA,

Note: #Ranks in Parenthesis **no calculation and release of data on GDI in 2010

*in 2015 and 2020, Groups are shown in parenthesis. Countries are categorized into five groups.

Gender development index is shown in Table 2.2 during 1995, 2000, 2005, 2009, 2015 and 2020. GDI has increased from 1995 to 2020 for every country indicating rise in basic human capabilities all over the world.

India index is showing a significant rising trend in comparison with other nations. Though ranking of India is not appreciable and is dismal when compared with Asian countries, India ranks better than its neighbouring countries except Sri Lanka and China in all time period. India needs huge measures to improve as it is way below the world rank. Countries which ranked highest in list have very high GDI and HDI as to compare to Asian countries in question, even though the gap has significantly reduced. India's score almost got double during last 25 years from 1995 to 2020. India still needs to work hard to get a better position on this list. Bangladesh and Nepal has improved significantly among all neighboring countries of India much better than India itself. Score of India and World according to GDI and its indicators are given in Table 2.3 for the year 2015 and 2010.

Table 2.3 GDI and its Indicators of India and World (2015 and 2020)

GDI indicators	India 2015	India 2020	World 2015	World 2020
Life Expectancy at Birth (years)- Female	69.5	71.0	73.7	75.0

Life Expectancy at Birth (years)Male	66.6	68.5	69.5	70.6	
Estimated Years of Schooling-Female	11.3	12.6	12.2	12.7	
Estimated Years of Schooling-Male	11.8	11.7	12.4	12.7	
Mean Years of Schooling-Female	3.6	5.4	6.2	8.1	
Mean Years of Schooling-Male	7.2	8.7	7.9	9.2	
Estimated Gross National Income per Capita-Female	2116	2331	10296	12063	
Estimated Gross National Income per Capita-Male	8656	10702	18373	21323	
Gender Development Index	0.795	0.820	0.924	0.943	
Human Development Index-Female	0.525	0.573	0.670	0.714	
Human Development Index-Male	0.660	0.699	0.725	0.757	

Source: Human Development Reports, United Nation Development Programme (UNDP), USA.

After that, India's data were not available due to lack of data resources and in 2010 UNDP end preparing GEM and replaced it with Gender Inequality Index. Later on in 2019, UNDP released some Women Empowerment measures which are given in Table 2.4.

Table 2.4: Women Empowerment Measures of India (2019 & 2020) by UNDP

Women Empowerment Measures	India 2019	India 2020
Reproductive Health and Family Planning		
Antenatal Care coverage, at least one visit	NA	79.3
Proportion of births attended by skilled health personnel	81.4	81.4
Contraceptive prevalence any method	53.5	81.4
Unmet need for family planning	12.9	12.9
Violence against women by intimate partner		
Women married by 18 years	27	27
Violence ever experienced by intimate partner	28.8	28.8
Socio-economic Empowerment		
Share of graduate in science, technology and mathematics programmes at tertiary level, female	27.7	26.9
Share of graduate in science, technology and mathematics programmes in tertiary education, female	43.9	42.7

Female share of employment in senior and middle management	13	13.7
Women with account with any financial institution or with any mobile money service provider	76.6	76.6
Mandatory Paid Maternity Leave	182	182

Source: Human Development Report 2019, United Nation Development Programme (UNDP), USA.

Note: NA-Not available in Human Development Report in 2019.

In its HDR 2019, UNDP also published some major women empowerment measures mentioned in Table 2.4 pertaining to reproductive health, violence against women and socio-economic empowerment of women (UNDP, 2019).

In India, 81.4 percent of births are attended by skilled health professional; it means 18.6 remain unattended or performed by unprofessional. Only 53.5 percent of women use contraceptive of any method. Women in India have very less access to reproductive rights and the decision to have and when to have baby generally decided by in laws and husband. 12.9 percent of women which are fertile (15-49) have an unmet need if they want to have no birth or if they want postpone the pregnancy.

Child marriage is a prevalent in India and it is a considered as a part of their culture in many societies. As a result, 27 per cent of women get married before the age of 18 years which is quite high as compared to other countries. It is considered as violence against women because it results in loss of women's bodily autonomy, educational opportunities and financial independence and makes them more vulnerable to violence.

Women's enrolment in higher education plays a very vital role for their socio economic empowerment. Girl's dropout rate is very high in India- means on every next other step of the education, a certain proportion of girls leaves the education due to many social, economic reasons and most of the times, due to gender prejudices. Less than half of women who are graduation science, technology and mathematics are in tertiary education (UNDP, 2019).

Only 13 per cent of women are employed at senior and middle management level which is very low and indicates the gender equality present in Indian society. It further explains the working of nexus of 'sticky floor', 'glass ceiling' and 'biased barriers' against women to attain empowerment.

Financial literacy among women is less in India and women have less access to banking facilities. 76.6 per cent of women have account in any financial institution or mobile money service provider which were only 26.6 in 2011 as reported in Human Development Report for the year 2011. From 2011 to 2018, women access to banking facilities has raised significantly (UNDP, 2019).

Table 2.5: Global Gender Gap Index (GGGI) and its Sub Indexes of India and World (2006 and 2020)

Sub Index/ Year	India (2006)		India (2020)		World (2020)
	Rank	Score	Rank	Score	Score
Economic participation and opportunity	110	0.397	149	0.354	0.582
Educational attainment	102	0.819	112	0.962	0.957
Health and survival	103	0.962	150	0.944	0.958
Political empowerment	20	0.227	18	0.411	0.241
India	98	0.601	112	0.668	0.685

Source: The Global Gender Gap Report 2006 and 2020, World Economic Forum(WEF), Switzerland.

Table 2.5 exhibits India's rank and score of all the four sub indexes of GGI in the years 2006 and 2020. These sub-indexes are a good depiction of plight of women in any country, this is the reason GGI is widely measure of gender inequality. India's score improved on educational attainment and political empowerment and declined on economic participation and health and survival. This is a matter of despair to note that in spite of improved score over the year 2006 to 2020, ranks of India fell remarkably. Its score has decreased on educational attainment showing that India needs to pick up the pace in order to win the race among all countries. Among all factors India improved ranking only on Political empowerment. The overall development in ranking can be seen as India's Ranking improved from 98 to 112 (2006 -2012) (WEF, 2020).

Table 2.6: Gender Global Gap Index (GGGI) of Selected Countries (2006-2020)

Countries	2006	2010	2015	2020
Norway	0.799(2)	0.840 (2)	0.850 (2)	0.842 (2)
Iceland	0.7813(4)	0.849 (1)	0.881 (1)	0.877 (1)
US	0.7042 (23)	0.7411 (19)	0.740 (28)	0.724 (53)
Japan	0.644 (79)	0.652 (94)	0.670 (101)	0.652 (121)
India	0.601 (98)	0.615 (112)	0.664 (108)	0.668 (112)
Sri lanka	0.719 (13)	0.745 (16)	0.686 (84)	0.680 (102)
China	0.656 (63)	0.688 (61)	0.682 (91)	0.676 (106)
Bangladesh	0.626 (91)	0.670 (82)	0.704 (64)	0.726 (50)
Pakistan	0.543 (112)	0.546 (132)	0.559 (144)	0.564 (151)
Nepal	0.547 (111)	0.608 (115)	0.658 (110)	0.680 (101)

Source: Global Gender Gap Reports, World Economic Forum(WEF), Switzerland.

GGI of India and other specific countries for the year 2006, 2010, 2015 and 2020 is displayed in the table 2.6. India has dropped in ranking from 2006 to 2020 with 112 rank out of total 153 countries (taken for preparing this index) but in terms of score India has improved showing that condition has improved. India is far behind the race when compared to other countries' improvement. Comparing with Asian countries India is better than only Pakistan and is running behind all others. India needs to increase score by 0.209 points to match number one ranking. Countries like Iceland, Bangladesh & Norway has done well in comparison with India.

WEF (GGGI Report 2020) states that Gender gap can be reduced by following ways-

- 1) Increasing female labour force participation broadly and in selected sectors
 - 2) Increasing the number of women in leadership positions
 - 3) Closing gaps in wage and remuneration
 - 4) Building parity in emerging high-demand skills and jobs.
- Each country needs to work on these through country specific action plan.

Table 2.7: Gender Inequality Index and its indicators of India and World (2010-2020)

Indicator (Time Period)	India 2010	India 2015	India 2020	World 2010	World 2015	World 2020
Reproductive Health						
Maternal Mortality Ratio	450	190	133	273	210	204
Adolescent Fertility rate	68.1	32.8	13.2	53.7	47.4	43.3
Empowerment						
Share of seats in parliament	9.2	12.2	13.5	16.2	21.8	24.6

Population with at least some secondary education-Male	50.9	56.6	47	61.7	65.4	68.3
Population with at least some secondary education-Female	26.6	27	27.7	51.6	54.5	61.0
Labor Market Participation						
Labor Force Participation-Female	35.7	27	20.5	56.8	50.3	47.2
Labor Force Participation-Male	84.5	79.9	76.1	82.6	76.7	74.2
Gender Inequality Index	0.748 (122)	0.563 (130)	0.488 (123)	0.560	0.449	0.436

Source: Human Development Report 2019, United Nation Development Programme(UNDP), USA

Maternal death or maternal mortality is defined by the World Health Organization (WHO) as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes." The maternal mortality ratio (MMR) is the ratio of the number of maternal deaths during a given time period per 100,000 live births during the same time-period. In India 174 die during her pregnancy related causes per 100,000 live births. In India, MMR is 174 which are lower than world average.

Adolescent birth rate: Number of births to women ages 15–19 per 1,000 women ages 15–19. As child marriage is very rampant, adolescent birth rate is high i.e 13 per 1000 women. World figure is more alarming than this.

Share of seats in parliament: Proportion of seats held by women in the national parliament expressed as a percentage of total seats. For countries with a bicameral legislative system, the share of seats is calculated based on both houses. Political representation of women is very low in India, although it has increased over the period of time due to many changes in government policies, laws and awareness among women. Only 11.7 per cent of total seats are occupied by women candidate in the year 2018 which is almost half than that of world.

Population with at least some secondary education: Percentage of the population ages 25 and older that has reached (but not necessarily completed) a secondary level of education. Enrolment in higher education has multiple impacts on empowerment of women. Only 39 per cent of women are getting secondary level of education in India as compared to 71.2 per cent all over the world. For men the figure is much better, 63.5 per cent are studying at secondary level. It is slightly more than the world figure.

Labour force participation rate: Proportion of the working-age population (ages 15 and older) that engages in the labour market, either by working or actively looking for work, expressed as a percentage of the working-age population. In India, only 23 per cent is a part of labor force which is very low as compared to men (78.6 per cent). Female participation is 1/3rd than that of male. India's position at Global level in Global inequality index is given in table 2.8 for the year 2010, 2015 and 2020.

Table 2.8: Gender Inequality Index of Selected Countries (2010-2020)

Countries	2010	2015	2020
Norway	0.234 (5)	0.067 (9)	0.045 (2)
Iceland	0.279 (13)	0.087 (12)	0.058 (9)
US	0.400 (37)	0.280 (55)	0.204 (46)
Japan	0.273 (12)	0.133 (26)	0.094(24)
India	0.748 (122)	0.563 (130)	0.488 (123)
Sri lanka	0.599 (72)	0.370 (72)	0.401 (90)
China	0.405 (38)	0.191 (40)	0.168(39)
Bangladesh	0.734 (116)	0.503 (111)	0.537 (133)
Pakistan	0.721 (112)	0.536 (121)	0.538 (135)
Nepal	0.716 (110)	0.489 (109)	0.452 (110)

Source: Human Development Report 2019, United Nation Development Programme(UNDP), USA

Norway is leading with rank 1 and India is far behind it lagging by 0.457 points. India is doing better than Bangladesh, Pakistan and Nepal when its global rank is compared with neighboring countries. India has made slight progress from 1995 to 2018. India would require concentrated efforts to fill this huge inequality. Sri Lanka & Nepal has made to good ranking despite having less population in comparison to India (Table 2.8).

Table 2.9: Social Institution and Gender Index(SIGI) and its indicators of India (2014 and 2019)

S N	Indicators-	2014(%)	2019 (%)
1	Discrimination in the family	64	47
2	Son Bias	54	-
3	Restricted Physical Integrity	37	25
4	Restricted Access to Productive and Financial Resources	59	37
5	Restricted Civil Liberties	35	21

Source: Organization for Economic Co-operation and Development (OECD), France.

In 2014, The SIGI is based on qualitative and quantitative data on discriminatory social institutions for 180 countries. Gender-based discrimination is measured across five dimensions: discriminatory family code, restricted physical integrity, son bias, restricted access to resources and assets, and restricted civil liberties. As a composite Index, the SIGI scores countries on 14 indicators from early marriage, fertility preferences, political voice to land rights and access to financial services.

By taking into account laws, social norms and practices, the SIGI captures the underlying drivers of gender inequality with the aim to provide the data necessary for transformative policy-change. The SIGI is also one of the official data sources for monitoring Sustainable Development Goals (SDG) 5.1.1 “Whether or not legal frameworks are in place to promote, enforce and monitor gender equality and women’s empowerment.”

The SIGI’s variables quantify discriminatory social institutions such as unequal inheritance rights, child marriage, violence against women, and unequal land and property rights. Through its 180 country profiles, country classifications, unique database and its innovative simulator, the SIGI provides a strong evidence base to effectively address the discriminatory social institutions that hold back progress on gender equality and women’s empowerment and allows

policy makers to scope out reform options and assess their likely effects on gender equality in social institutions (*OECD, 2020*).

Table 2.10: Social Institution and Gender Index (SIGI) of Selected Countries (2014 and 2019)

Countries	2014	2019	Change
Norway	-	0.15 (Very Low)	-
United States	-	0.18 (Very Low)	-
Japan	-	0.24 (low)	-
India	0.265 (High)	0.34 (Med)	Improvement
Pakistan	0.30 (High)	0.59 (Very High)	Worsened
Nepal	0.32(High)	0.36 (Medium)	Improvement
Bangladesh	0.39 (High)	0.55 (Very High)	Worsened
Sri Lanka	0.18 (Med)	0.43 (High)	Worsened
China	0.13 (Med)	0.21 (Low)	Improvement

Source: Organization for Economic Co-operation and Development (OECD), France.

Table 2.10 gives SIGI value of some selected countries and their category for the year 2014 and 2019. In 2014, SIGI indexed 108 countries and in 2019, SIGI was computed for 120 countries. Not much can be inferred from the Table 2.10 as data of many countries are not available especially 2014. Data for India and its neighbouring countries are present. India, China and Nepal have shown improvement i.e. lesser discriminatory social institution. SIGI values of Pakistan, Bangladesh and Sri Lanka has got worsened that is, more discriminatory social institution during last five years.

The scores and ranks of India and selected countries for the year 2019 are given in the Table 2.11.

Table 2.11 SDG Gender Index of selected countries in 2019

Countries	Score	Rank
Denmark	89.3	1
US	77.6	28
Norway	87.7	4
UK	82.2	17
Japan	80.6	21
Iceland		
India	56.2	95
China	64.7	74
Sri lanka	62.1	80
Bangladesh	49.2	110
Pakistan	48.9	113
Nepal	52.6	102

Source: Equal Measures 2030, United Kingdom.

India ranked 95 out of 129 countries in a new index with 56.2 score. Amongst the neighbouring countries, Sri Lanka (80) and China(74) has performed better than India. Bangladesh has performed worse with 110 rank and 49.2 score. Denmark has highest score of 89.3 and ranked at first place. There is vast gap between the score of Denmark and India which alerts India to make multiples strides towards reducing gender gap. UK is better performing than US with 17 and 28 respectively. Both have performed much better than India. India is at lower level of gender equality but shows faster recent progress as suggested by report “Bending the curve towards the gender equality by 2030” (*EM2030, 2019*).

3. Conclusion

Number of variables taken to formulate indexes, have also increased and covering most of the dimensions of empowerment i.e. economic, social, political, legal, psychological, cultural etc. for instance, GDI released in 1995 is just an account of disparity between men and women in three basic dimensions of human development, on other hand SDI gender index (first published in 2019) has 51 issues covered in making equality index ranging from health, gender-based violence, climate change, decent work and others.

The paper assessed the state of Women empowerment in India as compared to other countries in the world and among the Indian states and Union territories as well. It can be concluded that measuring ‘Empowerment’ or equality is an

arduous task in itself as it is multidimensional concept. It can be noticed that indices came at later on stages are more inclusive as they include more number of indicators, like SDG gender index has 51 issues covered in making equality index as compared to Gender Development Index(GDI) which is just an account of disparity between men and women in three basic dimensions of human development. To gain empowerment is still a dream for women as India is lacking behind in many dimensions. India is far behind the developed countries which lie in achiever strata of these Indices. Many steps are required to reach the better level to reduced inequality and empowerment women so that, gender gap gets abridged. Among the neighbouring countries, China and Sri Lanka is performing much better than India, other are either same or worse than India's score of indices.

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