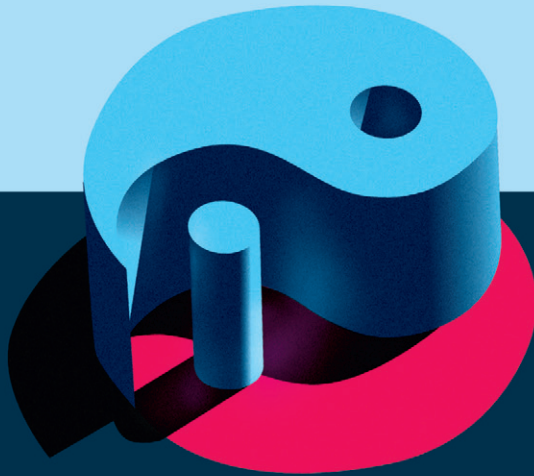


**EDITED BY**

Chandrima Chakraborty  
Dipyaman Pal

**GENDER  
INEQUALITY**  
*and its Implications on*  
**EDUCATION  
AND HEALTH**



**A GLOBAL PERSPECTIVE**

# **Gender Inequality and its Implications on Education and Health**

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# **Gender Inequality and its Implications on Education and Health: A Global Perspective**

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INVESTOR IN PEOPLE

*This book is dedicated to our daughter*  
**SHRINIKA**

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## Foreword

There is a well-known African proverb which says: “If you educate a man, you educate an individual. But if you educate a woman, you educate a nation.” This can be extended to areas beyond education, such as healthcare, among others. Unfortunately, due to discrimination and other social factors, huge inequalities in gender exist in many countries including India in education, in healthcare, in the labor market, and so on. Purely from an economic point of view, it is highly inefficient as women constitute nearly half of the total population: gross domestic product can be significantly increased if such inequalities are eliminated. The ethical dimension of the problem is even more of concern. The consequences of such inequalities also often have devastating effects on women and young girls in terms of malnutrition and morbidity. A clear manifestation of that can be found in the adverse female-to-male ratios in many South Asian countries.

In the present book, Dr Chandrima Chakraborty, a faculty member in the Department of Economics at Vidyasagar University, India, and Dr Dipyaman Pal, a faculty member at Bethune College, India, have collected 23 research articles on this topic. Most of the contributors are established academics, but there are also some doctoral students among the contributors. The geographic coverage of the contributions is also impressive with contributions from Asia, Australia, Africa, and Europe. The studies included also cover the above continents. The geographic coverage would allow researchers and policymakers to compare different country experiences, and then to see if success in one country can help to formulate policies in other countries. As one would expect, most of the contributions are on gender inequalities in education and in healthcare, but other areas of concern such as gender ratio in population are also present.

This book project must have been painstakingly arduous and challenging because of the complex nature of the broad problem. I congratulate the editors for being successful in the project. They have done a great service to the profession by completing this project.

To summarize, the book is on an extremely important subject, which should be attractive to any scholar and policymaker interested in the issue of gender inequality in emerging countries, and it should be a supplementary reading in any undergraduate and graduate course in development economics.

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With extensive hard work on the stages from submission of the book proposal to final submission of the proposed book titled *Gender Inequality and Its Implications on Education and Health: A Global Perspective*, it is an abundant pleasure for the editors as well as the chapter contributors that the book is now published.

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Although all care has been taken, no one other than us, as the editor, discloses to remain entirely responsible for any errors that still stay behind this book.

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Dipyaman Pal  
The Editors

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# Introduction

*Chandrima Chakraborty and Dipyaman Pal*

Every child deserves to reach her or his full potential, but gender inequalities in their lives and in the lives of those who care for them hinder this reality. Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous, and sustainable world. Gender equality and empowerment, Goal 5, is one of the Sustainable Development Goals (SDGs), and all the SDGs depend on the achievement of Goal 5. Women across the world continue to suffer from gender inequality, including child and forced marriage, gender-based violence, health care, as well as barriers to participation in education and employment. Achieving gender equity globally is crucial to meeting development goals and reducing human suffering.

Education is universally acknowledged to benefit individuals and promote national development. However, educating girls produces many additional socioeconomic gains that benefit entire societies. These benefits include increased economic productivity, higher family incomes, delayed marriages, reduced fertility rates, and improved health and survival rates for infants and children. But women and girls are not regarded as equal in status as compared to their male counterparts. Due to gender disparities, girls are discouraged from acquisition of education and participation in various tasks and activities. Their daily routine activities are based on the rules set by the male members of the household. Education would render an effective contribution in causing a reduction in gender disparities and providing equal rights and opportunities to both men and women.

Women report worse health than men, despite the fact that they live longer. Even excluding reproductive conditions, women have more health problems than men. Health problems that women experience may be minor from a medical viewpoint, but they are not so minor in women's daily lives. Compared with men, women may experience more day-to-day stress associated with socioeconomic disadvantage, such as poorly paying jobs, economic hardship, routine and oppressive work, and low household income, all of which contribute to poor health. There are several examples of gender inequality existing in the world today, e.g., women are forbidden to drive in Saudi Arabia, despite numerous protests, and must rely on their fathers or husbands to get from place to place. While allowed to participate in the army, women are still not permitted to serve in frontline combat in Turkey and Slovakia; this gender inequality persisted in the

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United Kingdom as well. India's recent ruling that rape laws do not apply to married couples clearly illustrates the sexual subjugation and violence to which women remain exposed. Access to education is especially a problem in Afghanistan where groups that oppose female education attack many schools.

This deserves analysis of the gender inequality and its various implications in the perspective of the abovementioned issues across a range of sectors and development concerns such as health, education, governance, Industry, urbanization, climate change, and social justice. In view of the above perspective, this book tries to touch upon a range of issues which may be considered as important as well as critical in the sphere of gender inequality and its various implications in the global context.

There are 23 chapters which are broadly classified into two parts. Part I covers the implications of gender inequality on education and health (Chapters 1–11) and Part II (Chapters 12–23) discusses gender inequality and its implications to other SDGs.

Brief sketch of all the chapters is presented below:

## **1. Section I: Implications of Gender Inequality on Education and Health**

Chapter 1 tries to evaluate the impact of women's agency along with some affirmative actions on child sex ratio (CSR) in India. The role of women's agency is assumed to be significant toward correcting the adverse CSR. However, it is confined to two variables like female literacy rate (FLR) and female work force participation rate (FWFPR). Women agency should take into account women's ability to make effective choices and to transform those choices into desired outcomes. Therefore, in order to explore the effect of some affirmative actions in explaining the variations of CSR across the states in India, three popular schemes, namely, Self Help Group (SHG), Rashtriya Mahila Kosh (RMK), and Kishori Shakti Yojana (KSY), are used in the present analysis. Pooled regression shows that FWFPR has a positive impact on CSR but FLR has a nonlinear relationship with the CSR. It is found that the SHG has positive but the KSY has negative effect on CSR; the other variable like RMK does not play any significant role toward variations of CSR. States showing higher concentration of ST population are found to be conducive to favorable CSR compared to SC population. Per capita net state domestic product (PCNSDP) has a same effect like FLR. This study also finds significant discriminating role (against female child) of major states compared to minor states and UTs. Therefore, the role of women's agency toward improving CSR needs to be highlighted more profoundly in Indian context.

In Chapter 2 the effect of government's health and education expenditures on gender inequality has been examined in the least developed and developing countries. The study covers 24 countries for the period 2010–2017. It has been observed that the government's health expenditures reduce gender inequality, while education expenditures increase gender inequality. This finding indicates

that education expenditures of governments do not reach girls in the least developed and developing countries. However, GDP per capita is the most important factor in reducing gender inequality.

In Chapter 3 the relationship between gender inequalities and percentage of female's overweight and obesity have been estimated. The results show that there is a long-run relationship between these variables. Moreover, it is also found that a decrease in gender inequality influences the increase in the number of females under overweight and obese. In conclusion, the findings of this study reveal that, while elevating the position of women in society may be an important step toward combating the epidemic of overweight and obesity, strategies must also tackle unhealthy habits that promote obesity.

Chapter 4 tries to capture the disparity in expenditure on primary education based on gender among the religious groups (Hindu, Muslim, and Christian) in rural India. The gender gap in education expenditure for a certain demographic group is calculated using the Oaxaca–Blinder decomposition approach. Further, the various household-related factors which might influence the decision of spending on a child's education is tried to be identified using the 75th-level National Sample Survey Office (NSSO) unit-level dataset of July 2017–June 2018 (one academic year) to obtain data on education expenditure and other household factors which play a manifesting role in the gender gap in expenditure on education. The finding suggests that the total differential (log mean boys education expenditure–log mean girls education expenditure) is positive among all religious groups signifying the gender bias in education expenditure. It is also found that the magnitude of the “Unexplained Effect” component is higher compared to the “Explained Effect” component signifying that the treatment of characteristics by students differs by their sex at elementary education. Household size and if household members are employed on a casual basis, then their expenditure on education falls on the other hand income of the household, a household with computer availability and household member engaged in regular wage/salary earning plays a positive role in expenditure on primary education in rural India.

Chapter 5 contributes to the literature by estimating output oriented Technical Efficiency (TE) of Indian higher secondary education for the period 2010–2011 to 2015–2016, using nonparametric Data Envelopment Analysis, for general category states and in the second stage, using the estimated TE scores from the first stage, and the regression analysis establishing the positive impact of the girls' enrollment relative to boys' on the resulting TE and hence the positive role of gender equality in enrollment on enhancing TE. The favorable role of government expenditures on education (as a ratio to aggregate expenditure for the state), proportion of para teachers' and the adverse role of “percentage of schools without girl's toilet,” and “percentage of schools without building,” in determining TE of Indian higher secondary education are evident.

Various feminist theories that have contributed to the understanding of gender are presented in Chapter 6. The important role of the schools and in particular the textbooks in socializing and building learners' understanding of the sociopolitical contexts cannot be negated. Hence, the chapter concludes by analyzing how

gender content and issues are experienced and gets represented in the school curriculum and the textbooks. Many researchers have emphasized the need for gender inclusion to achieve holistic and sustainable development goals. This is important because only with the achievement of social equality can we work toward economic equality.

Chapter 7 highlights two dominant factors leading to gender inequality in country education and employment. Empirical evidence suggests that the gross enrollment of females decreases from the upper primary level of schooling onwards. Moreover, higher education for women has not translated to higher employment post liberalization. India continues to be a country with one of the poorest female work participation ratios. Employment along with education is a key tool to improve the condition of women in our society. The chapter concludes that an integrated approach linking education of women and employment is essential for the reduction of gender inequality.

Gender inequality in terms of education and health in the North Bengal region is examined in Chapter 8 as it can have adverse effects on the overall development in the region. The study relies on the available secondary data on education and health. It is imperative that the authors realize the need to narrow the gender gap for development to be inclusive as investing in women's education and health can contribute to holistic economic growth and development.

Analyses of the status of child health in West Bengal from a multidimensional perspective and disaggregates it on the basis of their gender in order to catch the effect of discrimination persisting in the society is done in Chapter 9. In order to do so, the NFHS unit level data of the latest two rounds are considered. The present study contributes to the existing literature from methodological perspective as well as by formulating a child deprivation index using a multidimensional approach. Together with that, this chapter unearthed the factors influencing the health status of the children based on their gender.

Chapter 10 concludes that the factors pushing a child to dropout become more effective for the eldest sibling. The major reason is the family structure of India as the eldest sibling is expected to be more responsible and look after other younger siblings. Consequently, a certain number of the younger siblings try to follow the elder siblings and discontinue going to school.

Chapter 11 contributes to the literature by establishing the simultaneous dependence between female labor force participation rate (FLFPR) and female health status as measured by female life expectancy (FLE), the negative impact of outdoor air pollution as measured by prevalence of SPM, SO<sub>2</sub>, NO<sub>2</sub> on FLE, and the interaction among different demographic factors in determining both FLFPR and FLE. The interaction effect of air pollution with economic growth and poverty on FLE is negative implying that the partial effect of a change in growth (poverty) depends on air pollution level. Thus reduction in air pollution will increase FLE and hence FLFPR, as the simultaneous positive dependence between FLFPR and FLE is supported. The interaction effect of women's political power and education on rural FLFPR is significant and nonlinear with

positive marginal effect. Thus the partial effect of a change in women's political power on FLFPR will in turn depend on level of education and vice versa. The positive impact of other demographic factors like education, female leader, poverty, and urbanization, on FLFPR, and education, female household head, female leader, sex ratio, and growth on FLE are apparent. However, the household size significantly and negatively affects FLFPR.

## **2. Section II: Gender Inequality and Its Implications to Other SDGs**

Chapter 12 chooses a panel of 25 EEs for a period of 2007–2020 to investigate how gender norms can affect the Female labor force participation (FLFP) and development relationship. Results suggest that EEs are in a stage of development where even if countries are growing at a reasonable rate, FLFP is falling. Further investigation reveals that skewed sex ratio can dampen the impact of development, whereas secondary school enrollment and legislation to protect women from sexual harassment in workplace may foster the effect of development. Thus, policies to encourage parents to invest more on the girl child and providing legal support to women at the workplace can be effective policies to reduce gender inequality.

Chapter 13 underlines that the gender inequality hinders and obstructs global sustainable development and achievement of SDGs. Furthermore, this chapter examines causes of gender inequality as they need to be identified and eliminated to achieve global sustainable development. Women empowerment plays a significant role in solving gender inequality caused problems (e.g., health problems, education inequality, discrimination, crime, violence). Women empowerment achieved through supported gender equality can act as multiplier factor in achieving synergy creation and influence sustainable future. It highlights the influence of women empowerment and gender equality on all three pillars of sustainability. Furthermore, it underlines the importance of women empowerment in all industries and politics for addressing the gender inequality problems. It provides recommendations on how to enhance women empowerment to support achievement of all SDGs. Women empowerment based sustainable development policies can influence achievement of the SDGs. This chapter is expected to be useful to the academics and policymakers focusing on achievement of SDGs, sustainability, and sustainable development.

Chapter 14 analyzes the direction of the relationship between women's empowerment and gender-based violence, or if women's empowerment influences gender-based violence or vice versa. Analysis shows a link between women's empowerment and gender-based violence and a large disparity among states.

The differential effects of social expenditures on males and females are assessed in Chapter 15 by establishing the impact of public expenditures on education and health on gender parity in primary and secondary enrollment and on gender

parity in life expectancy for Nigeria given age dependency ratio, annual population growth rate, and GDP per capita growth rate. It is found that increased social spending on health and education increased female education enrollment which was hitherto lower than male enrollment. Again, increased social expenditure on health and education improved male life expectancy which was hitherto lower than female life expectancy. The importance of increased social expenditure on health and education; gender budgeting and gender-sensitive budgets; and implementation of inclusive growth policies in engendering gender parity in Nigeria were established.

Gender data are the foundation for ensuring gender equality and promoting evidence-based policymaking. It therefore makes a case for gender-related indicators in SDGs 6, 7, 9, 12, 14, 15, and 17 along with expanding the gendered understanding of people-related goals in the areas of education, health, and employment. Moreover, it reiterates the need for gender data collection to move beyond the binary construct of male and female and integrate an intersectional lens. The whole thing is discussed in Chapter 16.

Chapter 17 examined the role of environment and urbanization policies in enhancing gender equality and women empowerment. Furthermore, it investigates causes and consequences of failure in environment and urbanization policies in addressing gender equality and women empowerment. It emphasizes impacts of environment and urbanization policies on health especially on women health and well-being. It further highlights the role of gender equality in achieving healthy and sustainable environment and urbanization policies. Furthermore, this chapter provides recommendations on how to enhance environment and urbanization policies so that they can further support gender equality and women empowerment effectively.

The position and status of women in India in the realm of gender equality, poverty reduction, and social justice as well as the public actions viewed from India's perspectives are focused in Chapter 18. At the same time, it highlights the importance of global actions in an endeavor to establish gender equality, breaking the chain of poverty trap and establishing social justice along with their fallouts in the subsequent years.

Chapter 19 highlights how the narratives of Aboriginal Australian women's discriminatory issues are conveyed and discussed on twitter. In attempting so, this chapter highlighted whether the digital space has contributed to the equality in the society or is it attempting to reassert the existing hegemonic discourses and status in the Australian Community. The materialization and continuation of pandemic have a big toll on everyone's life. Female workers specifically from the unorganized sector faced diversified financial crises during the pandemic phase. These households go through multiple changes in terms of expenditure, loan burden, job uncertainty, etc.

Chapter 20 attempts to understand the changes that take place in terms of health, expenditure, and other associated evolved behavior in lockdown and post lockdown phases in selected rural-based areas of West Bengal. By applying

different statistical tools like regression, *f*-test, and *t*-test, various influencing factors for household expenditure along with the changes in savings behavior have been observed in the chapter. A sudden crisis like Covid-19 has made the selected respondents responsive toward vivid positive lifestyle and attitude changes like financial literacy, savings, crisis management, and so on.

Chapter 21 identifies gender differences by analyzing the levels of sustainable development achieved by Italian regions. The Italian case in fact is very peculiar due to its historical territorial gap between the regions of the North (among the most developed) and those of the Center-South, which still show high gender inequalities. A Gender Sustainable Development Index (GSDI) is constructed through the use of 50 indicators from the Benessere Equo e Sostenibile survey of Istat. The technique used is the stacking method (Landi et al., 2017; Norman, 2010), which was chosen for its high replicability of results. The results show that only 40% of Italian regions have higher levels of female sustainable development than male sustainable development. Moreover, the regions with the worst levels of both female and male sustainable development are located in the Center-South of the country, confirming the strong territorial gap present within the Italian Peninsula.

Whether income inequality has any sort of associations with the crime against women in the states of India have been examined in Chapter 22. The study has observed rising trends of crime rates and per capita incomes across the states in India for the period 2000–2019, and crime rates in the states are positively and significantly correlated with rising inequality in income. There, thus, needs to be policies related to reduction of crime against women and reduction of income inequality. The study thus suggests the interventions of the legislative system, government tax policies toward the rich, public awareness programs, etc. to reduce violence against women.

Chapter 23 focusses on gender inequalities and climate change which are global problems that concern the whole world. Disruptions in natural life, usually due to human activities, lead to climate change over time. Climate change, on the other hand, deepens the already existing gender inequalities. Problems such as water scarcity, natural disasters, lack of access to clean water, and energy shortages are gender-responsive issues that affect women and men in different ways. All these factors cause women to be in an even more disadvantageous position against climate change. One of the policy tools of states in the face of this problem is fiscal solutions. As a fiscal policy tool, government budgets can be used to eliminate the negative effects of climate change on women. This is called gender responsive climate budgeting (GRCB) in the literature. In order to apply GRCB, firstly sex-disaggregated data are required. In addition, institutional structures should be strengthened and strategic plans should be designed in a way that establishes the link between gender and climate change. This process should be carried out in a multistakeholder manner and the resources allocated for the financing of the problems should gain a gender-responsive structure.

The purpose of the book is to raise awareness among stakeholders and institutions, reaching gender equality and inclusiveness, and ensure equal rights for all.

We hope that the book will provide an immense knowledge base to undergraduate and postgraduate students, researchers, and faculty members around the globe related to various subjects such as Economics, Business & Management, Education, Sociology, and Gender Studies, among others. The volume will also be helpful for policymakers, multinationals, and government officials as well as the general readers interested in the field.

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