

Socio-Economic Inequality and Sustainability of Emerging Economies of South Asia

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ABSTRACT

Introduction: Sri Lanka's economic jeopardy, Pakistan's devastating floods, a global disaster in terms of growth, economic slowdown, terrorist outbursts in India, Pakistan, Bangladesh, religious and political turmoil, social challenges, and many more such incidents and facts have made South Asia vulnerable to an unprecedented combination of shocks and distresses. Scars of the COVID-19 pandemic have slowed down growth adding fire to the fuel. Inflation in South Asia, elevation in food and energy prices, trade restrictions, food insecurity in the region, gender inequality, inequitable growth and distribution, unplanned migration amounting to an unprecedented burden on the informal sector, etc. all demand the building of stronger fiscal and monetary policy buffers for strengthening resilience for the sake of South Asian people. **Methodology:** R programming language and grammar of graphics have been used to draw an exploratory overview about the sustainability of emerging economies of South Asia with respect to their socio-economic profiles. World development indicators (WDI), OECD national accounts data files, the ILOSTAT database, and the Global Terrorism Database have been used as data sources. **Results and Discussion:** Data visualization has been used to explore the socio-economic inequality of the emerging nations of South Asia. Maps, Time Series plots, Pie charts, Clustered bar charts have been used to help policymakers plan sustainable enterprises for resilience. **Conclusion:** Policies adopted by these nations towards 'Liberalization, Privatization and Globalization' since the early nineties have witnessed glaring inequalities instead of harnessing the benefits of globalization. India, the largest democracy, reports tremendous social unrest, followed by Pakistan and Sri Lanka, creating a hindrance to their sustainable growth. This is increasing due to dissatisfaction caused by the fall in GDP and consequent income and gender inequality, making the system unable to respond to the causes of good governance.

Keywords: *Socio-Economic Inequality, Gross Domestic Product, World Development Indicators*

Introduction

'South Asian Economies Bounce Back but Face Fragile Recovery'- this was how the World Bank reacted to the question of prospects the economic growth of South Asia

(The World Bank, 2021). Growth of the economy is not only low, but also uneven. Revenue generation is poor mainly due to the factors that millions of workers are employed in informal sector, unemployment rate is alarming and corruption level is mountain high. Job losses, decreasing incomes, gross discrepancies and inequalities, unskilled human capital etc. are some other factors, compelling Hartwig Schafer, World Bank Vice President to comment that “W” are encouraged to see clear signs of an economic rebound in South Asia, but the pandemic is not yet under control and the recovery remains fragile, calling for vigilance,” for the South Asia Region. But this dismal picture challenging the efforts for sustainable growth in South Asia is not pandemic specific, rather it is the consistent feature of South Asian economy.

Sustainability of Emerging Economies of South Asia demand greater investment for revamping their scarce resources, both material and human and for laying a foundation for a more inclusive and resilient growth to fight back against South Asia's deep-seated inequalities and vulnerabilities to the acts of intolerance, aggression, inequitable growth of economy and market etc. Unless governments develop clear policies for social insurance to protect informal workers and marginalized castes and classes of people and can develop a spirit of secularism in governance, equitable and robust recovery in socio-economic growth levels and assurance for sustainability are remote possibilities. All efforts and enterprises for equitable and inclusive socio-economic growth will be futile if regional cooperation is not assured, customs restrictions are not made flexible, health, education, and research are not insured, and corruption issues are not addressed to mobilize resource generation. The purpose of this paper is to provide an exploratory overview of the sustainability of emerging economies in South Asia in light of their socioeconomic inequalities.

Methodology

A framework has been proposed to provide an exploratory overview of the sustainability of emerging economies in South Asia in terms of socioeconomic inequalities.

Data visualisation which is an important component of exploratory data analysis has been beneficial to summarise the main features of the dataset, discover trends or patterns in the dataset, and detect anomalies present in the dataset through iterative visual exploration, which has been used to facilitate insight into complex socio-economic data.

Description of the dataset:

To propose a comprehensive framework for the exploratory overview about the sustainability of emerging economies of South Asia with respect to their socio-economic inequalities following datasets as mentioned in Table 1. have been considered.

These datasets include data about real GDP growth, Annual Gross Domestic Product (GDP), Poverty and Shared Prosperity, People, Environment, Economy, Global Links

and terrorist attacks, gender disparity in the employment sector, the participation of women in decision-making, etc.

Table 1: Datasets

DATASET	LINK
World development indicators (WDI)	https://data.worldbank.org/
OECD national accounts data files	https://data.oecd.org/
International Labour Organisation, ILOSTAT database	https://ilostat.ilo.org/data/
Global Terrorism Database	https://www.start.umd.edu/research-projects/global-terrorism-database-gtd

Proposed framework:

To draw a comparative picture about the sustainability of the emerging economies of South Asia with respect to their socio-economic profiles following framework has been proposed.

i. Ask a question: The process starts with asking a question; how does income inequality, gender inequality and blockage in ‘pipeline’ for women’s participation in decision making create dissatisfaction and increase terrorism in the emerging economies of the South Asian region? The data used to answer this question are accessible, insightful, reliable, and built on the diverse research traditions in the social sciences (Ferster, 2012). Visualisations helped us understand how inequalities in different facets of life create socio-political instability. This study may help the government understand the significance of investing in social sectors to accelerate human development.

ii. Search for information: The data sources used for creating insightful visualisations are reliable and accessible. Open data from World Bank and Global terrorism database were used for its reliability and easy accessibility. The database for the World Bank is a collection of global development indicators that is comprehensive and directed towards attaining sustainable development goals (The World Bank, 2021). The global terrorism database (1970–2019) has been used to comprehend the consequences of inequality in different facets of life (<https://www.start.umd.edu/research-projects/global-terrorism-database-gtd>).

iii. Structuring the data: In this step, the raw data was transformed into processed data to create high quality visualizations. To deal with the missing values, the listwise or case deletion technique was used (Scheffer, 2002). Further, R packages like tidyverse and dplyr were used for structuring the in this study, both quantitative and qualitative data were used from the World Bank’s online web resource and the Global Terrorism Database.

iv. Envision the answer: Envision the answer: In this stage, an attempt has been made to use exploratory data analysis to envision the answer to the research question. The projection of the GDP per capita across the nations on a world map formed the pillar to understand the effect of globalization in terms of income inequality. South Asian regions with diverse socio-demographic cultures report one of the lowest GDPs in the world. The time series plot has helped to give an overview of the trend of GDP growth in the emerging economies of South Asia in the pre-pandemic period. Since a country's development cannot be only measured by its economic growth, an insight about the socio-economic discrimination and about the outlook of the society towards women participation in decision making have been projected by using pie charts. A clustered bar chart has been drawn to unveil the sorry state of gender inequality with a focus on the comparison between the unemployment rate of male and female. This is because there is a nominal variable, i.e., "sex," with two categories (male and female), which has been used to illustrate the differences in the rates of unemployment in these two variables. To draw the conclusion that these societal problems have the potential to increase terrorism because of growing dissatisfaction and mental blockage, a clustered bar chart has been used to illustrate the changing pattern of terrorism for 2017–2019 in the emerging economies of South Asian regions. These comparative overviews have been used to provide an exploratory overview of the sustainability of the emerging economies of South Asia.

v. Represent the visualization: Grammar of graphics has been considered to create a wide range of visualizations. R programming language has been used in this paper for creating the visualisations.

1. Map:

- Information about locations and shapes of geographic features are stored as coordinates and topology.
- Coordinate: geographic coordinate system
- Geometry: lines
- The lowest GDP has been indicated by orange colour and highest by blue. The missing values have been represented by grey colour.

2. Time series plot:

- Statistic: Percentage
- Geometry (geom): Lines
- Coordinate: Cartesian coordinates since data was continuous
- Scales: Linear
- Variable: Independent variable-year, Dependent variable-GDP growth
- Aesthetic/Scale: Different colours for different lines have been used according to the countries with proper labels and legends,

3. Pie chart:

- Statistic: percentage
- Geometry (geom): polygon
- Coordinate: polar
- Aesthetic/Scale: brewer scales have been used to distinguish between different countries with proper labels and legends.

4. Clustered bar chart:

- Statistic: count
- Geometry (geom): bar
- Coordinate: cartesian
- Position: dodge
- Aesthetic/Scale: Different colours have been used for two categories- male and female. Different colours have been used to segregate the categories of type of attack with proper labels and legends.

vi. Tell a story: In this era of globalization, the upsurge of terrorism indicates a complex story, making it mandatory for policymakers to formulate policies to increase the level of satisfaction of the people. The indicators used to understand the growth in terrorism highlight those countries with an equitable distribution of resources; countries with a lesser amount of inequality are in a better condition with respect to the frequent occurrence of political turmoil and instability. Although Sri Lanka has proven that feminine leadership helps build relationships and social bonding, which may be considered one of the chief reasons for the low occurrence of terrorist activities, income and gender inequality remain critical problems in this region. It can also be argued that the market of Sri Lanka is not as lucrative as those of India and Pakistan; the possibilities of cross-cultural conflicts are limited as compared with the scenario of Geographically, Sri Lanka is in an advantageous position. The strategic importance of India, clubbed with its own indigenous limitations, has made her more vulnerable than others as regards outbreaks of terrorist activities. The political environment of the country and the quality of life of the people are important parameters to measure the rate of human development, which in turn points towards the success or failure of the policy making system of a country. No single criterion can explain the cause of social unrest, nor can there be a generalized derivation applicable to every nation, irrespective of their specialties.

Results and Discussion

The advent of globalization across the globe has brought about phenomenal changes in the socio-economic scenario in all parts of the globe. Aggression of market economy and transformation of citizens into customers/clients have clubbed together with the

factors of increased inequality in major facets of life of the common people. In 1980s, US president Ronald Reagan and British Prime Minister Margret Thatcher made the practical application of New Rights Philosophy, activating the Robert Nozick's (1974) concept of 'minimal State or state as night watchman'. Random outsourcing, public choice, free competition, and the managerial state all helped increase GDP, but at the same time they increased gaps among the regions, among the nations, and among the segments of population, which is evident from the GDP per capita map.



Figure 1: GDP per capita across the world, 2018

The map displays the GDP per capita of different regions with different socio-cultural diversity. The data retrieved from World Development Indicators shows that the GDP per capita projections of European, South Asian, and African regions are in different states of development; there is every possibility for the people of the deprived regions to suffer and to get depressed due to relative deprivation. Moreover, Global Multidimensional Poverty Index (MPI) report, 2018 released by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative (OPHI) projects a complex picture of poverty in South Asian region, where almost 41% (Global Multidimensional Poverty Index (MPI),2018) of the people are sucked into this black hole of relative deprivation mainly due to extreme concentration of wealth in the hands of privileged .This has instigated the researcher to explore how income inequality, gender inequality, and blockages in 'pipeline' for women's participation in managerial posts, i.e., in decision-making and execution, nurture social imbalance, provoking some sections of the unprivileged to get trapped and create social unrest, and how challenges are mounted against all attempts to ensure the sustainability of the enterprises for socio-economic growth.

South Asia is rich in socio-demographic diversities. Following the Great Recession of

2008, its economy began to enter a new phase. Pandemic in 2020, however, added new variety. Therefore, the period of 2008–2019 has been chosen to seek an answer to the research question stated above with respect to South Asia.

An overview of the economic condition of emerging economies in South Asia is visible from the following graph, drawn based on the data available from the World Bank national accounts and OECD national accounts data file on GDP. It forecasts the scenario for South Asia from 2008 to 2019

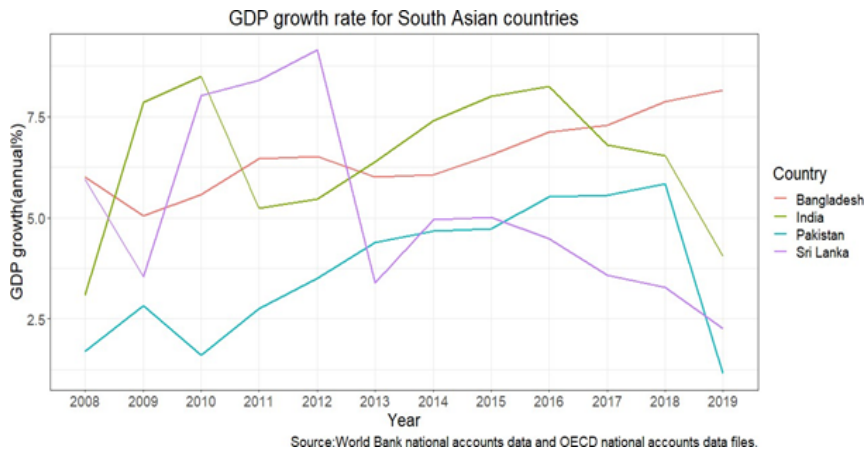


Figure 2: Trend of GDP growth rate in South Asia

This visualization portrays that after the 'Great Recession' (Christiano, Eichenbaum & Trabandt, 2015) in 2008, India's economy started well to harness its potential, and in 2016, the figure was close to 8.1% per annum, followed by Sri Lanka. Bangladesh, however, witness's stagnancy, although its growth in GDP over the decade appears to be consistent. But Sri Lanka, India, Pakistan is found to be coming down the lane since 2018, which makes it mandatory for them to think more for political stability, consolidation of democracy and consistency of its market policies to attract FDI (Foreign Direct Investment).

The two South Asian economists, Mahbub-ul-Haq and Amartya Sen, realised that a country's level of development could not be measured only in terms of its economic growth. Their emphasis was on the need to assure equity, sustainability, productivity, and empowerment. Based on their observations, certain parameters can be considered for discussion to focus on the issues related to social imbalance and consequent social unrest, making attempts to develop a country's socio-economic standards futile and non-sustainable.

1. Concentration of wealth and consequent income inequality:

Concentration of wealth in the hands of a few is evident from the data presented by

World Development Indicator database over the period 2010-2019. Data is being referred to the most recent year available during the period specified.

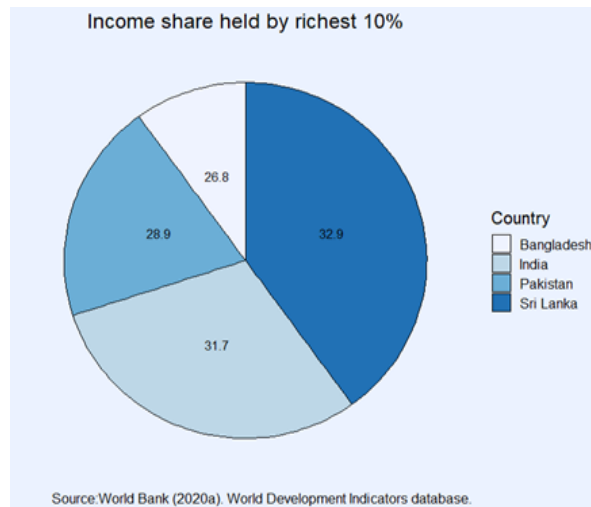


Figure 3: Concentration of Wealth of the Emerging Economies of South Asia

This figure portrays that 32.9% and 31.7% of the income is being shared by the richest 10% in Sri Lanka and India respectively, projecting the highest concentration of wealth in the hands of few, creating perpetual crisis for oppressed minorities, generating venues for exploitation of disadvantaged populations; this leaves the common man with nothing but dissatisfaction, frustration, leading to erosion of societal values and hinders consistent and overall growth of economy. Bangladesh and Pakistan are lagging not far behind in this respect. Despite tremendous efforts taken for development, 'ultimately, due to small capital transfer from developed to the developing countries, globalization widened inequalities (Shahzad, 2015).

1. Labour force participation and employment in South Asia with special focus to gender disparity

In the South Asian region, the lower rate of labour force participation and Employment-to – participation ratio suggest a dismal picture, as compared with the world average, which is a matter of concern for policymakers. This can be identified as a potential cause for the rising trend of social imbalance and social unrest turning into violent outbursts in the region.

"According to the ILO's new estimation, based on improved data sets and methodologies, the global unemployment rate is expected to fall slightly to 5.5 percent in 2018 (from 5.6 percent in 2017). However, with a growing number of people entering the labour market to seek employment, the total number of unemployed is expected to remain stable in 2018" (Elder,2018).

Socio-Economic Inequality and Sustainability

This story of unemployment becomes more worrisome when it's blended with gender inequality. "Around the world, finding a job is much tougher for women than it is for men. When women are employed, they tend to work in low-quality jobs in vulnerable conditions..." (Molina-Plaza & Allani, 2020).

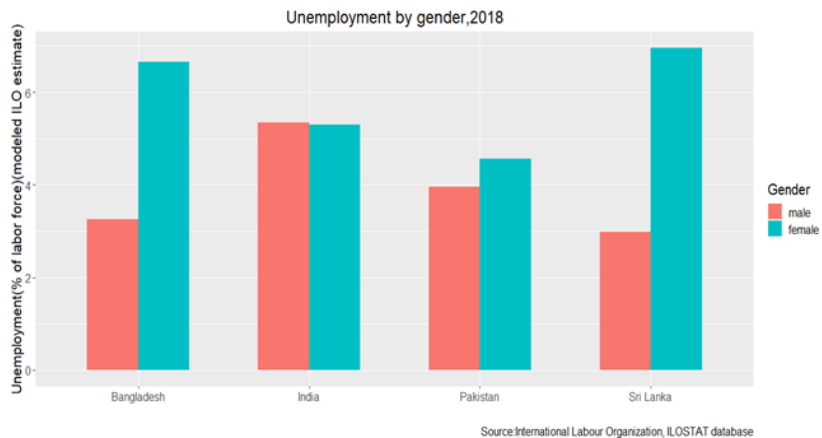


Figure 4: Unemployment: gender disparity

This visualisation depicts gender inequality in the employment sector in South Asia's emerging economies in 2018. It is evident from the data presented by the International Labour Organization database that there is a gap in the rate of employment between the male and female labour force. Diminishing trend in GDP serves as a potential reason for unemployment and gender disparity. Gender disparities are found to be lowest in India, where female and male unemployment rates (% of labour force) are 5.30% and 5.34%, respectively, and highest in Sri Lanka.

1. Participation of women in decision making:

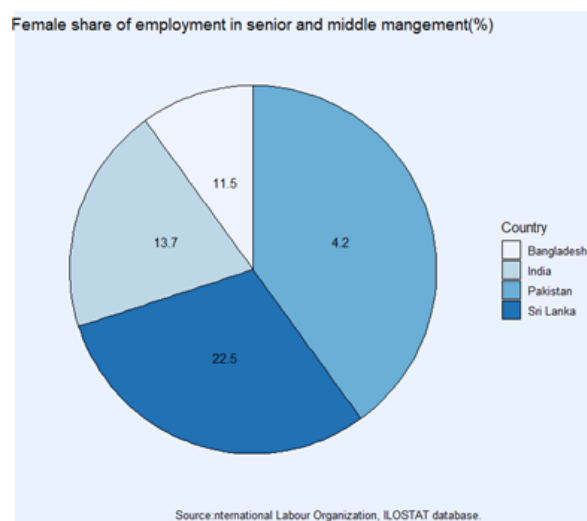


Figure 5: Female share of employment in senior and middle management (%)

This visualisation depicts a stumbling block in the "pipeline" for women's participation in managerial positions. It can be witnessed from the data taken from the International Labour Organization database for the year 2018 that the female share of employment in managerial posts is highest in Sri Lanka, followed by India and Bangladesh. The female share of employment in managerial posts can be treated as a vital indicator of women's empowerment and a change in society's outlook towards a progression of democracy and good governance.

If policy making system nurtures gender discrimination, if women are found mainly in vulnerable jobs and not in managerial positions, economic growth and social empowerment are bound to be constrained.

Terrorism as an outcome of socio-economic imbalance

Terrorism is considered a social phenomenon. Social conditions enable the causes of terrorism. Feelings of relative deprivation, inequality, poverty, skewed gender balance and gender disparity in respect to the lower participation of women in decision-making systems, market rivalries, cross-cultural conflicts in multicultural societies, and the failure of governments to address the problems of the people are some of the major causes of terrorism. Poor societies with social imbalance and countries in a state of democratic transition are not only exposed to the risk of terrorist attacks but also use it as a tool to target their neighbours.

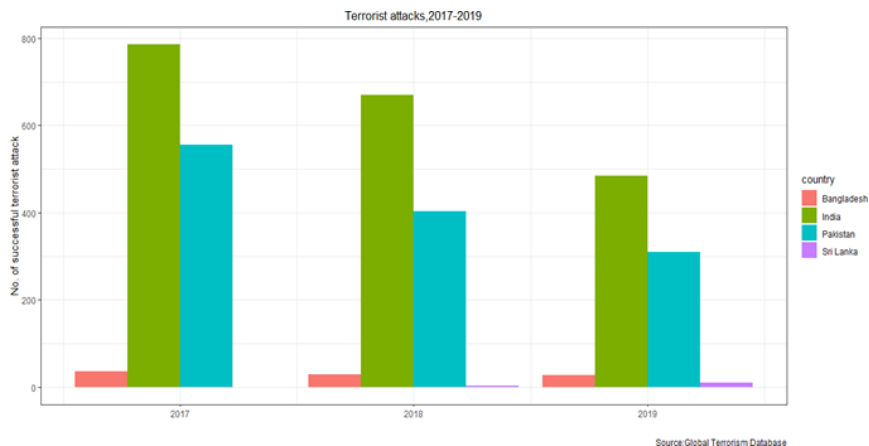


Figure 6: Terrorist attacks in the emerging economies of South Asia (2017-2019)

Based on data from the Global Terrorism Database, this visualisation depicts successful terrorist attacks in South Asian emerging nations from 2017 to 2019.

India, the world's largest democracy, reports tremendous social unrest. This could be a result of growing unemployment and income inequality. Although this is a complex

picture since India's Hegemony in the international system has the potential to make it vulnerable to terrorist attacks. This compels the conclude that terrorism as a social construct is a backlash against globalisation and modernisation.

Pakistan reports second highest terrorist attacks. The female share of employment in senior and middle management is just 4.2%, making the system unable to respond to the causes of good governance.

Terrorist attacks are increasing in Sri Lanka due to growing dissatisfaction caused by the fall in GDP and consequent income and gender inequality.

Bangladesh seems to be in a fairer position in terms of social unrest, although the glaring picture of income and gender inequality of Bangladesh cannot be overlooked.

Policies adopted by these nations towards 'Liberalization, Privatization and Globalization' since early nineties have made these economies witness tremendous reforms, coupled with a revolution in communication technology, to reap the benefits of globalisation but the glaring inequalities instead of harnessing the benefits of globalisation have multiplied the challenges for the governments of these nations. This is a high time to unveil the realities for the sake of better nation-building and the sustenance of human values.

Conclusion

Economic crises are affecting all South Asian countries bitterly, but some are doing better in respect to sustainable enterprises for recovery.

Policies adopted by these nations towards 'Liberalization, Privatization and Globalization' since early nineties have made these economies witness tremendous reforms, coupled with a revolution in communication technology, to reap the benefits of globalisation but the glaring inequalities instead of harnessing the benefits of globalisation have multiplied the challenges for the governments of these nations. India, the world's largest democracy, reports tremendous social unrest since India's hegemony in the international system has the potential to make it vulnerable to terrorist attacks. It is evident that Pakistan reports the second highest number of terrorist attacks, and terrorist attacks are increasing in Sri Lanka due to growing dissatisfaction caused by the fall in GDP and consequent income and gender inequality, making the system unable to respond to the causes of good governance.

Perpetual crisis for oppressed minorities leading to dissatisfaction, frustration and erosion of societal values hinders sustainable growth of emerging economies of South Asia. Strong policy framing and its implementation by unbiased, coherent, and honest governments can bring about changes in the long run. In order to cure society of this deadly social evil, they should know its causes, consequences, and remedies.

Ethical Implication

There is an increasing importance of practicing ethical data visualisation to address explicit and implicit biases in our research. As our datasets have been taken from a reliable source, it can be readily assumed that our visualisation results are free from bias as far as practicable. Although, due to the complexity of the research topic, it is inevitable that some bias has crept into the result. The corruption index, leadership crisis, ethnic cleavages, etc. have also been overlooked in this study due to its limited scope, though they are potential reasons for social unrest. Biased projection of the visualisation will harm society, while some opportunist groups will benefit. Since then, entire globes have become susceptible to the incidence of civil war and terrorism.

Acknowledgment

The author is thankful for kind support from Netali Nagar College management for supporting and encouragement to complete the present article

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