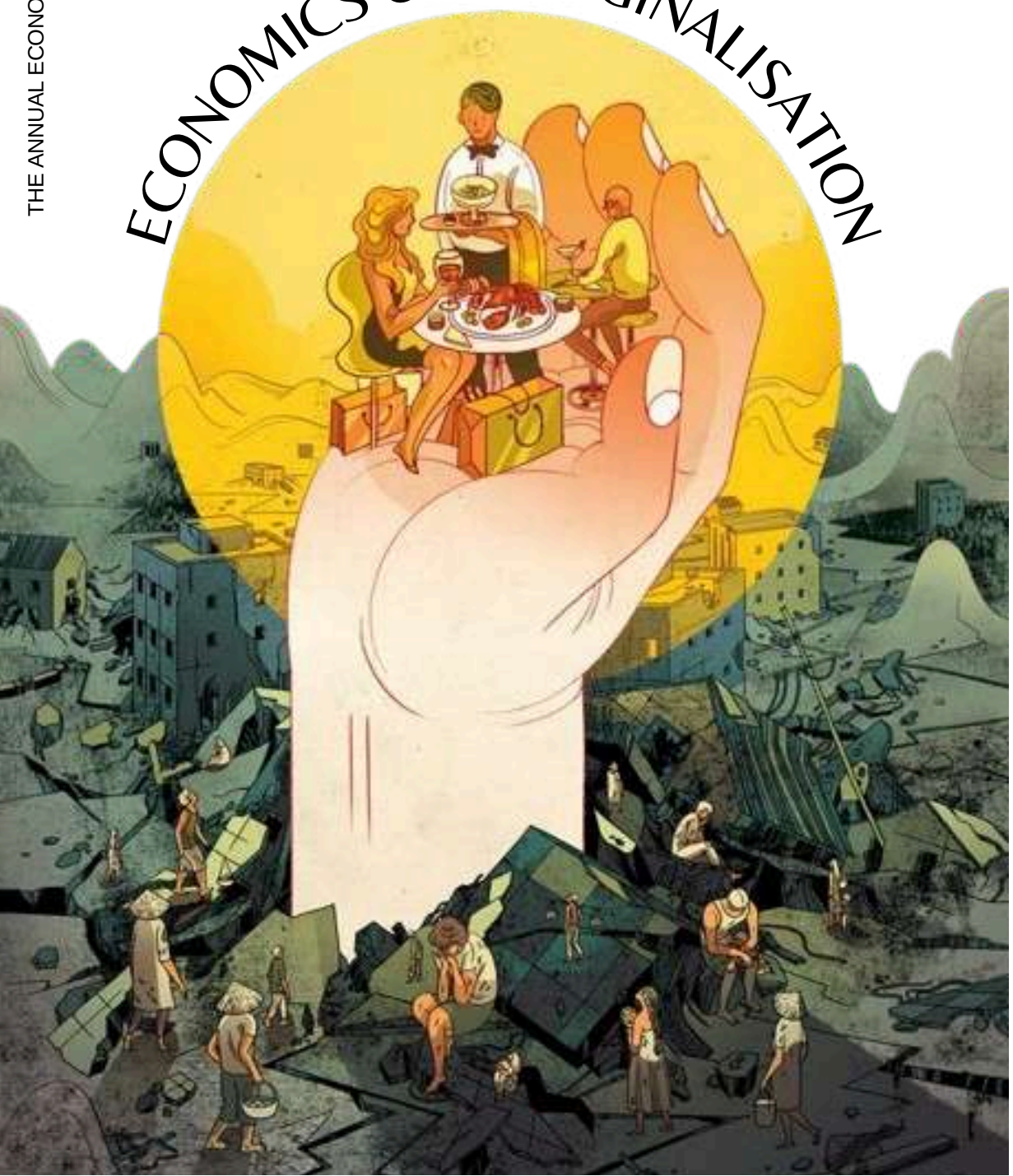
DAULAT RAM COLLEGE
UNIVERSITY OF DELHI

DEPARTMENT OF
ECONOMICS

THE ANNUAL ECONOMIC OUTLOOK | ISSUE 12 | 2024-2025

OPTIMA

ECONOMICS OF MARGINALISATION



As the world evolves so does the various economies. But as we marvel in economic growth we should realise that economics is much more than calculating the GDP of countries. There are real faces behind the numbers whose voices deserve to be heard. We do not have to be just another brick in the wall but rather strive consistently to achieve economic growth which is equitable.

28 Editorials

2 Interviews

1 Vision

PRINCIPAL'S MESSAGE

I am delighted to present the 12th edition of Optima, the Annual Economic Outlook of Daulat Ram College. This edition, centered around the theme Economics of Marginalization, delves into the pressing economic realities of our time, shedding light on the structural inequalities that shape societies and economies across the globe.

The theme—Economics of Marginalization—aims to foster a deeper understanding of how economic policies, market forces, and social structures impact marginalized communities. It encourages us to critically engage with issues of economic disparity, social justice, and inclusive growth. By exploring these dimensions, we not only acknowledge the challenges but also pave the way for meaningful discussions on equitable solutions.

Optima has long been a cornerstone of intellectual discourse at our college, fostering a culture of analytical thinking and academic inquiry. This 12th edition carries forward the tradition of excellence, showcasing the dedication and intellectual rigor of our students and faculty. Through well-researched articles, engaging interviews, and insightful infographics, this edition provides a platform to amplify voices and perspectives that often go unheard.

I extend my heartfelt appreciation to the editorial team, faculty members, and contributors whose tireless efforts have brought this edition to life. Their commitment to academic excellence and discourse is truly commendable. I encourage you to engage with the articles, reflect on the insights shared, and contribute to the ongoing dialogue on building a more inclusive and just economic landscape.

Best Wishes,
Prof. Savita Roy
Principal, Daulat Ram College

CONVENOR'S MESSAGE

It is my pleasure to present the twelfth edition of Optima: The Annual Economic Outlook, under the aegis of Éclat: The Economics Association of Daulat Ram College. Optima reflects the dedication towards studies and intellectual curiosity in the discipline of economics of our students, competently guided by our learned faculty, bringing together diverse perspectives on pressing economic issues.

This year's theme, Economics of Marginalisation, explores challenges faced by underprivileged and marginalized communities. From women's participation in global trade to financial inclusion and corporate social responsibility, this edition highlights key economic debates shaping our world.

I congratulate the editorial board and all contributors for their hard work in making this edition possible. May Optima continue to spark meaningful discussions and new ideas.

Happy reading!

Best wishes,
Shikha Singh
Convenor, Éclat: Economics Association
Department of Economics, Daulat Ram College

TEACHER-IN-CHARGE'S MESSAGE

I congratulate the entire team of Optima for regularly contributing a wonderful, creative and constructive collection of students' inputs and thoughts on the contemporary economic challenges. Special thanks for the Optima volume of 2025 that brings out crucial take aways from budding scholars in this era of transition and paradigm shifts in growth and development. It gives all the scholars of Economics discipline to put forward the thoughts and the vision of our new generation, how they perceive our present economic scenario contextualizing it to this evolving world of technology, transition and geopolitical regimes. I extend my wishes and support all the future endeavours and initiatives.

Dr Pooja Sharma
Associate Professor
Teacher-in-charge, Department of Economics
Daulat Ram College, University of Delhi

ACKNOWLEDGEMENT

Through this page we want to honour and cherish all those whose relentless work, guidance and advise has made this issue a success. Your unwavering support and belief has strengthened us to take all the necessary steps to bring this issue to life.

Firstly, we extend our sincere gratitude to Dr. Savita Roy, Principal of Daulat Ram College who has believed in our vision and pushed us to pursue excellence. Additionally we want to thank our Convener, Ms. Shikha Singh and our Teacher in Charge, Dr. Pooja Sharma for your guidance and commitment to nurture our talent.

Our deepest appreciation to all our contributors. Optima is nothing without your belief in it being deserving enough to honour your work. We thank you for taking time out and meticulously making all the last minute changes we asked for.

We want to express profound gratitude to Anastasia Nesvetailova and Dr. Richard B. Freeman for agreeing to do interviews with our Editor-in-Chief and most importantly believing in Optima. We acknowledge the time you took out of your busy schedules just because you took faith in our work.

Last but not the least, to the entire Editorial Board, Head of Design and Writers without your dedication, passion and hardwork all of our idea would amount to nothing. From the deepest corners of our heart, Thank You!

MENTORS' VISTA

Welcome to Optima, a platform where ideas take shape and the dynamic world of economics is explored through the lens of students. Optima serves as a window into global economic trends, policies and challenges offering fresh insights from young minds. Let Optima be your guide, as we navigate the complexities of the economic world together. My heartiest congratulations to the students and the entire team of Optima.

Dr. Pooja Khanna
Associate Professor

It gives me great pleasure to write this note for our Annual publication, Optima. Optima showcases the creative mindset of our young economists and their viewpoints on pertinent economic issues facing the world today. I congratulate Team Optima on putting the magazine together and doing a brilliant job of it every year.

Dr. Ritu Khanna
Associate Professor

I congratulate Optima for the next edition of Optima, It reflects the courage and hard work of the team members. I wish the optima may reach great heights, best of luck for the success.

Dr. Rita Rani
Associate Professor

Optima" has always been a platform where diverse perspectives converge, enabling a rich exchange of knowledge and ideas. This collective endeavour of students and faculty embodies the spirit of critical thinking and constructive intellectual engagement. I congratulate the entire editorial team for the release of the latest edition of Optima, and wish them continued success!

Ms Devangana Jha
Assistant Professor

Huge congratulations to the team on the latest edition of Optima! Your hard work and dedication shine through on every page. This edition is a testament to your creativity, passion, and commitment to research. Keep up the fantastic work!

Saachi B Bhagat
Assistant Professor

MENTORS' VISTA

I feel immense pride to be associated with Optima. Optima functions as a window showcasing the academic productivity and creativity of the Daulat Ram Economics community. It has been inculcating critical thinking, and ideas that go beyond the classroom teaching and learning practice. I hope it reaches a wider audience with its scintillating and insightful articles.

Dr. R Ahalya
Assistant Professor

Dear Students,
I'm so proud of all of you for putting together another issue of 'OPTIMA'! Your hard work and creativity really shine through in this issue, and it's a testament to the amazing talent and perspectives of our student body. Congratulations again!

Devendra Kumar
Assistant Professor

Optima is a continual endeavor of the Eclat towards encouraging the students and faculty members, to put forward their creative ideas and enrich the teaching learning process. It serves as a platform harmonizing excellence with inclusivity in the pursuit of understanding the Economics discipline. I congratulate the editorial team of Optima for its latest edition and applaud the efforts of everyone who contributed to it.

Dr Priyanka Yadav
Assistant Professor

I appreciate the commendable effort and incessant support of the entire editorial team of Optima for bringing out this years' edition. I hope this annual magazine will provide useful insights to the young researchers and help them in developing research acumen. I extend my heartfelt wishes for all their future endeavours.

Aakriti Saini
Assistant Professor

Announcing an annual outlook for a department not only marks the intellectual prowess of a highly committed editorial board, its facilitators and contribution but also their time and effort. Conforming to this idea of opportunity cost involved, I extend my warmest congratulations to the entire team of Optima for the release of the recent edition. This collaborative effort of the students and teachers is a wonderful initiative to foster creative intellectual stimulation and research aptitude.

Best Wishes
Akanksha

EDITOR-IN-CHIEF SPEAKS

Dear Readers,
As I sat down to think about the theme for the 12th edition of Optima, I couldn't help but resonate with the derivation of the term 'Optima' which is Optimize. I hope that our issue on the Economics of Marginalisation will optimize voices, voices that might not be as privileged as you and me.

I have sincerely believed in the beauty of economics and its ability to make our lives better. However, who has actually been made better off is a question we hope to answer through the topic of 'Economics of Marginalisation.' We have especially tried to focus on Northeast India, labor laws, gender barriers, climate change, education disparity and global trade inequity. Reading the various articles, papers and opinion pieces presented in our issue has reinstated my faith in the idea that - only empowering the empowered robs Economics of its beauty.

It has been an absolute honour to serve as the Editor in Chief for the 12th issue of Optima. I believe that during my tenure our team has been able to dream and be ambitious with our vision but have the patience and grit to bring those ideas to life. I want to specially thank the heads of design, editorial team and writers for believing in my leadership and vision but most importantly for bearing with me in general. I also want to extend my heartfelt gratitude to Anastasia Nesvetailova and Richard B. Freeman who decided to show faith in Optima and gave me interviews which furthers our understanding of Economics of Marginalization. During the start of my tenure the only vision I had was that we were able to amplify the impact of Optima and I am happy to say that our team has worked relentlessly to achieve that, even if it has meant sleepless nights. After all, everything you lose is a step you take. I am happy to welcome you to a new era at Optima!

Lastly, if you made it to the end of my note - Thank you.

With love
Shivalee Duara

"Life is not easy for any of us. But what of that? We must have perseverance and above all confidence in ourselves. We must believe that we are gifted for something, and that this thing, at whatever cost must be attained."

- Marie Sklodowska Curie

CO-EDITORS SPEAK

"Development is about transforming the lives of people, not just transforming economies."
–Amartya Sen

Dear Readers,
Welcome to Optima: Economics of Marginalization
Step into the world of economic marginalization through the lens of Optima. Our passionate team has gathered diverse voices that illuminate overlooked realities and challenge established narratives. Within these pages, discover fresh perspectives that provoke thought, inspire action, and deepen understanding. Whether you're a student, educator, or curious mind, there's something here to captivate you. We invite you to explore, question, and join us in reimagining economics through a more inclusive lens.

Navya Garg
Co-Editor, Optima

Dear Readers,
It is an honor to present the 12th edition of Optima. Being part of the editorial board has given me the opportunity to engage with insightful perspectives and thought- provoking discussions.
This year's theme, Economics of Marginalization, examines the economic struggles of underrepresented communities and the structural barriers they face. We hope this edition fosters awareness, encourages dialogue, and inspires readers to rethink economic inclusion and equity in today's world.

Happy Reading!
Chavi Singal
Co-editor, Optima

Being part of Optima has been an incredible journey—one of ideas, debates, and a shared passion for economics. As Co-Editor, I've seen how powerful discussions shape perspectives, and this edition is a reflection of that spirit. It brings together insights that question, inform, and inspire.
To everyone who contributed and engaged with Optima, thank you for being part of this journey. I hope these pages spark the same curiosity and excitement that economics brings to me.

Kripa Agarwal
Co-Editor, Optima

Our annual economics magazine serves as a platform for insightful analysis, diverse perspectives, and thought-provoking research on pressing economic issues. As the co-editor, I am thrilled to present a publication that not only fosters intellectual curiosity but also encourages critical economic discourse. Through carefully curated articles and research contributions, we aim to spark meaningful conversations and broaden perspectives, making economics more accessible and engaging for all.

Palak Seksaria
Co-Editor, Optima

HEADS OF DESIGN SPEAK

Dear Readers,

If words bring ideas to life, design gives them a soul. As the Heads of Design for the 12th edition of Optima, we had one mission—make economics look as exciting as it is. And let's be honest, turning terms like "marginalization" and "trade inequity" into visually engaging narratives was no easy feat. But here we are, with pages that don't just inform but demand attention.

From late-night color palette debates to making peace with last-minute layout changes, this issue has been a wild ride. But every pixel, every stroke, and every slightly dramatic redesign was worth it. We set out to amplify unheard voices, and we hope our visuals do justice to the stories within these pages.

A huge shoutout to the editorial team for trusting us (even when we pushed the boundaries of "aesthetic economics"), and to our writers for giving us content worth designing for. If this edition makes you pause, think, and maybe even admire a chart or two, we've done our job.

Now, go on—flip through, soak it in, and don't forget to appreciate the margins (pun very much intended).

With creativity and love,

Happy Reading!

"Normality is a paved road: It's comfortable to walk, but no flowers grow on it."

— Vincent van Gogh

Best Regards
Nandini Verma, Bhavya Pal
Heads of Design
2024-25

EXTENDED EDITORIAL BOARD

Dear Readers,

It is with immense pleasure that the Assistant Editors and Assistant Designers of Optima take up the quill to welcome you to yet another splendid edition of our magazine—a treasure trove of wit, wisdom, and the most delightful musings that society has to offer.

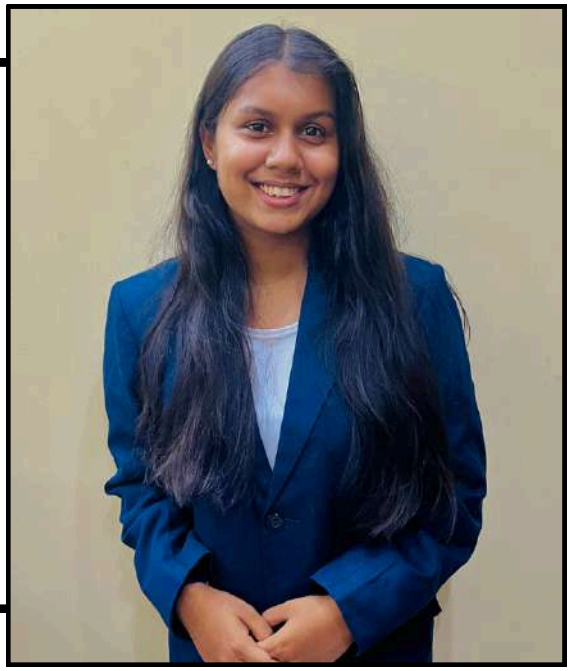
This year's edition addresses a wide variety of topics, throwing light on the most important economic and business issues. Our emphasis has been on choosing content that presents new perspectives and serious analysis, while the design seeks to enhance readability and visual appeal. In the process, we have closely collaborated with the Editorial Board and writers, sharpening stories and arranging layouts to achieve consistency with the overall vision of the magazine.

The experience of working on Optima has been challenging but rewarding. It has provided us with the opportunity to work with complex ideas, hone our editorial and design skills, and collaborate with a talented team dedicated to producing a high-quality publication. The discussions, revisions, and innovative thinking sessions that have gone into the making of this issue have been vital in making it informative as well as interesting.

We sincerely thank the support of our writers and readers whose zeal and feedback continue to drive the evolution of Optima. We hope that you will find this issue stimulating and insightful, and we look forward to embarking on this journey of sharing knowledge with you.

Warm regards,
Manya Jain, Khyati Malik, Tanvi Verma
Assistant Editors
Prachi Kumari, Bhavna Saini, Vanshika Sharma, Ridhima Marwah
Assistant Designers

BY THE UNION



It is a pleasure to introduce Optima, our in-house magazine, dedicated to sparking discussions on important topics and encouraging students to think critically.
I feel privileged to be part of such a talented team and truly appreciate the hard work of our Editorial Board, Writers, and Designers in bringing this edition to life.

Wishing Optima continued success for years to come!

Warm Regards,
Priya Singhal, President

Optima isn't just a magazine; it's a reflection of the curiosity, creativity, and intellect that define our department. Each edition is a testament to the effort, vision, and dedication of the team behind it. Being a part of this journey has been truly rewarding, and I'm grateful to our Editorial Board, Writers, and Designers for their dedication in bringing this publication to life.
Here's to many more editions that continue to inform, inspire, and challenge perspectives!

Best,
Chhavi, Vice President

UNDERSTANDING THE THEME:

ECONOMICS OF MARGINALISATION

The Multiple Forms of Marginalization: The Silent Struggle

Marginalization does not always shout. Sometimes it's performed in soft whispers—a barely audible voice within a meeting room, a youth who is prevented from receiving a good education, or a worker who is in a discriminatory cycle of wages. It is an organized exclusion of members or groups who are driven into the peripheries of society where possibilities elude them on the horizon.

Marginalization is essentially about exclusion. It comes in all hues—economic, social, political, and even virtual. Economically marginalized groups are not able to buy the bare minimum, while socially marginalized groups, on the basis of caste, gender, race, or disability, are not allowed full interaction with society. Politically, the silenced voices occur where the policies favor the privileged, and in the technocratic world of today, digitally excluded individuals are out of reach, widening the gap between the capable and incapable to access information. What makes marginalization more evil is its self-perpetuating nature. Pushed to the margins, it is practically a gigantic leap to regain lost ground. A poor child is given second-class education, diminishing his/her opportunity to escape the poverty trap. Women all over the world are not given decision-making rights, hence prospects of climbing out of structural oppression are very minimal.

But there are fissures in this dogmatic structure. Policy changes, movements of the people, and initiative for consciousness are gradually but consistently transforming things. The fight against exclusion continues, and every sentence, every act of inclusion, brings us one step closer to a more equitable world.

Marginalization could lead individuals to the peripheries, yet the journey back to space begins with the naming of the problem. And when we know that, we are unable to keep quiet.

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ANASTASIA NESVETAILOVA

In Dialogue- Exploring Global Trade Inequity: the way ahead

She is the Director at UNCTAD, heading the Macroeconomics and Political Development Department. She was Director of City Political Economy Research Centre – CITYPERC and Professor of International Political Economy at City University of London. Anastasia is a research specialist in International Political Economy. Her areas of interest cover finance and financial crises, globalisation and governance and her current research focuses on the themes of global financial fragility and crises, the formation of financial and monetary policies, and the process of capitalist evolution in Russia and other FSU countries.

Q1 : One of the many reasons countries are pulling away from the idea of globalisation is because of the lack of accountability which has led to costs being borne by developing nations. How do we close the gap between countries i.e. the economies of the rich and the poor?

Answer: Your rightfully point to the lack of accountability as a problem. Unlike inclusivity, for instance, – a frequent reference in the discussions of global economic reform - the notion of accountability is comparatively rare. And yet accountability mechanisms are essential for making global integration truly inclusive and fair**.**

Part of the problem relates to the question of agency. The global economic architecture – conceived 80 years ago in the Bretton Woods - is centred on states as key agents of globalization. While it is true that political authority ultimately underpins any market operation, globalization is driven by a myriad of corporate and financial strategies of modern businesses – itself a sophisticated process of manoeuvring between different jurisdictional niches. In the dynamics of global arbitrage, the state is often positioned in a reactive, rather than a pro-active role. This is especially so in many cases where mid-size and small-size developing economies are concerned.

Globalisation is also a technological force. Ongoing revolutions in digitalisation and AI, the rise of new materials that can alter production systems, will have a profound impact on countries'development strategies. Global economic governance is yet to address these new forces and agents of change. Making the agents of

globalization accountable requires, first all, an understanding how the connections between trade, finance and technology work in the world of globalized business and investment. This task, in turn, requires greater data transparency on economic and financial integration, and greater policy coordination between countries. Today, most of data in the world is controlled by private corporations.

Q2 : In your book 'Sabotage' you talk about financial malpractice. What role does financial sabotage play in deepening economic inequality globally?

Answer: I enjoyed doing research for the book, partly because it required working with financial history while investigating recent and current financial scandals. One of the most revealing moments was the text of the special investigation into the 1929 financial market crisis. It was carried in 1932 by a special committee of the US Senate set up to investigate the circumstances of the 1929 crash and is now known as the Pecora report. The document details the questioning of all the major actors of that crisis – the financiers, the bankers, the traders, the insurers, the advisors - about the market crash and reflections on their personal role in it.

I was stunned to note that the questions the investigators raised in 1932 were exactly the same, almost word for word, to the questions posed to the bankers in the wake of the 2008 crisis by the Financial Crisis Inquiry Commission.

The control of the market, or the sabotage of the public interest, were quite overt in the run up to the 1929 crash, just as they were explicit during the bubble years preceding the 2008 crisis. But while in the 1930s, the accountability mechanisms at the level of the state had not been developed, in the 2000s such mechanisms were circumvented or diminished. What is most worrying, is that the lessons from the 2008 meltdown were drawn in a very selective way. The ensuing reforms targeted the banks, yet the deeper origins of growing economic asymmetries, asset bubbles and wealth nequality have not been addressed in a comprehensive way. A window to reform the global financial architecture opened by the 2008 crisis, was largely missed.

Partly as a result, the asymmetries between those who have a lot and thus are immune to pretty much any external shock, and those who face acute economic insecurity, have continued to deepen. Perhaps with one key caveat: whereas the great wealth divide in the early 2000s centred mainly on the gulf between finance and the real economy; today, asymmetries of power centre on the finance-corporate-technology nexus.

All the major spheres of economic activity - be that technology, digitalisation, finance, pharmaceuticals, energy, commodities, including food - are controlled by a handful of poorly regulated corporate groups. The monopolised and inter-connected sectors lack transparency; while financialization further enhances their power over markets and societies. So, I think the question of the social function of business and corporate transparency needs to come centrally onto policy agenda today, in the advanced and in the developing economies.

Q3 : You mentioned in one of your interviews held by UNCTAD that the most important thing for developing countries is to make sure the debt architecture meets the needs for the developing world. Could you expand a little more on that and also talk about policy interventions that can be adopted?

Answer: Finance, or credit, is the lifeblood of any economy, and a country's ability to borrow from global markets is critical for its growth trajectory. Debt management is closely linked to the policies of economic openness and trade integration, export diversification and revenue mobilization. At the same time structurally, debt management is a macroeconomic issue: it is linked to exchange rate fluctuations and macroeconomic policies more broadly.

Today, after a decade of historically low interest rates, debts have become much more expensive to service. Most of the debts of developing nations are

denominated in dollars, and higher dollar value and higher interest rates in advanced economies make debt service more expensive. More than 3 billion people live in countries that spend more on servicing old debts than they do on public education and healthcare needs. In 2023, the external debt of developing countries– money owed to foreign creditors – has quadrupled in two decades to a record $11.4 trillion, equivalent to 99% of their export earnings. That is not only a liquidity management issue, but a developmental crisis in the making: indebted countries are not able to invest in the future of their societies. It is a critical concern, as the countries of the global South need skilled labour, technology and infrastructure to be able to navigate the challenges of climate change and geo-economic shifts.

Q4 : I came across your article "Why The Ukraine Crisis Will Make Little Difference to Dollar Supremacy" and I wanted to ask, how might sanctions and global fragmentation affect the stability and growth prospects of developing nations within a dollar-centric global system?

Answer: In terms of trade, South-South trade has more than doubled between 2007 and today. This structural change can help build new trade networks and grow existing markets in the global South. But developing countries are integrated into the global economy as financial assets. In the portfolio strategies of global asset managers, emerging markets and developing countries tend to be bundled together as one asset class.

The implication of this trade-finance divide is that while some trade pressures may be mitigated in a more diverse topography of major export markets, in the financial system, the exposure of developing countries to speculation and volatility is concentrated and is therefore, a source of risk. In addition, as most of world trade is invoiced in dollars, its value affects the costs of insurance and the costs of dollar-denominated debt that impede developing countries' growth potential.

Q5 : You have also talked about the huge opportunity that lies in trade for agriculture or minerals for the developing nations. However, many times trade is not fair globally. What is the role of fair trade in promoting sustainable development and social justice and what policy intervention do you think should be adopted?

Answer: Globally, demand for commodities is projected to increase significantly over the next two decades; with the demand for food commodities expected to grow by 35-50% by 2050. This trend is driven by population growth, climate-related crises, geopolitical conflicts and the needs of energy transition. Developing countries have an abundance of natural resources and can harness the opportunities of **the new growth wave.** But a right policy framework is key to success, as is a functioning multilateral trade system.

The challenges here are many. During the past two decades, gains from trade have become progressively asymmetric, with labour getting a smaller share of income compared to companies. Financialization of commodities sectors has been closely linked to price speculation and profiteering. In extractive industries, risks of illicit finance are high. To fully benefit from the revenues generated by critical minerals and other commodity exports, countries need a mix of policies and tools to distribute the wealth, create jobs and build resilient, diversified economies.

In order to attain food security and fairer trade in agriculture, governments should cooperate to increase transparency of food markets and tackle the monopoly power of food traders on the one hand, and financial speculation in food commodities markets, on the other. Data disclosure of physical stocks, better regulation of the financialised areas of commodity sectors and policy coordination - are key areas where developing countries can strengthen their efforts to make trade opportunities fairer and rebuild trust in international economic cooperation.

Q6 : What are your views on India's current economic standing, in terms of employment, inflation, trade, investments and equitable income growth? On what grounds do you think India could do better?

Answer: India is one of the fastest growing economies in the world: it registered growth of 6.8% in 2024; we project it to growth by 6.3% in 2025. This is due to many factors, including investment in economic diversification, the success of service-led sectors and growing investment in intangibles, strategic approach to digitalisation and of course, the country's major role in international trade. But challenges such as inequality, securing long-term finance for energy transition, remain. Addressing them requires new system-wide mechanisms that can help embed current financial gains into the long-term future domestically. It is also essential to consider the needs of energy transition, as the costs of climate crisis and uncertainty in core markets can impact the financial cycle and price levels.

In Conversation: Optima-lly Speaking RICHARD B. FREEMAN

In Dialogue: Labour Wage Inequality: assessing the importance of Labour unions

He holds the Herbert Ascherman Chair in Economics at Harvard University. He is a Research Associate at the NBER, and is currently serving as Faculty co-Director of the Center for Labor and a Just Economy at the Harvard Law School. Freeman received the Mincer Lifetime Achievement Prize from the Society of Labor Economics in 2006. In 2007 he was awarded the IZA Prize in Labor Economics. His research interests include the job market for scientists and engineers; the transformation of scientific ideas into innovations, Chinese and Korean labor markets; the effects of AI and robots on the job market; and forms of labor market representation and employee ownership.

Q1 : Given the declining union membership and persistent wage inequality, how do you view the long-term economic implications of the wage standardization mechanisms that unions historically provided in the labor market?

Answer: Well, there is no real substitute for unions in balancing corporate power and ensuring fair wages. When the state attempts to replace unions, it often results in an authoritarian structure where worker rights align only with government interests. While some governments manage this effectively, unions remain the most reliable mechanism for securing fair labor standards and preventing corporate overreach.

Q2 : You argue that people flows are fundamental to creating a global economy, yet most nations continue to restrict immigration as a sovereign right. How do you reconcile the apparent contradiction between the economic imperative of labor mobility and the political resistance to transnational workforce integration?

Answer: Resistance to immigration stems from two main concerns. First, there is an economic argument—workers fear that an influx of labour from abroad will drive down wages and reduce job opportunities in their fields. This is a legitimate concern that governments, particularly in the U.S., often overlook. To ease these tensions, policies must be designed to compensate affected workers, ensuring that the overall economic gains from immigration are distributed more equitably. The

second aspect is social and cultural resistance. People often feel uneasy about rapid demographic changes in their communities, which can lead to opposition to immigration policies. While this concern is less defensible from an economic standpoint, it remains a key political challenge.

Q3 : Your research highlights the remarkable divergence between private and public sector unionism in the United States. What fundamental economic and institutional dynamics do you believe most profoundly explain this structural transformation of labor representation?

Answer: A major difference is that public sector employers cannot violate labour laws as easily as private sector employers. In the private sector, companies often fire employees attempting to unionise, knowing that penalties are minimal. Public sector employers, however, are held accountable by voters, making it harder to suppress unions. Additionally, public sector employees play a role in electing politicians, giving them more influence over labour policies, whereas private sector workers have no similar leverage over corporate boards.The way forward is for workers to hold shares in the company, giving them a voice in decision-making. While the exact number of shares needed isn't clear, they must be voting shares. Some companies issue two types of shares: one that grants voting rights and another that only provides financial returns without decision-making power. To be effective, workers must have shares that allow them to participate in corporate governance.

Q4 : How does the unique demand-curve shifting mechanism of public sector unions fundamentally alter our understanding of labor economics and governance?

Answer: Public sector unions actively shape demand for public goods, influencing voter and consumer preferences to advocate for increased government spending on public services. Unlike private sector companies, which use advertising and marketing to drive demand, public sector workers themselves play a direct role in raising awareness and advocating for their services. For example, when workers strike at companies like Starbucks or Amazon, they encourage consumers to boycott the business.

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Q5 : Your research highlights significant consequences of union decline, particularly in "The Effects of Scientists and Engineers on Productivity and Earnings at the Establishment Where They Work" (2017). What do you see as the critical factors behind this decline, and how should policymakers respond to mitigate its effects on wage inequality?

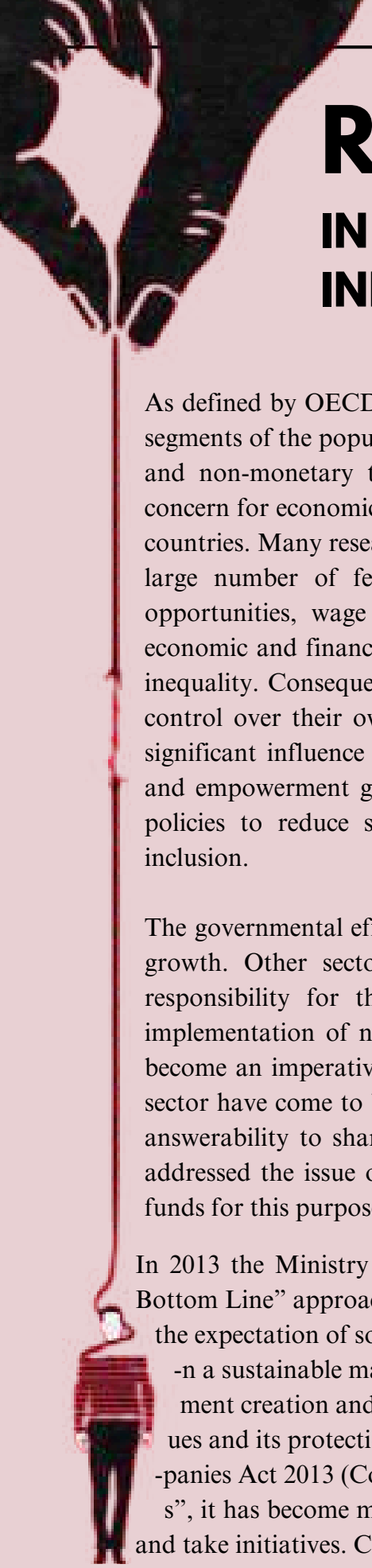
Answer: The decline in unions has contributed to rising wage inequality, particularly among scientists and engineers. However, the U.S. is currently experiencing its largest union movement since the 1940s, driven by young STEM workers, including graduate students organising for better wages and working conditions. This is an effective way to reduce pay disparities within companies. However, wage inequality across different firms remains a challenge—if one company's engineers are highly productive and profitable, their wages increase, widening the gap between workers at other firms. While employee stock ownership plans (ESOPs) can help distribute profits within a company, they do not address industry-wide disparities. European countries tackle this issue through collective bargaining agreements that set industry-wide wage standards, ensuring fair compensation across all firms.

Q6 : In light of your work, particularly in "Willingness to Pay for Clean Air in China" (2019), how do you think globalization influences labor markets while also raising environmental concerns? What policies could balance these competing interests?

Answer: Globalisation often shifts the most hazardous and polluting jobs to poorer countries, where labour and environmental regulations are weaker. This creates significant ethical concerns, as companies exploit cheap labour while contributing to environmental degradation. While consumer activism can pressure corporations to adopt ethical practices, the most effective long-term solution is economic growth that benefits all social classes, enabling developing nations to enforce stricter labour and environmental standards.

On the environmental side, technological innovation is the key to reducing pollution. Investing in clean energy and sustainable production methods is essential.

FACULTY INSIGHTS



ROLE OF CSR

IN WOMEN'S ECONOMIC INCLUSION IN INDIA

By Dr Rita Rani, Associate Professor, Daulat Ram College, University of Delhi

As defined by OECD, "Inclusive growth is the economic growth that creates opportunity for all segments of the population and distributes the dividend of increased prosperity, both in monetary and non-monetary terms, fairly across society". Economic inclusion of women is a critical concern for economic equality and development, around the world, especially in under developed countries. Many research studies, ministerial reports, bank reports and news reports, reveal that a large number of females are found to be discriminated in educational attainment, work opportunities, wage payment, and ownership of capital etc. They are not able to exercise economic and financial freedom in the family and the economy, leading to economic and social inequality. Consequently, women suffer from lack of health, education, work opportunities and control over their own lives and selections (Saluja et al., 2023). In India, women have gained significant influence on social, economic and political institutions through their actions, rights and empowerment given by the law. Various efforts have been made through the government policies to reduce such disparities among genders and to promote equality and economic inclusion.

The governmental efforts are necessary but not sufficient in accomplishing the needs of inclusive growth. Other sectors of the economy such as the corporate houses have to bestow the responsibility for the wholesome development of all segments of society. Ever since the implementation of new Industrial Policy 2013, the Corporate Social Responsibility (CSR) has become an imperative for social and economic development. The CSR initiatives by the private sector have come to be understood as a broader obligation to stakeholders, not just as a narrow answerability to shareholders (Bhattacharjya et al., 2012). Some of the corporate sectors have addressed the issue of gender equity and women empowerment and used their significant CSR funds for this purpose.

In 2013 the Ministry of Corporate Affairs, Government of India, has implemented the "Triple Bottom Line" approach for the corporates under which their economic activities could accomplish the expectation of society, the environment and the interest of many stakeholders at the frontier i -n a sustainable manner. As a result, CSR has essential effects on poverty eradication, employment creation and labor practices, education, and human development and environmental issues and its protection, (Chenavaz et al., 2023). With the introduction of section 135 of the Com -panies Act 2013 (Corporate Social Responsibility Policy) Rule, popularly known as "CSR Rules", it has become mandatory for all companies that fall under the criteria to make CSR policies and take initiatives. Companies have to spend at least 2% of their net profit on CSR activities notified in Schedule VII (Tanwar et al., 2018), during the preceding 3 years as per the CSR policy. The computation of net profit for CSR is as per Section 198 of the Companies Act, 2013. India is the first country in the world to make Corporate Social Responsibility (CSR) mandatory, following an amendment to the Companies Act, 2013 in April 2014.

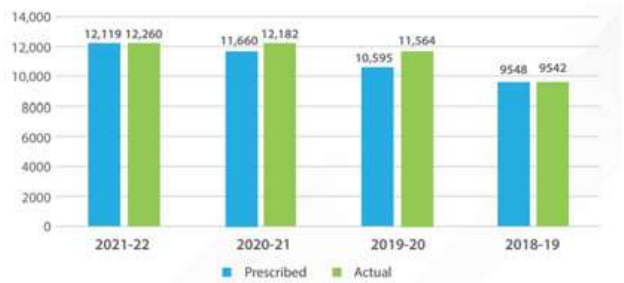
Businesses can invest their profits in areas such as education, poverty, gender equality and hunger alleviation (Debnath, 2018). Women empowerment has been realised as an essential part of socio-economic development efforts. Which is evident from the National Commission for Women that proposed gender budgeting in CSR at CII-NCW Round-table with Industry (13 July 2023) (CII, n.d.). Deliberations at the Round-table centred around the role of India in strengthening livelihood for women and the importance of a collaborative approach with government, industry and civil society collectively working towards creating a robust ecosystem that would help women, especially vulnerable women, realise their economic potential.

Analysing the current trend

In India, there are only a few large companies that share a major part of CSR on socio-economic development expenditures. Reliance Industries, HDFC Bank, Tata Consultancy Services, ONGC and Tata Steel emerge as the top 5 companies, on the basis of the Actual CSR Spent during the last several years. These five companies account for more than 25% of total CSR spending. Oil Drilling Lubricants & Petrochemicals, Banking & Finance and Computer Software & IT Sector companies jointly share more than 50% of India's total CSR fund. On the basis of the locality, 43.5% of the companies are headquartered in Maharashtra, 9.97% in Karnataka and 9.3% in Delhi, while the three states, Maharashtra, Odisha and Delhi received nearly 25% of India's total CSR fund.

Around 37.87% of the companies have spent more than the Prescribed CSR Budget for the year 2021-22. Public sector undertakings accounted for 26.23% of total CSR spend for the financial year.

*Fig. 1 CSR Trends Analysis (in INR Cr.)



Thematic Areas & Cumulative CSR Spent

Actual CSR fund spent on various thematic areas shows that the theme of Gender Equality and Women Empowerment has been merged with that of Senior Citizens and Economically Backward Groups. The amount spent on all these areas i.e., Gender Equality, Women Empowerment, Senior Citizens and Economically Backward Groups has been a nominal share of the total CSR amount spent in the last three years. That is evident from table 1, INR 244.03 Cr., (1.93%) of the CSR spent in 2021-22, INR 105.41 Cr., (0.87%) of the CSR spent in 2020-21, INR 167.98 Cr., (1.45%) of the CSR spent in 2019-20. Allocation of such a small share of the total amount spent on Gender Equality, Women Empowerment, Senior Citizens and Economically Backward Groups shows the least priority given to this issue by the corporate sector.

Table 1: Thematic Areas & Cumulative CSR Spent Between FY 2019-2022 (in INR Cr.)

Thematic Areas	Amount Spent in FY 2021-22 (in INR Cr.)	% of CSR Fund Spent in FY 2021-22	Amount Spent in FY 2020-21 (in INR Cr.)	% of CSR Fund Spent in FY 2020-21	Amount Spent in FY 2019-20 (in INR Cr.)	% of CSR Fund Spent in FY 2019-20
Poverty Alleviation, Healthcare and WASH	4532.31	35.87%	4406.99	36.18%	3222.47	27.87%
Education and Skills	3196.7	25.30%	3082.37	25.30%	3631.82	31.41%
Gender Equality, Women Empowerment, Senior Citizens and Economically Backward Groups	244.03	1.93%	105.41	0.87%	167.98	1.45%
Environment Sustainability	879.3	6.96%	571.93	4.69%	668.56	5.78%
Protection of National Heritage, Art and Culture	91.05	0.72%	135.62	1.11%	109.89	0.95%
Benefits to Armed Forces Veterans, War Widows	22.18	0.18%	21.86	0.18%	36.13	0.31%
Rural Sports and Paralympics	177.32	1.40%	154.56	1.27%	180.10	1.56%
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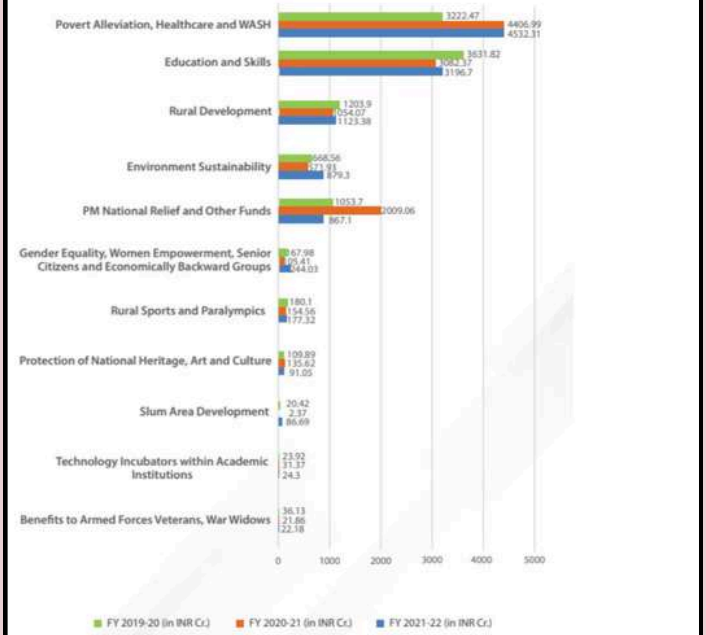
PM National Relief and Other Funds	867.1	6.86%	2009.06	16.49%	1053.70	9.11%
Technology Incubators within Academic Institutions	24.3	0.19%	31.37	0.26%	23.92	0.21%
Slum area Development	86.69	0.69%	2.37	0.02%	20.42	0.18%
Others (including disaster relief and management & contributions to public funded Universities, IITs, National Laboratories and autonomous bodies)	1143.95	9.05%	392.53	3.22%	1045.18	9.04%

Thematic Areas & Cumulative CSR Spend Trend for Last 3 Years (in INR Cr.): The CSR expenditure was INR 67.98 Cr. 2019-20, INR 05.41 Cr. in 2020-21, and INR 244.03 Cr. in 2021-22. Theme of Gender Equality, Women Empowerment, Senior Citizens and Economically Backward Groups comes after "Poverty Alleviation, Healthcare and WASH", "Education and Skills", "Rural Development", "Environment Sustainability", "PM National Relief and Other Funds".

*Fig. 2 Thematic Areas & Cumulative CSR Spent Trend for Last 3 Years (in INR Cr.)



CSR Contributions in Sustainable Development Goals in FY 21-22

CSR also contributes to sustainable development goals. Where SDG 1 (No Poverty), SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), and SDG 1 (No Poverty) have been the main focused SDGs and together received 65% of India's total CSR fund. While the SDG 5 Gender Equality has received only 1.73% of the total CSR fund in the year 2021-22. Almost 47.3% of the CSR project has been executed by Implementing agencies while 5% of the Actual CSR expenditure was allocated for Aspirational Districts. Around 2.4% of the Actual CSR Spent was allocated for Northeast region. Table 2 reveals that in the year 2021-22 only 80 companies have implemented 199 projects related to gender empowerment in which INR 211.58 cr. has been spent i.e. 1.73% share of the total CSR.

Table 2: SDG - specific CSR Contributions in FY 2021-22

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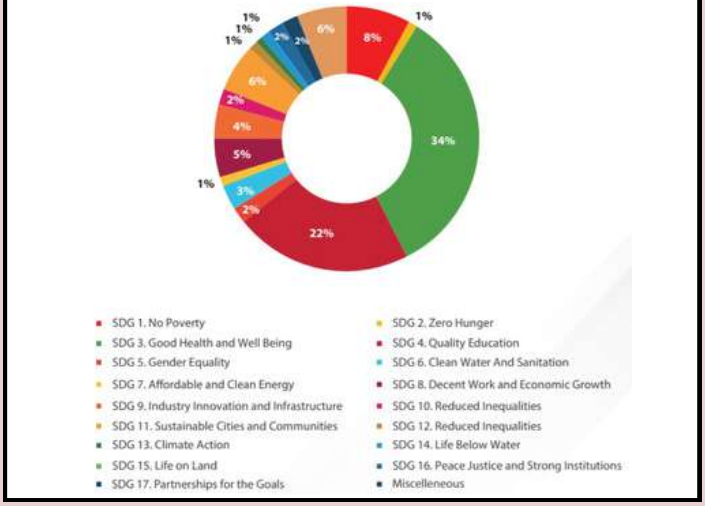
SDGs	Objective	Number of Companies	Number of Projects Implemented	Amount Spent in Thematic Area (in INR Cr.)	% of Amount Spent in SDG to Total Actual CSR Spent
SDG 1.	No Poverty	63	182	1042.16	8.51%
SDG 2.	Zero Hunger	54	135	149.73	1.22%
SDG 3.	Good Health and Well Being	280	2433	4194.49	34.24%
SDG 4.	Quality Education	267	1923	2725.17	22.24%
SDG 5.	Gender Equality	80	199	211.58	1.73%
SDG 6.	Clean Water and Sanitation	105	553	421.22	3.44%
SDG 7.	Affordable and Clean Energy	38	85	82.84	0.68%
SDG 8.	Decent Work and Economic Growth	100	278	563.5	4.60%
SDG 9.	Industry Innovation and Infrastructure	43	262	514.69	4.20%
SDG 10.	Reduced Inequalities	64	117	200.68	1.64%
SDG 11.	Sustainable Cities and Communities	94	331	779.47	6.36%
SDG 12.	Sustainable Consumption and Production	27	80	97.91	0.80%
SDG 13.	Climate Action	59	146	136.07	1.11%
SDG 14.	Life Below Water	12	18	10.64	0.09%
SDG 15.	Life on Land	77	228	187.73	1.53%
SDG 16.	Peace Justice and Strong Institutions	14	20	12.57	0.10%
SDG 17.	Partnerships for the Goals	27	76	243.71	1.99%
Miscellaneous		195	438	692.74	5.65%

The share of the CSR fund allocation on different Sustainable goals

It can be understood with the help of the following pie diagram. The share of the SDG 5 "Gender Equality" is almost 2% in the total CSR fund allotment as a whole.

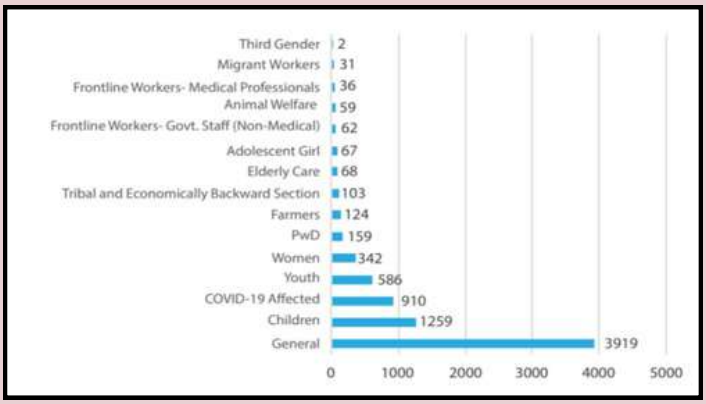
*Fig. 3 SDG-specific CSR Contributions in FY 21-22



Target groups addressed through CSR projects in FY 2021-22

342 projects have been implemented for women as a targeted group out of 7727 (04.42% of the total) projects implemented.

Fig. 4 Number of Project Implemented Focusing on Different Target Groups (FY 2021-22)



Nobel laurite Indian economist Amartya Sen explained in his words that "Unless women empowerment issues remain unsolved no economy would be able to grow and this is the problem of the developing countries." The most significant change that is required for women empowerment is recognised as the enhanced self confidence and self-esteem, education and occupational skills and social capital. Government can help in improving these issues by corrective policies that yield substantial development payoffs but these efforts are not sufficient. Other sectors such as corporate sector should also focus on inclusion of women empowerment in their corporate social responsibility initiatives.

The reports reveal that the corporates in India are utilising the CSR funds on various themes to fulfil their obligation towards the society, but there is a smaller number of companies, which are actively working in the field of women empowerment and their economic inclusion. Which shows a lack of targeted focus of CSR on this particular issue. The share of CSR fund and the amount spent on gender equality and allied fields need to be increased considering 48.5% female population in the total population of 1.2 billion (as per Census 2011), and with a marginal improved share of the female population 48.8% in the total population expected to be 1.5 billion in 2036. Thus, there is a need for the corporates to increase the women centred CSR spending to help the economy and the society. There are many studies which show direct benefit of improvement in women's health and education and independent source of income for the women to the family and the economy.

Some companies stand apart with special efforts made in the field of women empowerment, for example, Mahindra Group's Nanhi Kalli project is an educational initiative with a deeper understanding of the forces that keep girls away from school. Tata's Second Chance Internship Programme helps women return to work if they have taken a career break for gender reasons such as childbirth (Kumari, 2020). In 1998, L'Oreal and UNESCO started a Women and Science programme to recognise the achievements and contributions of exceptional women worldwide, by awarding fellowships to promising scientists with the objective of furthering their research. The women of prominent business families, such as Rohini Nilekani, Sudha Murthy, Roshni Nadir and Nisaba Godrej, head the CSR wings of their organisations, which help to bring focus on issues of women empowerment (Bhattacharjya et al., 2012).

Operating corporate social responsibility helps grow the economy by directly benefiting the society through the activities of social upliftment, welfare initiatives, financial assistance for poor people, protecting environment, charity and donation. It can also cooperate with the society by running educational schemes and providing vocational training. They can also support the financial inclusion by helping women form self-help groups by providing them with the financial support and occupational skills in rural and semi urban areas. On the other side, in return, the corporate sector gets employee loyalty, financial benefits, market growth, , improved government relation and customer trust.

However, CSR practice by many companies and allocation of the CSR funds is not at par with the needs of the society, which affects the inclusive growth of the economy. Thus, there is a need for proper sectoral allocation of CSR funds by the government for the corporates.

Realising the fact that women's economic empowerment has a direct connection with economic growth, CSR Policies should be in coordination with the women's economic empowerment for achieving economic growth, for this the corporates must include policies with focus on health, education and training programs, specifically designed for women empowerment. There is a need to build an inclusive network that actively involves and supports women in the rural and remote areas. Corporates can take the opportunities to build their network, collaborate with NGOs and other institutions. The knowledge-sharing can also be adopted in taking initiatives for women empowerment to bring the effective change in the current scenario. Last but not the least, there is a need to improve the participation of women experts within project management and budget allocations to focus on women empowerment.

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Notes:

- NCW proposes gender budgeting in CSR (2023), CII-NCW Round-table with Industry

- Aspirational Districts (ADs) are districts in India that have been identified for special development to improve their socio-economic status. The Government of India launched the Aspirational Districts Programme (ADP) in 2018 to transform these districts.

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CSR Analysis of Large 301 Listed Companies (FY 2021-22)
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Conceptualising Decentralised Pathways through Biogas Deployment: A concept where each one matters

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Energy is not only a prerequisite for growth and development, but also becomes an issue of national security owing to the limited and unequal endowment of energy sources As a result, each country essentially desires to be energy secure. In the present context, when Climate Change has become the greatest challenge, energy transition pathways have to be determined by each nation. Consequently, all the nations have moved towards a sustainable development path, and in terms of energy, it means shifting towards environmentally sustainable energy sources. In the present global scenario, the notion of Sustainable Development Goals (SDGs) has been framed to achieve poverty alleviation and at the same time protecting the planet and ensuring the people enjoy peace and prosperity.

Consequently, all the developing nations have been facing the biggest challenge of attaining sustainable development goals to ensure prosperity in every sense. However, to visualise and finally accomplish goals, the nations should lay down the system or mechanism strong enough to address the basic questions like- for whom? how much? and for what? This indicates that the larger perspective is to cater to the localised needs of people living in remote areas and effectively opt for inclusive growth. Therefore, to achieve these goals, a framework effective enough to evolve a comprehensive platform is essential to bring prosperity that is sustainable to each person living in the society.

The United Nations General Assembly 2012 has been designated as the 'International Year of Sustainable Energy for All'. India's policymakers consider energy access as a top priority. The policymakers believed that centralised energy planning would be the pathway to resolve the issue of energy poverty, mainly implying delivery of piped or bottled LPG and grid-based electricity. Apart from availability, the issue of affordability is another concern of energy poverty. The most energy-intensive household activities pertain to the rural areas, therefore subsidies on the consumption of these fuels have been predominant to make these essential fuels affordable, but the provision of rural energy programs is hardly sufficient for cooking and lighting. 'Millions of families who have been lucky enough to benefit from such a program prepare their evening meal under the glow of an electric light - in a smoke–filled kitchen over an unimproved wood or dung–burning stove' (Karthik Ganesan, 2014). Many of the home-based industries have been ignored substantially where nearly 18.3 million people in India are employed, constituting almost 4% of the working population of the country. Therefore, in order to visualise and alleviate energy poverty and income poverty, such household industries have to be incorporated for an inclusive growth.

A decentralised system of reaching energy accessibility

The energy system usually falls into a locked into centralisation but is facing a shift in favour of decentralised initiatives. A decentralised energy system is a system of generating energy source near the place it would be used instead of getting

generated by a large plant much far away from the area, which requires energy access and is grid connected. In this system, all the plants are connected to distribution network rather than transmission network, for example, small scale plants that supply electricity to a building, industrial site or community or micro generation i.e. small installation of solar panels , wind turbines or biomass /waste burners supplying only to a building or small community , Combined Heat and Power plants (CHP) , micro-CHP plants replacing domestic boilers generating electricity and heat at home. Other examples are non-gas heat sources such as biomass, wood, solar thermal panels, geothermal energy or heat pumps etc. (Neil Carson, 2008)

This kind of localised generation reduces transmission losses and strengthens energy security by supplying electricity to places that are not grid-connected. Though the initial installation cost could be high in the long run, such decentralised energy setups can prove to be more competitive leading to stable prices as compared to traditional energy due to the provision of a special decentralised energy tariff.

A decentralised system can bring about several community benefits such as local independence, energy security, low carbon emissions, reduced business vulnerability to peak hours, and new job opportunities in fuel production. Even from the developer's and investors' point of view, decentralised energy is a cost-effective method of achieving energy security in terms of energy accessibility and environmental sustainability. Moreover, the decentralised framework of energy provision would empower the local population and communities by promoting opportunities to attain sustainable, competitive, and efficient energy choices.

The present concerns of the environment have been guiding business operations, research areas, R&D, and innovation with the motive to decouple economic growth from greenhouse gas emissions. This situation would call for a radical shift of business planning to enjoy competitive advantage in both domestic and international market. Under such circumstances, there arises the need for energy transformation streamlined towards sustainable consumption and production by using a strategic approach of energy use, resource efficiency and waste management.

A decentralised energy or distributed energy holds a very crucial role in the process of shifting to sustainable consumption and production. There are several benefits associated with decentralised energy method of supplying electricity, such as a reduced degree of transmission losses implying increased conversion efficiency, increased use of renewable, carbon –neutral and low carbon fuels , greater degree of security for businesses and investments. A decentralised energy system leads to more flexibility for generation to meet the local demand patterns for electricity and heat. This also implies greater awareness of energy issues through community–based energy system, driving a change in social attitudes and more efficient use of energy resources.

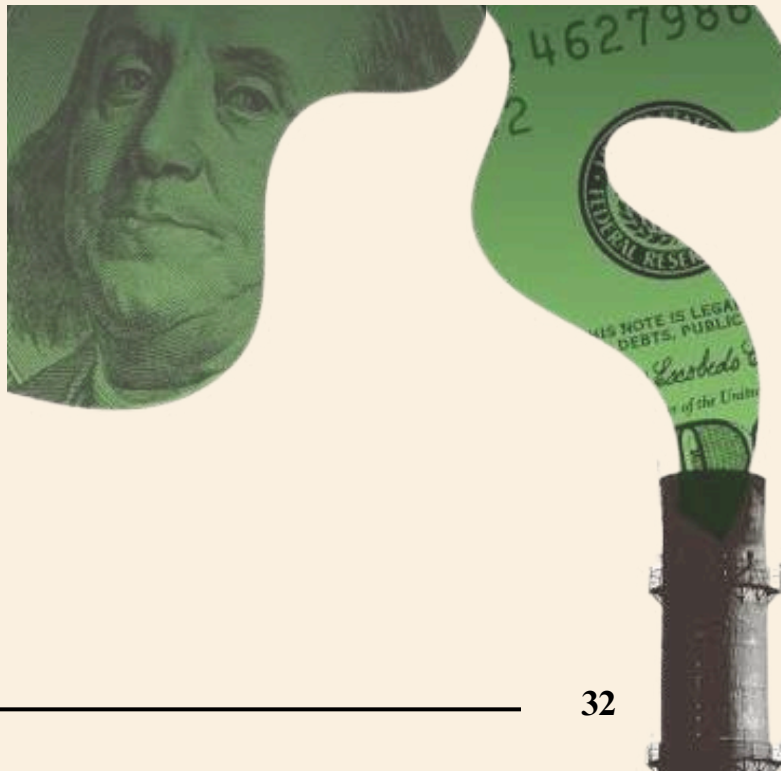
The emerging market for decentralised energy products and services has to be recognised and supported by institutional arrangements. This would further imply training and skill development, warranty and assurance schemes, reliable connectivity between centres, and decentralised and micro energy systems. Given the diversity of decentralised energy, the emerging energy system should be guided by resources, technologies, expertise, and patterns of demand. This would optimise products and services to meet demand. The aim behind the decentralised energy system is to engage more and more people in business thus creating more employment, improving the standard of living, and filling the existing supply gap in the centralised structure or framework.

Biogas Energy: A breakthrough in a decentralised energy framework.

India's commitment is to decarbonise 50% and achieve 500 GW fossil-fuel-free generating capacity by 2030. The Ministry of New and Renewable Energy (MNRE) of the Government of India notified the National Bioenergy Programme (NBP) for the period from FY 2021-22 to 2025-26 (Ministry of New and Renewable Energy). Biogas Energy, a remarkable sustainable clean energy solution, offers a huge opportunity to empower women. Women's participation in renewable energy development is generally not emphasised although women should play a crucial role in the policy strategy development, especially for household cooking gas. Thus, women could play important roles in the adoption of biogas as an alternative for the community's energy supply and thereby facilitate the success of national energy transformation to clean and sustainable energy solutions. In addition, assessing socio-economic and environmental challenges and support at the rural level becomes crucial to support energy policy transformation in India. Several factors determine the deployment of biogas plants in a community or a region. Socio-demographic factors (age, gender, education, decision-making power, financial holdings, health care, religion, household size, location of house, socio-religious groups), economic factors (agricultural productivity, occupation of individuals, family income or wealth, energy consumption of household, electricity tariffs), political factors (political stability in the region, crime, theft, role of women in political system), environmental factors (circular economy, emissions, use of resources, etc) are the selected factors that influence and govern the deployment of biogas at a large scale.

India has the installed capacity of solar (16%), wind (10%), biomass (3%) hydro (11%), Gas (6%), and coal+lignite (51%) in 2023. The government of India has made strong commitments to increase the share of gas in the Indian energy mix from the current 6% to 15% by 2030, with a particular focus on increasing its share in the cooking and mobility sectors. India is making significant progress towards meeting its target of 50% renewable energy by 2030. To promote the uptake of clean cooking, the Government of India has historically provided significant price subsidies for household LPG. In 2024-25, the Ministry is estimated to spend Rs 11,925 crore on LPG subsidy. There are several techno-economic challenges such as technical failures, lack of infrastructure, R&D, skilled labor, high investment costs, lack of substantial financial support or subsidies, and absence of loans, which are some of the economic barriers. Political challenges include lack of political support, lack of private sector participation, and huge bureaucracy-related challenges.

An increase in agricultural production of bio-fertilisers, employment of women, increase in livestock, reduced gender inequality, and inclusivity are direct economic benefits. The indirect impact comprises of improved and cleaner methods of cooking, time-saving, education, and knowledge empowerment, better hygiene situation owing to disposal of waste, reduced emissions, circular economy, waste management, reduced pathogenic capacity, and reduced disease transmission such as gastrointestinal diseases. Higher crop yield may result in better nutritional status for individuals and reduced danger of famines. The political stability, state of law, control of corruption, and voice of women in the political system are additional indirect effects.



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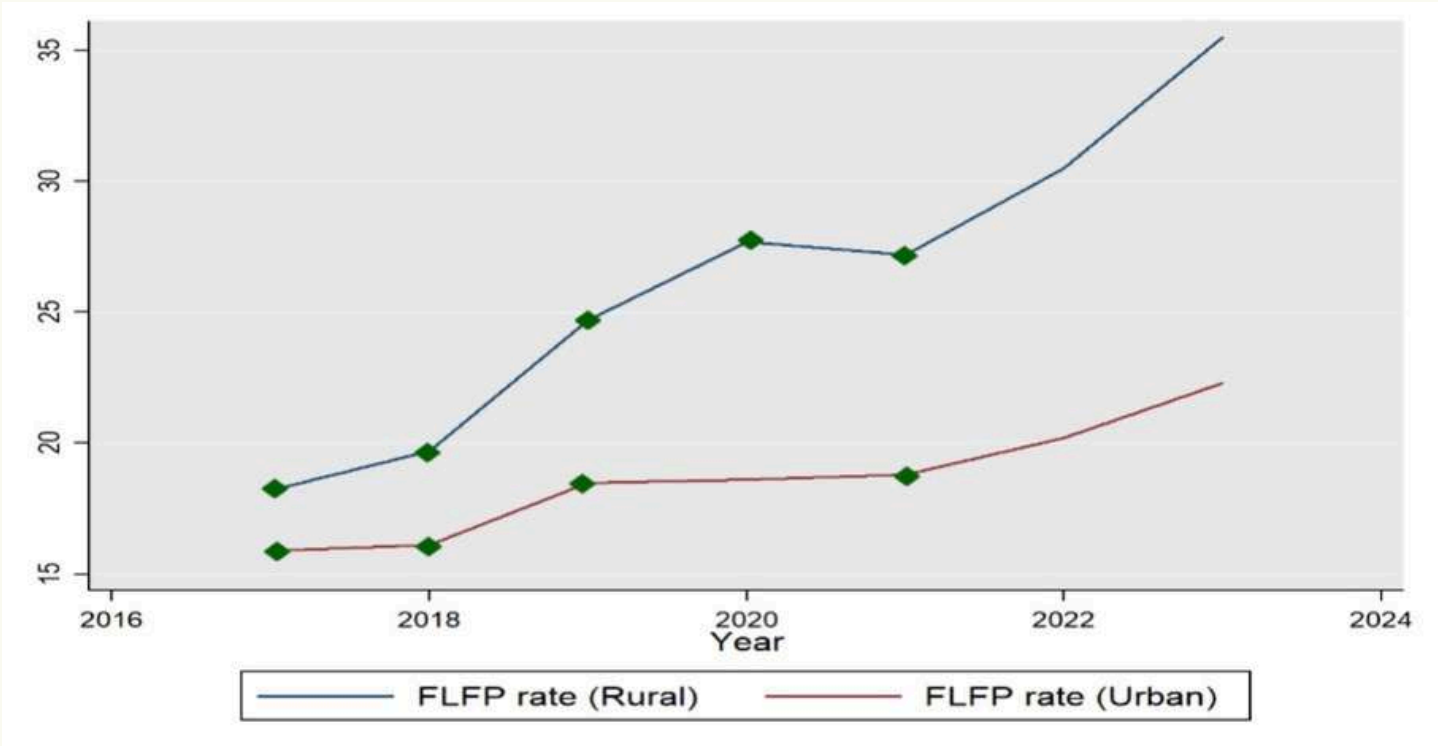
THE CONUNDRUM OF

It is widely recognised that increasing Female Labour Force Participation is necessary, not only for the empowerment of women, but also for the overall development of the nation. An upsurge in female labour force participation (FLFP), as indicated by the latest Periodic Labour Force Survey (PFLS), has been emphasised in the recent Economic Survey. It has been attributed to the initiatives taken by the Government of India to empower women. The PFLS (2023) report indeed shows that the female labour force participation (%) in usual status has increased from 23.3% in 2017-18 to 41.7% in 2023-24. While the rural FLFP rate has substantially increased from 24.6% to 47.6%, the urban FLFP rate also increased from 20.4% in 2017-18 to 28% in 2023-24. Although these changes are noteworthy, it is imperative to assess them more thoroughly to understand their implications. Figure 1 shows the trend of female labour force participation in India from 2017-18 to 2023-24 in rural and urban India. The figure illustrates that the female labour force participation (FLFP) rates have consistently increased during the period, except for a modest decline in rural areas in 2021, when the COVID-19 pandemic had caused a slowdown in economic activity. Overall, the FLFP rates in urban areas lag behind rural FLFP rates for the entire period.

Figure 1: Trend of Female Labour Force Participation rates (in %) in rural and urban India



*** Source: Own calculations using PFLS data**

The disaggregated picture

If we consider the changes in FLFP across different education levels, it is observed that the FLFP for illiterate women rose from 27.7% in 2017-18 to 50.4% in 2023-24. During the same time period, the FLFP of women with a graduate degree increased from 21.2% to 30.5% in 2023-24. This indicates that a significant chunk of the increase in FLFP is due

FEMALE LABOUR FORCE PARTICIPATON IN INDIA

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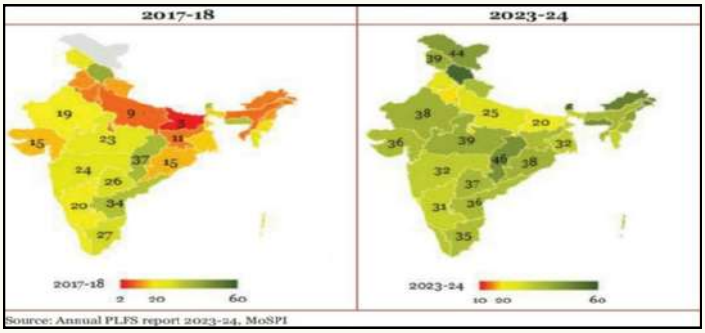
to an increase in supply of unskilled labour. The data on workers by usual status also shows that the percentage of females employed in regular wage/salaried jobs declined from 21% in 2017-18 to 15.9% in 2023-24, while the percentage of self employed females increased from 51.9% to 67.4% during the same period. It is also observed that the majority of these self employed women are engaged as helpers in a household enterprise. This further raises questions regarding the availability of regular jobs for women, and the quality of self employment opportunities. Further exploring the distribution of female workers by industry, it is found that the percentage of rural females engaged in agriculture increased from 73.2 % in 2017-18 to 76.9% in 2023-24. The percentage of males engaged in agriculture dropped to 49.4% from 55% during this period. This is a clear indication of feminisation of agriculture, due to a shift among males towards employment in industrial and service sectors, which are considered to be more lucrative and prestigious. This again reinforces the claim that the increase in FLFP may be due to financial distress or household obligations, rather than an attempt to claim emerging employment opportunities. Further, urban females are predominantly engaged in the service sector, but the share of females employed in services declined from 44.4% in 2017-18 to 40.1% in 2023-24. Majority of the females employed in the service sector work in the category 'Other services', which suggests that most of these females are employed in the informal sector, and such jobs do not offer job security, have precarious working conditions, and offer low wages.

Dynamics of female labour force participation across states

According to the Economic Survey (2024), the rise in FLFP is a major indicator of the overall improvement in the labour market situation. The state wise data from PFLS also shows that FLFP increased in the majority of states by at least 5-10% in 2023-24, in comparison to the FLFP in 2017-18. The report claims that this increase across states is an indication of women taking advantage of the new opportunities provided by the various government schemes launched by the government across states to promote women's skilling and entrepreneurship, apart from better capturing of women's work in unpaid labour by the PFLS data. Some of the recent initiatives include skilling programs and better credit access to women entrepreneurs under the Deendayal Antyodaya Yojana - National Rural Livelihood Mission (DAY-NRLM), and the Startup India initiative. The report also acknowledges that the majority of the rural women are engaged in household farms or small enterprises, and there are wide disparities among women depending upon their socio-economic status. The main reasons given for these issues are the prevailing gender norms which prevent many women from securing better employment opportunities.

The NITI Aayog report has pointed out that there are 70 central level and more than 400 state level schemes to support entrepreneurship, and these initiatives are helping marginalised rural Indian women in diverse sectors (PIB Delhi, 2024). Exploring the state level data further, it is found that the FLFP rates in the worst performing states of Bihar and UP were merely 3% and 9% respectively in 2017-18, but it rose to 20% and 25% respectively in 2023-24 (Economic Survey, 2023). Although the FLFP rates rose across all states, the extent of increase was meagre in comparison to the better performing states like Chhattisgarh, Andhra Pradesh, and Tamil Nadu. It is to be noted that Bihar and UP had the largest number of registrations of informal workers among all states of India in 2023-24 (Ministry of Labour and Employment, GOI). The state wise percentage of credit linked Self Help Groups is highest in Telangana (97%) and Andhra Pradesh (89%), followed by Bihar (84%), while the corresponding percentage in Uttar Pradesh is only 25%. The southern region is found to have the lowest credit gap, among all regions (NABARD report, 2022-23), even though the jump in FLFP over time has been comparatively moderate in this region. The state level changes in FLFP from 2017-18 to 2023-24 are indicated in Figure 2. It is likely that the whopping increase in the FLFP rates in some states is due to either an increase in informal workers or a change in the methodology of measuring FLFP.

Figure 2: State wise FLFP rates (2017-18 to 2023-24)



Source: Annual PLFS report 2023-24, MoSPI

Diverging observations regarding the state of FLFP in India

Several economists have been skeptical of the increase in FLFP. One issue is related to the change in the methodology used to measure labour force participation, which may have inflated the reported values of FLFP rates. In the new methodology, a household member engaged in domestic duties, but also involved in unpaid household labour for 1 to 2 hours regularly for at least 30 days in a year, is considered to have subsidiary economic activity and is classified as a self employed worker (The India Forum, 2025). This leads to the inclusion of exploitative unpaid labour of females in the FLFP figures, which creates an illusion of better employment opportunities for females. Another concern is regarding the increase in the share of self employment, particularly in rural areas, which stipulates that the rural distress and lack of opportunities may be driving women towards working in family farms or small household enterprises. Deshpande (2023) points out that the gross average monthly earnings (at constant prices) of female self employed workers has fallen since 2017, the gross average daily wages (at constant prices) for female salaried workers have consistently increased over the period. This reinforces the claim that increase in self employment is not the result of female empowerment. However, there have also been positive assessments of the phenomenon. It has been noted that new opportunities for self employment may have encouraged women to be entrepreneurs. Notably, the microfinance schemes introduced by the government have been instrumental in creating entrepreneurship opportunities for women in rural areas. Analysts at Goldman Sachs have pointed out that the positive trend in FLFP in India is the result of broader structural changes in the Indian economy (Outlook Business, 2024). These contrasting observations present a perplexing picture of the actual state of female FLFP and employment opportunities for women in India.

There is a clear consensus that at least a part of the increase in FLFP may be attributed to a change in

the methodology. The government microfinance schemes and other initiatives to boost female employment may have had a role in encouraging women's participation in the labour force. It is to be highlighted that the Budget 2025-26 has proposed further schemes to boost employment and entrepreneurship in agricultural as well as manufacturing sector, particularly among women. However, there are several challenges to be tackled in this front, which require steadfast policy initiatives. Actions have to be taken to create salaried employment opportunities for women, particularly in rural areas. Encouragement of non-farm economic activities and the integration of the agricultural supply chains will be crucial for gainfully engaging rural women. Additionally, public expenditure should focus on creating facilities for women like women's housing, safer public transport, and childcare facilities (Mehrotra and Sinha, 2019). Women have to deal with the double burden of binding social norms that prohibit them from accessing opportunities, and the financial and physical distress due to household responsibilities. Evidence shows that increasing investment in social, physical, and financial infrastructure helps in breaking social and cultural barriers that prevent females from seeking employment (Mitra and Okada, 2017). The government initiatives for encouraging women's self help groups and skilling programs for women have been commendable. However, there has to be broader incorporation of gender perspectives in all policy actions. It is not adequate to include women's household work in FLFP, efforts have to be made to reward them for their contributions.

The perception of women's work as secondary or supplementary should be dismantled, and the primacy of their employment has to be acknowledged.

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GUEST SUBMISSIONS

THE GLOBAL SHIFT

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The construction of a particular pattern of the international division of labour, and a corresponding division of the world between developed and underdeveloped countries, were historical products of the process of what the Nobel Laureate had called 'modern economic growth' (Kuznets 1971). Starting with the Industrial Revolution in Britain in the late 18th century, industrialisation emerged as a process of structural change in economies that brought in its wake rapid rises in per capita incomes. Industrialisation did spread beyond its original location, but only to some parts of the world during the period before the end of the Second World War and the post-war drawing to a close of the era of colonialism. The countries that made up what was subsequently referred to as the Triad, the three centres that were to dominate the world economy until the end of the 20th century - North America, Western Europe and Japan – emerged from this. The countries which made up the G-7 grouping were all also from these regions. The rest of the world became part of this process only by serving as export markets for the manufactured products produced in the advanced regions and supplying them with primary commodities. Some like India even experienced a process of de-industrialisation during the 19th century, the destruction of its traditional manufacturing industry. This correlation between industrialisation and divergence within the world economy is captured in the estimates presented in Table 1.

Table 1: Indicators of Industrialization and Per Capita GNP Levels, Developed and Third World Countries

	Per Capita Industrialization (UK in 1900=100)		Percentage Shares in World Manufacturing			GNP Per Capita in 1960 US Dollars and Prices	
Year	Developed Countries	Third World	Developed Countries	Third World	Year	Developed Countries	Third World
1750	8	7	27	73	1750	182	188
1800	8	6	32.3	67.7	1800	198	188
1860	16	4	63.4	36.6	1860	324	174
1913	55	2	92.5	7.5	1913	662	192
1953	135	5	93.5	6.5	1950	1054	203
1980	344	17	88	12	1977	2739	355

Source: Bairoch (1981, 1982)

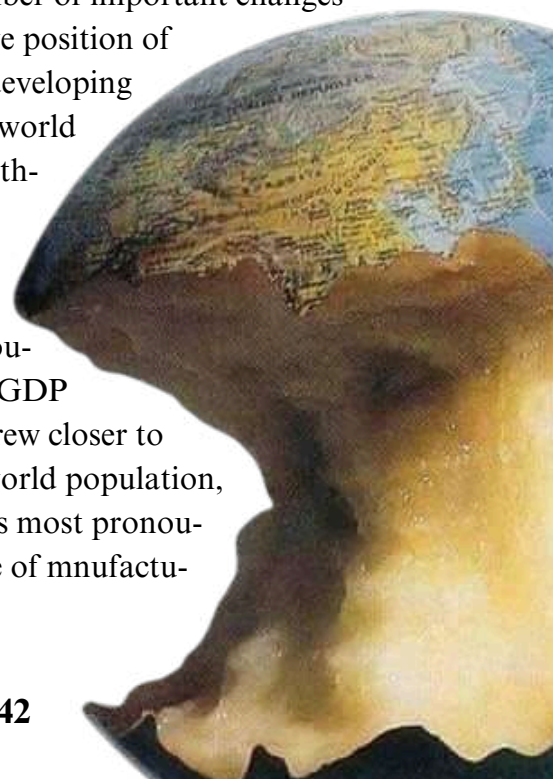
AND ITS LIMITS

Table 1 also shows that divergences clearly persisted till 1980, despite some diffusion of industrialisation. It is in this unequal world that globalisation unfolded. Indeed, the US-led Triad grouping's dominance – which had economic and technological, as well as political and military dimensions to it - was even heightened in the early years of globalisation by the so-called end of the Cold War. It is in such a world that the twin processes defining this era – namely, financialisation and globalised production – unfolded. While the former is the phenomenon of a disproportionately rapid growth of financial activities including the increasing significance of highly volatile cross-border portfolio capital (Epstein 2005, Mader et al 2020), the latter term describes the reorganisation of production systems through offshoring and outsourcing – creating global value chains involving coordinated networks of several firms and production sharing across several countries (Dunning & Lundan 2008, UNCTAD 2013). A US dollar and West centred financial system has also served as the medium for the growth of international transactions that came with globalisation.

Globalisation and the Global Shift

Given the above mentioned background, the changes in the world economy during the globalisation era, specially in the 21st century, might appear paradoxical at first sight. Capturing one dimension of the essence of the shift in the world economy was the distinct shift in the trajectory of world inequality after 1980. In a marked break from the long-term trend till then, a decline in 'between country inequality' has been a feature of the world economy, along with a reversal of the post-Second World War trend of declining 'within country inequality' (Fig 2.4, p. 57, Chancel et al 2022). The faster average growth of low income countries with a large share of the world's population, despite the slowing down of world growth, was essentially the reason for the decline in within country inequalities, even though internal inequalities within these countries also increased. These two trends were not independent of each other - they were mutually related products of a process of production gravitating towards cheaper locations of production. This gravitation on the one hand took advantage of general economic openness to trade and capital flows across a world of countries with different economic conditions including wage levels. On the other it was also propelled by conditions of global demand constraints resulting from both rising inequalities (wage depression) and fiscal constraints faced by states in a context of global competition and potential exchange rate instability that went with openness.

The reorganisation of global production, which was particularly accelerated during the short boom in the early years of the 21st century that culminated in the 2008 global financial crisis, produced a number of important changes in the the relative position of developed and developing countries in the world economy, when th--ese are conside--red collective--ly. The share of developing cou--ntries in world GDP increased and drew closer to their shares in world population, and the shift was most pronou--nced in the case of mnufactu--ring.



The share of these countries in world trade also increased – their rising share in world production and income was linked to their increasing importance as exporters and as importers, more so in merchandise trade but also in trade in services, at the expense of developed countries. Eventually, export surpluses generated by developing countries in their trade with developed countries also made them the net capital exporting group among the two. This was described as the 'capital flows paradox', or the phenomenon of 'capital flowing uphill', because the direction of the flows were from faster growing but relatively capital scarce economies towards slower growing capital rich ones (UNCTAD 2008). It is this apparent process of the world economy being turned upside down that led to the description of some developing countries as 'emerging' economies, or them being clubbed into new groupings like the BRICS, and even the idea of a shift from unipolarity to multipolarity in the world order.

The geopolitical stresses and strains, as well as those being seen in the social fabrics of many individual developed and developing nations, are clearly reflections of the fact that the changes wrought by globalisation have hardly produced a more democratic and stable world order. It is not even clear that the world is on a path to such an order and what we are witnessing today are simply the pains inevitably associated with fundamental historical transitions. Indeed, one of the aspects of the changes in the world economy is in fact the limits to any transition that its structurally unequal character has achieved - the category of high income economies still remain dominated by the original advanced economies and most 'emerging' nations are in the middle income categories. There are also many still unable to extricate themselves out of the low income grouping. Moreover, the five major advanced economies still accounted for three fourths of technological advances during globalisation (Eugster et al 2019)

Convergence and Divergence

Once one goes beyond the overall developing versus developed country groupings and looks at different regions, it also becomes clear that there are important variations within both the groupings. As Table 2 shows, within the advanced economies, the relative decline of North America (mainly the US) in terms of share in world GDP is not that dramatic, especially once one has accounted for changes in population shares. It is Japan and Europe, the leading centres of growth in the advanced economies during the post-World War II 'Golden Age', which have experienced sharp erosions of their positions during globalisation. On the other side of the equation, China's rise completely overshadows the story as far as the developing world is concerned, even in what is more an Asian rather than Latin American and African story. Latin America and Africa's shares in world GDP in fact have been on a declining trend, as have Central and West Asia's, in the post-2008 world despite their rising share in world population. Even the rise in India's and South Asia's shares have been slower in the second decade of the twenty first century and partly on account of their still rising share in population. In other words, the global shift from advanced to developing countries in terms of GDP at least has a high degree of geographical concentration in China's region, namely Eastern and South Eastern Asia – the home of the 'East Asian Miracle' that preceded globalisation. It also partly is a shift within that region given Japan's dramatic decline.

Table 2: World Distribution of GDP and Population (Three Year Averages of Percentage Shares)

Country or Region	Share in World GDP				Share in World Population	
	1990-92	2000-02	2010-12	2018-20	1990-92	2019-21
Japan	14.5	13.3	8.5	5.9	2.3	1.6
Northern America	28.0	33.3	24.2	26.2	5.2	4.7
Northern Europe	7.8	7.6	6.4	5.7	1.7	1.4
Western Europe	17.5	13.5	12.3	10.8	3.3	2.5
Southern Europe	8.7	6.4	6.0	4.7	2.7	2.0
TOTAL of Above (Advanced)	**76.5**	**74.1**	**57.3**	**53.3**	**15.2**	**12.2**
Eastern Europe	**3.6**	**2.2**	**4.6**	**3.8**	**5.7**	**3.8**
China	*1.8*	*3.9*	*10.2*	*16.5*	*22.0*	*18.5*
Eastern Asia excl Japan & China	2.6	3.2	2.8	3.2	1.7	1.4
South-Eastern Asia	1.7	1.9	3.1	3.5	8.4	8.6
Southern Asia excl India	0.8	0.9	1.4	1.6	6.0	7.2
India	*1.3*	*1.4*	*2.5*	*3.2*	*16.5*	*17.7*
Central Asia	0.2	0.1	0.4	0.3	0.9	1.0
Western Asia	2.3	2.5	4.1	3.7	2.8	3.6
Total Asia excl Japan	**10.7**	**13.9**	**24.5**	**32.1**	**58.3**	**58.0**
Latin America and the Caribbean	**5.3**	**6.5**	**8.2**	**6.1**	**8.3**	**8.4**
Africa	**2.3**	**1.9**	**3.1**	**2.8**	**11.9**	**17.2**
Oceania	**1.6**	**1.4**	**2.3**	**1.9**	**0.5**	**0.5**

Source: UN Stats

Manufacturing has been at the heart of the global shift and the changes in the world's manufacturing landscape have been even more dramatic than in overall GDP (Table 4). China's growing relative significance in world manufacturing is even greater than in GDP, and its increasing significance in global value chains is indicated by the fact that its share in production of intermediate products has grown even faster than in final products (Baldwin et al 2023). However, as Table 4 also makes clear, the advanced countries in general are still way ahead in terms of per capita levels of manufacturing value added. In other words, they are the more industrialised economies with only some of the other East Asian Economies like South Korea or Taiwan being able to match or exceed them. China's is perhaps the only real industrialisation story belonging to the globalisation period, the latest instance of a phenomenon that has characterised the East Asian region like no other. More significantly, the shift in global manufacturing has taken place in a context where the world economy as a whole has been 'de-industrialising'. What is remarkable though is that de-industrialisation – the declining relative significance of manufacturing in a country's production as well as employment– is being experienced not only by the advanced economies but also most developing countries other than the Asian manufacturing powerhouses. 'Premature' de-industrialisation – where the decline begins from lower levels of share of manufacturing and at lower per capita income levels than has been the norm in case of advanced economies – is widespread (Rodrik 2015). Not only Latin America and Africa but also South Asia is afflicted by this, with India and Sub-Saharan Africa making up the parts of the world with the lowest per capita income levels as the starting point.

Table 3: Per Capita Manufacturing Value Added (MVA) Levels and World Distribution of MVA (Three Year Averages)

Country or Region	Per Capita MVA (2015 US$) 2019-21	Share in World MVA in Current US$ (%)		
		2000-02	2010-12	2018-20
Japan	7881	17.1	10.7	7.6
Northern America	6789	28.6	17.9	18.1
Northern Europe	5961	6.5	4.4	4.2
Western Europe	6767	14	11.8	10.1
Southern Europe	3178	6.2	4.8	3.8
TOTAL of ABOVE		**72.3**	**49.6**	**43.8**
Eastern Europe	**1586**	**2.3**	**4.2**	**3.6**
China	2901	5.2	20.4	28.0
East Asia excl Japan & China	5822	4.1	4.3	4.6
South-Eastern Asia	928	2.9	4.4	4.6
Southern Asia	309	2	3.9	4.3
India	*310*	*1.3*	*2.6*	*2.9*
Central Asia	712	0.1	0.4	0.4
Western Asia	1435	1.9	2.8	2.8
TOTAL ASIA excl Japan		**16.2**	**36.1**	**44.6**
Latin America & the Caribbean	**1083**	**6.5**	**7.1**	**5.1**
Africa	**208**	**1.5**	**2.0**	**2.0**
Oceania	**2313**	**0.9**	**1.1**	**0.8**

Source: UNIDO Database

The limits to the changes in the pattern of the international division of labour are also reflected in and expressed through what has happened within the larger story of the rise of the share of developing countries in world trade. Here too one can see that there are very important differences between developing countries. Latin America and Africa have certainly not replicated the Asian story of becoming exporters of manufactured products – their exports continue to be dominated by primary commodities (Table 4). However, it is true that whether it is primary product or manufactured product exports of developing countries - developing Asia has also became the the most important destination for these exports. This means that the primary commodity exporters have also become relatively less dependent than earlier on advanced economies to absorb their exports.

Table 4: Developing Country Exports by Origin, Destination and Commodity Group in 2022 (Percentage Shares)

By Commofity Group of Origin			
Commodity Group	**Developing Africa**	**Developing Latin America and the Caribbean**	**Developing Asia & Oceania**
All Food Items	11.1	25.8	5.1
Agricultural Raw Materials	2.0	0.3	0.8
Fuels	41.9	14.1	17.3
Ores, Metals, Precious Stones, etc	24.0	13.3	5.1
Total of Above 4	**79.0**	**53.4**	**28.3**
Manufactured Goods	**21.0**	**46.6**	**71.7**
Commodity Group By Destination			
Commodity Group	**Developed Economies**	**Developing Economies**	**Of which: Developing Asia & Oceania**
All Food Items	39.5	60.5	46.1
Agricultural Raw Materials	36.9	63.1	56.2
Fuels	39.4	60.6	52.6
Ores, Metals, Precious Stones, etc	36.3	63.7	58.4
Total of Above 4	**38.7**	**61.3**	**52.4**
Manufactured Goods	**48.6**	**51.4**	**41.5**

Source: UNCTAD, Handbook of Statistics, 2023

As Table 5 indicates, a structure of global trade has emerged whereby Asian developing countries have started generating a surplus in their trade based on export surpluses with the advanced economies, Africa and Latin America continue to reflect the structural conditions giving rise to foreign currency constraints typically associated with underdevelopment.

Table 5: World Exports by Origin and Destination, 2022 (US $ Millions)

Origin	Destination					
	World	Developed Countries	Developing Countries	Developing Africa	Developing Latin America & the Caribbean	Developing Asia and Oceania
Developed Countries	**8613204**	**6223605**	**2378559**	**165922**	**527431**	**1685206**
Developing Economies	**7241876**	**3517659**	**3722264**	**290821**	**428843**	**3002601**
Developing Africa	*138967*	*65336*	*73616*	*39587*	*7572*	*26457*
Developing Latin America & the Caribbean	*608705*	*477886*	*129874*	*3630*	*100528*	*25717*
Developing Asia and Oceania	*6494204*	*2974437*	*3518773*	*247604*	*320743*	*2950427*
World	**15855080**	**9741264**	**6100823**	**456743**	**956274**	**4687807**

Source: UNCTAD, Handbook of Statistics 2023

Even within Asia there are important differences typified by the very contrasting trajectories of China and India. While India was part of the Asian trend of rising importance in world manufacturing trade, India's significance was not only incomparable with that of East Asia, it was also one where imports outpaced exports (Table 6). India's economy, therefore, in contrast to East Asia, has consistently been characterised by merchandise trade deficits. It is in fact India's trade with developing East Asia that has replaced the advanced economies as the most significant contributor to this deficit. Excess foreign currency earnings for India have been generated in invisibles, primarily exports of IT services and remittances, but even these have not been sufficient to neutralise the trade deficit. A persistent dependence on capital inflows, rather than capital exports, have been India's reality (Table 8).

Table 6: Percentage Shares in World Exports and Imports of Manufactures: Selected Countries/Country Groups

Country/Country Group	1981	1991	2001	2011	2021	2022
Manufactured Exports						
ASEAN Countries	1.5	4.1	6.4	6.6	8.3	8.6
Other East Asian Miracle Economies	5.4	9.2	9.6	10.0	10.7	10.0
China	1.0	2.2	5.2	15.4	21.1	21.2
Total of Above	**7.9**	**15.5**	**21.3**	**32**	**40.2**	**39.8**
India	0.5	0.5	0.7	1.6	1.8	1.8
US, European Union and Japan			**61.9**	**52.1**	**46.6**	**45.9**

Manufactured Imports						
ASEAN Countries	3.7	5.4	5.7	6.1	7.2	7.4
Other East Asian Miracle Economies	3.5	7.1	7.4	7.3	8.2	7.7
China	1.1	2.0	4.0	8.6	9.9	8.6
Total of Above	**8.4**	**14.5**	**17.1**	**22**	**25.2**	**23.6**
India	0.5	0.4	0.5	1.6	1.7	1.9
US, European Union and Japan			**57.8**	**47.2**	**46.9**	**47.5**

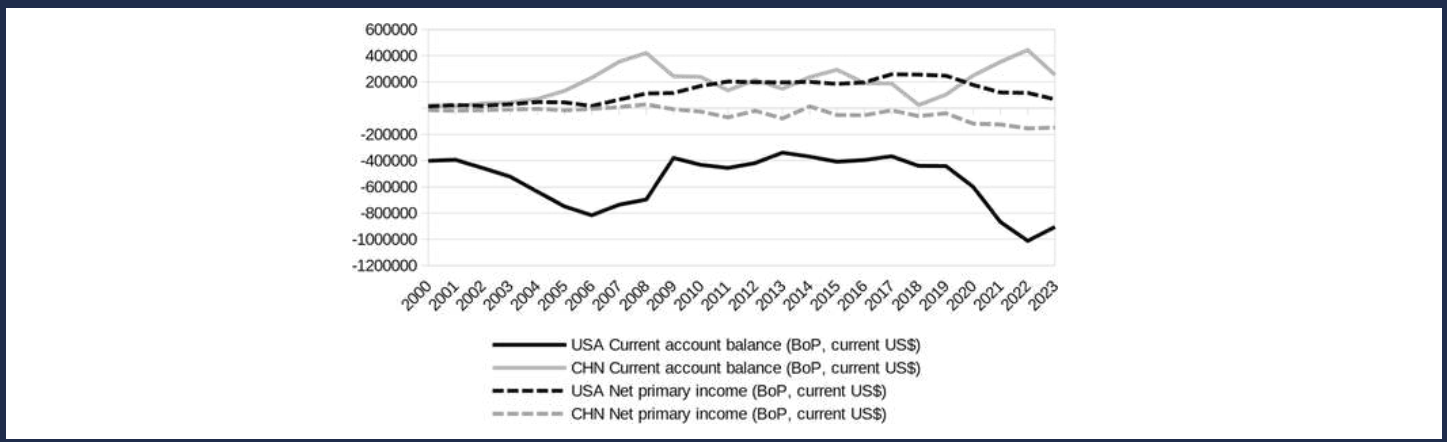
Source: WTO Database

The Limits of 'Emergence'

Even if one leaves aside the geographically concentrated nature of even the global shift associated with globalisation, there are other indicators too of the limits of change in the world order this has produced. This can be illustrated firstly with the example of the widely different situations China and the US face as a result of the foreign ownership of assets by and in their countries. As Figure 1 shows, the United States has consistently had a current account deficit in the 21st century – in other words it has been a net capital importer so that its foreign liabilities have grown faster than its foreign assets. Yet, the US has tended to have a consistent positive balance in net primary income from abroad. China's position is the exact opposite – it has consistently generated current account surpluses but its primary income balance has tended to be in the negative. Net primary income, it may be noted, includes receipts and payments of employee compensation paid to nonresident workers and investment income (receipts and payments on direct investment, portfolio investment, other investments, and receipts on reserve assets). It is the latter which generates the surplus earnings for the US and makes it negative for China.

A common factor underlies the difference between China's position and that of the US – namely the hegemonic position of the US dollar. A significant part of the USA's foreign liabilities are the extremely low return foreign exchange reserves that other countries like China have to hold. While the US has to pay very little for these 'borrowings' from the rest of the world which finance its international transactions deficit, those holding them as foreign assets correspondingly earn very little from them. It is this advantageous position of the US which also allows it to use measures like sanctions as a weapon of reinforcing and preserving its dominant position in the world. That position may have been weakened, but it has by no means disappeared

Figure 1: Current Account Balance and Net Primary Income (US $ Million), USA and China, 2000-2023



Source: World Bank, World Development Indicators

An additional aspect of continuing inequalities in the world is the vast gap that still exists in the transnational corporation space. As Table 7 shows, though transnational corporations have now emerged from developing countries, their degree of internationalisation and their presence in and dominance of globalised production systems remains limited compared to their advanced country counterparts. This, combined with their technological dominance, also creates channels of the flow of value created in developing economies towards the advanced economies that may not even show up in the values of international transactions.

Table 7: Internationalization of 100 Largest TNCs, 2020-21 (US$ Billion and Employment in Thousands)

Group	Assets		Sales		Employment	
	Foreign	Total	Foreign	Total	Foreign	Total
Top 100 Global	10428	19256	6681	11624	9051	20103
Top 100 Developing	2927	10069	2288	6531	4053	13601
Top 100 Developing/Global Top 100 (%)	28.1	52.3	34.2	56.2	44.8	67.7
Share of Foreign in Total (%)						
Top 100 Global	54		57		45	
Top 100 Developing	29		35		30	

Source: UNCTAD, World Investment Report 2023

Conclusion

All 'emerging' nations have not necessarily exhibited the same trajectories of development during the era of globalisation and nor has their emergence undone many of the inequalities historically associated with the world order. Even if a larger G-20 grouping has been formed alongside the G-7, the special status of the latter has not been eliminated by the changes the world economy has experienced during globalisation. Moreover, even within them, the growth of inequalities have meant that there has been much less of an escape of their populations from the state of underdevelopment. The achievement of global equality therefore still has a long way to go – and its achievement is far from being the spontaneous outcome of the process of globalisation. Instead, globalisation has tended to make for a specific pattern of change in the divergences within and between nations, including the emerging ones, the political expressions of which can be seen both domestically and in the field of international relations.

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Strengthening Women's Participation in India's Global Trade Ecosystem

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Global trade has been a cornerstone of economic growth and poverty alleviation, particularly for developing nations like India. By facilitating the exchange of goods and services across borders, trade unlocks vast market opportunities for businesses and economies to grow exponentially. As per a report by the World Bank, developing countries increased their share of global exports from 16 per cent to 30 per cent from 1990 to 2017, and in the same period, the global poverty rate fell from 36 per cent to 9 per cent. Beyond its economic impact, international trade is a key driver of social progress, particularly in advancing gender equality. Providing access to global markets, enables women-led businesses to grow sustainably and build resilience while creating greater employment opportunities for women. The 2020 joint report by the World Bank Group and the World Trade Organization highlights that those women working in export-driven sectors are more likely to have formal employment with better benefits, training, and job security. With countries becoming more integrated into the global value chains (GVCs), indirect benefits on women's livelihoods are also ensured.

However, trade is not gender-neutral as women's participation in trade remains considerably low, they hold fewer jobs, are paid less, are overrepresented in the informal sector, and are more likely to experience worse job conditions than men. India's ranking of 142 out of 146 countries in the 'Economic Participation and Opportunity' subindex of the Gender Gap Report 2024 underscores the persistent gender disparities in the overall labour market. In the trade and export sector, this gap is particularly evident. According to the latest Periodic Labour Force Survey (PLFS) 2023–24, fewer than 5% of employed women were engaged in the trade sector, whereas the corresponding share for men stood at 13%. The gender disparity is even more pronounced in the transport and storage industry, a sector critical for facilitating both domestic and international trade, with women constituting only 0.16% of their total workforce in this sector, in stark contrast to approximately 6.5% for men. In fact, women working in these sectors are primarily concentrated in lower- and mid-skilled roles. Hence, while international trade brings enormous benefits, women disproportionately miss out on its positive outcomes —whether in terms of wages, welfare, job quality, and availability, or the risks they face - ultimately losing out on opportunities.

Hence, addressing the persistent challenge of low female participation in international trade is crucial for fostering a more inclusive and prosperous trade environment in India. Enhancing women's engagement in global trade would not only promote gender equality but also drive economic growth, boost productivity, and foster income equality, ultimately contributing to resilient and sustainable development. To achieve this, targeted affirmative actions for gender mainstreaming are essential to

create an enabling ecosystem that facilitates women's participation in export-led firms, particularly in skilled and leadership roles within the global value chains.

Invisible Roadblocks: The Gendered Challenges in International Trade

Literature highlights several key barriers that hinder women from establishing businesses and accessing export markets for global trade. One of the primary constraints is the deeply ingrained gender biases within the society and family that perceive international trade-related activities—such as entrepreneurship, customs house agency, or freight forwarding—as predominantly male-dominated professions. These perceptions create significant barriers, ultimately restricting women's participation in the trade sector by denying them education, training, and skill development opportunities.

Gender stereotypes in India also lead to the unequal distribution of care responsibility within households, placing a disproportionate burden on women and constraining their time and mobility. According to the 2024 International Labour Organization (ILO) report, 53 per cent of women in India remain outside the labour force due to caregiving responsibilities, compared to only 1.1 per cent of men. With less than. 1 per cent of India's GDP located to the care sector, inadequate state support exacerbates women's social and economic challenges, ultimately impeding their participation in the global trade workforce.

Limited access to formal financial services and financial literacy also pose significant challenges for women entrepreneurs in securing funding for import and export transactions. In 2021, women-led startups accounted for less than 15 per cent of the total funding raised by Indian start-ups. According to a study by the International Finance Corporation (IFC) in 2015, women-owned enterprises in India face a financing gap of around 70 per cent, and a large part of this gap can be attributed to ingrained social biases in the financial system. As a result, many women entrepreneurs are compelled to rely on informal sources of financing, which not only exposes them to exorbitant interest rates but also increases their vulnerability to financial exploitation, abuse, and harassment.

Limited access to established business networks in the export sector and a lack of knowledge about international markets can also significantly restrict women's participation in the sector. This usually results in women entrepreneurs missing out on funding and expansion opportunities. , struggling with navigating logistical and procedural compliance for international trade, and facing challenges in acces--sing crucial information and advice. Women are also less likely to be aware of the documentation and customs clearance processes, putting them at a disadvantage owing to the gender divide with the digitisation of these procedures.

The absence of authentic and reliable gender-specific data along with a lack of comprehensive research on women exporters and entrepreneurs reinforces biases in trade policymaking (Singla, 2024). The limited availability of gender-disaggregated data contributes to a significant knowledge gap, hindering the assessment of women's engagement in global trade. This, in

turn, limits the identification and development of targeted policy interventions to address the challenges faced by women in trade, ultimately hindering their participation in the sector .

Additionally, systemic policy and legal barriers, high tariff and non-tariff restrictions on products primarily consumed by women, 'gender blindness' of trade policies, the underrepresentation of women in leadership and technical roles, and the absence of gender-sensitive infrastructure at land ports facilitating trade at the borders further limit women's participation in global trade.

These barriers are largely interconnected and tackling any of these with suitable policy interventions can significantly reduce the burden of the other. Hence, a holistic and gender-responsive approach to trade policy and economic reforms is the need of the hour as bridging the gender gap in trade will not only empower women entrepreneurs but also contribute to India's overall economic growth and global competitiveness.

Actionable Recommendations for Improving Women's Participation in Global Trade

To ensure women's meaningful inclusion in trade and entrepreneurship, a multi-pronged approach is necessary—one that strengthens domestic policy frameworks, mainstreams gender in trade agreements, improves trade facilitation practices, enhances data collection, and promotes women's holistic empowerment. Addressing existing gender gaps requires targeted interventions that not only provide early stage support but also ensure long-term resilience and integration into global markets.

Strengthening Domestic Policy Frameworks – Several schemes and initiatives at both the central and state levels have been implemented to support aspiring and established women entrepreneurs in scaling their ventures. These efforts encompass incubation and acceleration programs, entrepreneurial skill development, and mentorship, alongside financial assistance, marketing and taxation support, access to government marketplaces, and digital literacy initiatives aimed at fostering digital inclusion.

For instance, the Women Entrepreneurship Platform (WEP), launched by NITI Aayog, serves as a comprehensive ecosystem for women entrepreneurs across India. It provides a range of support services, including free credit ratings, mentorship, funding assistance, apprenticeship opportunities, corporate partnerships, and incubation and acceleration programs to facilitate business growth. Similarly, the SheTrades and UPS Project, Empowering Women Entrepreneurs in India, focuses on capacity-building initiatives, personalized mentorship, and coaching for select women-owned businesses, with an emphasis on digital inclusion, financial access, and business resilience. Additionally, the International Women's Trade Centre (IWTC) in Kerala is a dedicated initiative designed to establish a trade hub catering to the specific needs of women entrepreneurs.

While these initiatives highlight the growing policy focus on women's entrepreneurship in India, direct support mechanisms for the internationalization of women-owned start-ups remain limited. Most existing schemes primarily provide early-stage assistance, yet measures ensuring the resilience and long-term sustainability of these ventures through expansion into global markets are lacking (Taneja et al, 2022). Addressing this gap requires targeted policy interventions that create a gender-inclusive trade environment, enabling women entrepreneurs to meaningfully contribute to the global economy.

One such affirmative action was undertaken by the Central Board of Indirect Taxes and Customs (CBIC), which issued a directive to ensure greater representation of women in trade-related decision-making processes. The measure

mandated the inclusion of women in the Permanent Trade Facilitation Committee (PTFC) and Customs Clearance Facilitation Committee (CCFC) meetings, encouraged trade bodies to establish dedicated help desks and streamlined processing mechanisms for women traders and logistics service providers, and promoted skill development by offering relevant training for women in logistics, freight forwarding, and customs brokerage. Additionally, the initiative emphasized the establishment of gender-inclusive infrastructure and the organization of regular gender-sensitization training sessions. Action Point #27 of the National Trade Facilitation Action Plan (NTFAP) 2020-23 also explicitly highlights the importance of fostering gender inclusivity in trade to enhance women's participation in the global economy and strengthen their business resilience. Similarly, theLand Ports Authority of India (LPAI) has undertaken efforts to promote gender inclusivity at India's Integrated Check Posts (ICPs).

Moving forward, it is essential for policymakers to implement affirmative actions through targeted policies for enhancing access to digital technology, finance, global trade-related information, and infrastructure, as well as focusing on upskilling, education, and the development of human capital. These initiatives should not only support early-stage ventures but also ensure their long-term sustainability and successful integration into the global market. This includes

Mainstreaming of Gender in Trade Policies and Agreements – Given the existing disadvantages women face in trade, high-level trade policies and agreements must integrate gender considerations to ensure inclusivity. It is essential for these policies to incorporate gender-specific provisions that enable women's meaningful participation in the global trade ecosystem. Additionally, a holistic approach is needed to align trade policies with domestic reforms and initiatives, creating a cohesive and inclusive framework. While gender equality considerations are increasingly being incorporated into bilateral and multilateral FTAs, agreements, and discussions at the international level, India has lagged in fostering inclusivity for its socio-economically disadvantaged groups. As per the 2020 Report by the International Trade Centre, more than 25% of the 292 FTAs in force currently and notified to the WTO have at least one gender-explicit provision. With the growing integration of trade into global value chains (GVCs), it is imperative for India to adopt a more inclusive and pragmatic approach to trade policy. India can draw inspiration from global best practices to incorporate special provisions for women in international trade agreements. For instance, in 2018, the European Parliament passed a resolution mandating the inclusion of gender equality considerations in all future free trade agreements. India can take a similar approach by ensuring that its ongoing bilateral FTA negotiations include women entrepreneurs as key stakeholders in domestic consultations, with their concerns and aspirations reflected in the final agreements. At the multilateral level, a significant step forward would be for India to join the Informal Working Group on Trade and Gender IWG, which was established to engage in global discussions on gender-responsive trade policies.

Enhancing Trade Facilitation Practices – Strengthening India's trade facilitation through the simplification, modernization, and harmonization of export and import processes is another key measure that can significantly boost women's participation in trade-related services. According to the 2023 UN Global Survey on Digital and Sustainable Trade Facilitation, which assessed 160 economies across more than 60 digital and sustainable trade measures, India's score in the "Women in Trade Facilitation" category rose to 77.8 per cent—an improvement from 66.7 per cent in 2021. This progress was largely driven by India's trade facilitation efforts aimed at increasing women's participation, particularly through enhanced representation in

the National Trade Facilitation Committee and other governing bodies, following the implementation of the National Trade Facilitation Action Plan (NTFAP) 2020-23. India's implementation of the Turant Customs Programme, which modernized the customs clearance process by making it faceless, contactless, and paperless, has played a crucial role in fostering a level playing field for women by reducing physical interactions and shifting procedures to a digital platform.

However, while such reforms are commendable, it is crucial to scale them up and institutionalize them, ensuring that gender mainstreaming becomes a core component of India's trade facilitation execution and implementation strategies. Gender mainstreaming should be a fundamental aspect of India's trade facilitation framework – especially at the sea and land ports, which serve as key gateways for the country's cross-border trade. This requires the provision of gender-friendly infrastructure and addressing safety concerns for women, alongside fostering a broader, more inclusive ecosystem through gender affirmative measures (Taneja et al, 2023).

Improving the Availability and Accessibility of Gender-Disaggregated Labour Datasets – The effectiveness of policies designed to enhance women's participation and benefits from global trade relies on the availability of comprehensive and reliable gender-specific data. Enhancing the accuracy and accessibility of gender-disaggregated trade statistics is essential for the effective implementation of trade policy reforms. Greater government funding and coordinated efforts are required to systematically collect granular national-level gender-disaggregated data on women exporters and entrepreneurs at the firm level and ensure its accessibility to independent research organizations. Such data would enable a better assessment of how various policies and challenges affect women and men differently while also aiding in the identification of vulnerable groups for targeted interventions.

Advancing Women's Holistic Empowerment - Recognizing the impact of gender-based stereotypes on women's economic participation, comprehensive action plans for their holistic empowerment are essential. Since caregiving responsibilities often limit women's access to economic opportunities, enhancing care policies and expanding care service provisions across all sectors and projects in India is crucial (Singla, 2023). Investing just 2% of India's GDP in public-sector care infrastructure could generate 11 million jobs while improving women's economic and social well-being as they transition into formal employment. Although India currently provides 26 weeks of maternity leave, shifting towards a parental leave framework would create a more supportive environment for working parents. Additionally, increasing and diversifying gender budget allocations across ministries is necessary, as it has remained stagnant at just 1% of GDP for the past 17 years. Most importantly, fostering education and awareness through gender-sensitization programs—both within families and workplaces—is critical to challenging biases and promoting women's empowerment.

Ultimately, empowering women in global trade goes beyond achieving gender parity; it is about fostering a more resilient, equitable, and prosperous economy. As India deepens its integration into global value chains, ensuring that women actively participate in and benefit from trade will be crucial to unlocking the nation's full economic potential and driving sustainable development. Increasing women's representation across various roles in trade—whether as exporters, entrepreneurs, customs brokers, or freight forwarders —has the potential to create a powerful role-model effect. This, in turn, can amplify the socio-economic benefits of trade, transforming it into a catalyst for equality and inclusive growth.

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Critical assessment of the need for country level social cost of carbon

By Sangyukta Das, M.Sc. Environmental Economics, LSE'23 and Policy Associate Data, Policy and Innovation Centre

To assess whether the costs of climate change will outweigh the benefits for some regions, there is a peaked interest in determining the Social Cost of Carbon (SC--C). SCC by definition represents the economic damages that would be caused by an additional tonne of carbon dioxide emission today into the atmosphere. It is the marginal global damage of carbon emissions and is estimated in US$, € or GB£ per tonne of carbon (tC). While it estimates the net present value of impact over the next 100 years or longer due to the extra tonne of carbon emitted today, it differs from the total or average impact of climate change. In mathematical programming, the SCC is the shadow price of carbon emissions along a reference path of output, emissions and climate change (Nordhaus, 2014). Many scholars and scientists have tried to estimate a fair SCC in the past three decades using a range of assumptions on uncertain parameters and they have been quite complex as the calculations involve the full range of impacts from emissions, carbon cycle and climate change and also their economic damages. The various Integrated Assessment Models(IAMs) available have been relatively successful in the estimation of the entire path of cause and effect and can calculate an internally consistent SCC. The recent estimates range from US$10 per tCO2 - US$1000 per tCO2 (Ricke et al. 2018).

The global social cost of carbon(GSCC) is useful and the right value to use from a global welfare perspective. But country-level SCC (CSCC) is important as the domestic investment projects in transport, energy and other public sectors also have significantly large contributions to the SCC. The distribution of the CSCC gives better insights into the distributional impacts of climate change and national strategic incentives and thus is helpful in quantifying non-cooperative behaviour and prioritising international cooperation.

Key issues in calculating the SCC:

Uncertainty

Nordhaus (2017) categorizes uncertainty about the social cost of carbon (SCC) into model uncertainty and structural uncertainty. Model uncertainty arises from varying parameter assumptions across integrated assessment models (IAMs), such as emissions, temperature sensitivities, and discount rates. While CO2 emissions are relatively easy to measure, non-CO2 emissions like methane involve measurement challenges and source ambiguities. Predicting future GHG emissions requires understanding socio-economic trends, carbon intensity, and the costs of abatement technologies, which are crucial for cost-benefit analyses to determine optimal emissions levels and corresponding carbon taxes.

Uncertainty also stems from the absorptive capacity of forests and oceans, which could be affected by deforestation or climate change, potentially leading to over- or underestimation of atmospheric carbon concentrations. Secondary climate impacts, such as shifts in precipitation,

increased natural disasters, or extreme phenomena like changes in ocean currents (Hu et al., 2020), Antarctic ice sheet melting (IPCC, 2019), and the runaway greenhouse effect (Goldblatt & Watson, 2012), add further complexity.

Valuing non-market climate impacts increases uncertainty, particularly with techniques like willingness to pay (WTP) and willingness to accept compensation, often based on surrogate markets (Rothman et al., 2003). Socially contingent effects, including famine, migration, and conflict, further amplify uncertainty in damage estimates (Watkiss & Downing, 2008). These impacts may lead to underestimated costs, especially in regions facing displacement, morbidity, or unrest. Additionally, equity-weighting raises questions about whether climate risks should reflect regional or global WTP, highlighting significant valuation challenges.

Equity

Clarkson and Deyes (2002) justify equity weighting by saying that "a dollar to a poor man is worth more than a dollar to a rich man." The equity weighting gives marginal damage at least a factor of two higher than if regional damages are not equity weighted. So when we try to find global estimates for SCC, people in poorer regions of the world would value the same amount of money more than people who are already rich. Thus the estimate is based on the Eyre et al. (1999) study wherein:

$$\left(Y_{\text{world}}/Y_{\text{region}}\right)^{-\text{elasticity}}$$

Here Y is GDP per capita and 'elasticity' is the elasticity of marginal utility (MU) with respect to income, taken as -1. This will assign more impact value to the poorer regions and thus increase total impacts and thus SCC. This study resulted in an increase in damage values at $1.5/tonne per year over time.

The IPCC (1996) said that the choice of using equity weights will partly be a matter of ethical judgement and 'will likely remain an unresolved question in economics'. Pearce (2002) also argues that the equity weight should be assigned to all measures that affect poor countries disproportionately than the richer ones, or to completely scrape of equity weights. The region-wise damage estimates increase, which later feeds into the larger aggregate damage estimate for any given level of climate change.

Discounting

Uncertainty around discounting reflects inter-temporal and inter-generational equity. Arrow et al. (1996) describe the descriptive approach, where the discount rate reflects the market price of future consumption, calculated using the Social Rate of Time Preference (SRTP). SRTP is defined as: SRTP = PRTP + βg, where PRTP is the pure rate of time preference, β is the negative of the income elasticity of marginal utility, and g is the growth rate of per capita consumption (Pearce & Ulph, 1999). PRTP values vary across developed and developing regions, adding to the uncertainty (Moyer et al., 2014).

The prescriptive approach argues that market-based discounting undervalues future generations, as modest discount rates make future consumption near-zero. It advocates for valuing future generations equally to the current ones and using lower discount rates to account for uncertainty and calamities. For example, Maddison (1995) proposed a 5% discount rate assuming PRTP = 3%, while Nordhaus (1991, 1992) shifted between values, later assuming 3% as constant, though SRTP levels remain unclear. Without discounting, future climate costs are weighted equally with present costs, significantly increasing SCC (OECD, 2018). However, Pearce (2003) notes this approach could impose heavy sacrifices on current living standards, which current climate policies do not support.

The debate extends to ethical considerations. A zero PRTP reflects fairness to future generations, while a positive PRTP lowers their welfare weight,

challenging inter-generational equity (Cline, 2004). Some suggest SRTP should align with long-term per capita growth rates and that discount rates should be endogenous and time-dependent, rising with higher per capita growth and vice versa. Ricke et al. (2018) calculate country-specific SCC estimates using growth-adjusted discounting based on the Ramsey endogenous rule, incorporating varied elasticity of marginal utility and PRTP values.

Country-wise differences for SCC estimates

Numerous studies (Maddison 2003; Mendelsohn et al. 2000; Nordhaus 2006) have analysed the global welfare impacts of climate change. They found that while the doubling of GHG emissions may not significantly affect the current economy, the cumulative effects over a century could cost nearly a year's global economic growth. Initial benefits of slight temperature increases, such as CO2 fertilization, reduced heating costs, and lower cold-related health problems, were positive, particularly in temperate zones. However, the climate has surpassed these sunk benefits. The natural environment's uncertainties and surprises are vast, and their impacts are compounded by extrapolation (Tol, 2012). Poorer countries are particularly vulnerable to human-induced natural disasters due to their reliance on agriculture and geographical location near the equator and tropics, lacking resources and capacity for adaptation and mitigation (Yohe and Tol, 2002). Estimating the Country-Specific Social Cost of Carbon (CSCC) is critical for understanding regional impacts and designing tailored climate policies in such regions.

Countries like the US and the UK have already determined their Social Cost of Carbon (SCC) for implementing domestic climate policies. However, determining CSCC for individual countries would help address regional impacts and guide adaptation and compensation measures. The US EPA estimates SCC at $12, $42, and $62 per tCO2 emitted in 2020 for 5%, 3%, and 2.5% discount rates, respectively (IAWG, US Govt 2013). The UK government established SCC at £70/tonne of carbon (tC) for 2000 emissions, updated at £1/tC annually, within a range of £35–£140/tC (DEFRA, UK 2005). Ricke et al. (2018) followed US National Academy of Sciences (NAS) guidelines and used country-level climate projections to derive CSCCs, highlighting substantial heterogeneity.

While determining CSCC is crucial, the overall cost of achieving net-zero emissions should be borne proportionally by countries based on their weighted carbon contributions. This approach ensures that countries reducing emissions and investing in alternative pathways are incentivized to continue innovation and reductions. Accurate SCC estimates are vital for countries to identify their economically optimal levels of pollution control. Estimating the damages avoided by pollution control is essential to determine abatement requirements. Furthermore, explicitly determining CSCCs will enable countries to devise better domestic policies (Guo et al., 2006).

Watkiss and Downing (2008) analysed SCC usage in UK policy, and Watkiss and Hope (2011) found that global SCC estimates are used in countries like the USA, UK, Netherlands, Finland, and Italy. However, using global SCC estimates for domestic policy can be problematic, as highlighted by Anthoff and Tol (2010). They argue that global estimates often fail to consider differences between global and national decision perspectives, particularly under equity weighting. Equity weighting can pose ethical dilemmas about a country's responsibility for others. In scenarios like sovereignty, altruism, good neighbour, and compensation, significant differences in SCC estimates were observed, influencing national climate policy intensity. Additionally, Pearce (2003) noted that equity adjustments are absent for domestic trade or agriculture policies, and applying these adjustments would significantly impact SCC values and regulatory appraisals.

Ricke et al. (2018) estimated CSCC using a four-module framework (socio-economic, climate, damages, and discounting).

They found significant discord between countries' CO2 emissions and their CSCC shares. For instance, while Russia benefits the most, countries like India, Indonesia, and Brazil bear disproportionately large losses relative to their emissions. The largest emitters, the USA and China, contribute significantly to emissions but hold smaller GSCC shares. These dissimilarities create confusion in forming common climate agreements and lead to lower GSCC estimates. More research is needed to understand the "geographical diversity of climate change impacts," improve CSCC estimates, and implement more effective cost-benefit analyses for domestic climate policies.

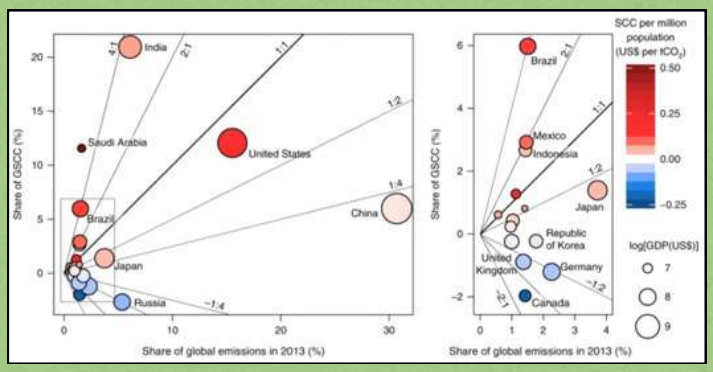

Fig 1. Difference between country's share in GSCC and individual CO2 emissions (Source: Ricke et al. 2018)

The Role of SCC in Government Regulation and Policymaking

The use of the Social Cost of Carbon (SCC) in government regulation is a relatively recent development, requiring an institutionalized process for regular reviews and updates (Pizer et al., 2014). Establishing an official SCC for a country begins with selecting which Integrated Assessment Model (IAM)—such as DICE, FUND, or PAGE—to use. These models differ in their scope, public accessibility, peer review status, and integration of the latest scientific findings. For example, determining the SCC for 2023 would involve the following steps:

- Projecting the future path of GHG emissions using IAMs.
- Simulating alternate climate change scenarios by adding 1 ton of emissions in 2024.
- Assessing the effect of these emissions on the climate system and human activities.
- Monetizing the impacts, discounting future damages to 2024, and estimating the required abatement levels.

The SCC is calculated as the difference in damage valuations with and without the additional ton of carbon in 2024 (Pizer et al., 2014). Assumptions about the baseline trajectory of GHG concentrations significantly affect SCC estimates. These assumptions could include:

- Business-as-usual emissions: No climate change policy is implemented.
- Targeted trajectories: Global mean temperature rise is limited to less than 2°C.
- Optimal abatement levels: Emissions are controlled to achieve marginal damages (MD) equal to marginal abatement costs (MAC).
- Other emission pathways: Intermediate scenarios based on specific socio-economic or policy conditions.

The economic effects of increased emissions are dispersed across future years, and the SCC aggregates these effects into net present value terms. The timing of emissions plays a critical role, as carbon dioxide emitted at different points in time may result in varying levels of damage. This is due to the nonlinear relationship between the accumulated stock of greenhouse gases in the atmosphere and the damages caused. The existing emissions stock influences additional damages, while rising income levels impact the willingness to pay for emission abatement. Consequently, SCC values are expected to rise over time, with the IAWG US Government (2013) predicting the SCC in 2050 to be roughly double that in 2010.

Clarkson and Deyes (2002) outline two primary approaches to calculate the SCC:

1. Cost-Benefit Analysis (CBA): Determines the carbon tax level required to achieve optimal emission levels.
2. Marginal Cost (MC): Measures the direct change in future damage levels caused by

a marginal change in current emissions.

Both approaches face uncertainties, particularly regarding the discounting of future damages, as noted in previous sections.

The SCC is instrumental in conducting cost-benefit analyses (CBAs) for climate policies. It enables policymakers to estimate the abatement needed now to avoid future damages. A reliable SCC estimate can be applied in:

- Project Appraisal: Evaluating the costs and benefits of individual projects.
- Regulatory Impact Assessments: Analysing policy implications.
- Setting Economic Instruments: Designing taxes, subsidies, and other tools for damage reduction.
- Long-Term Climate Policy: Establishing national and international goals for GHG mitigation or adaptation.

The SCC is particularly relevant for policies addressing GHG mitigation, improving air quality, optimizing energy use, and reducing transport congestion (DEFRA, 2007). It aids in determining the appropriate stringency of environmental regulations, provided that damage functions incorporate inter-sectoral and inter-regional variations and interactions.

The Role of SCC in Reducing Policy Inconsistencies

As illustrated in Figure 2 (adapted from Resources for the Future), the SCC helps identify the most cost-effective and beneficial policies. It provides an economically optimal level of pollution control by quantifying damages avoided through abatement (Guo et al., 2006). Furthermore, incorporating the SCC into policy design ensures implicit cost-benefit ratios are consistently evaluated using available parameters (Thomas, 1963). Reliable SCC estimates—including the shadow price of carbon—minimize policy inconsistencies and allow policymakers to work with plausible approximations rather than no guidance at all (Hanemann, 1994).

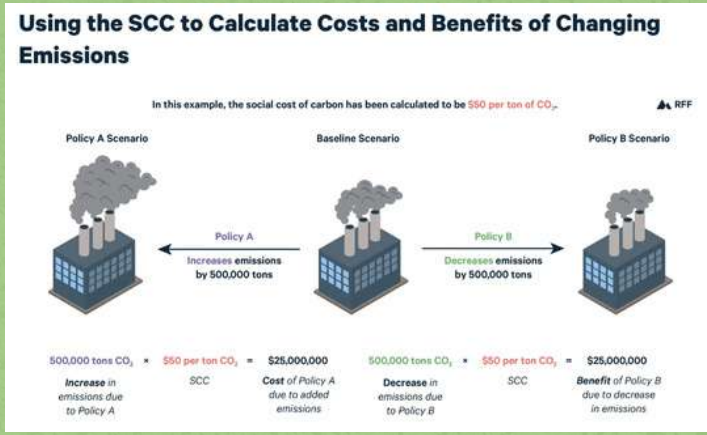

Fig 2: Diagram explaining the use of SCC in two different policy scenarios (Source: Resources for the Future)

To improve SCC estimates and integrate them effectively into policy-making, IAMs must undergo continual development. This requires increased funding, research, and systematic updates to ensure SCC values remain robust and reflective of current scientific knowledge. By doing so, SCC estimates will contribute to better CBAs, ultimately driving the formulation of effective national climate policies.

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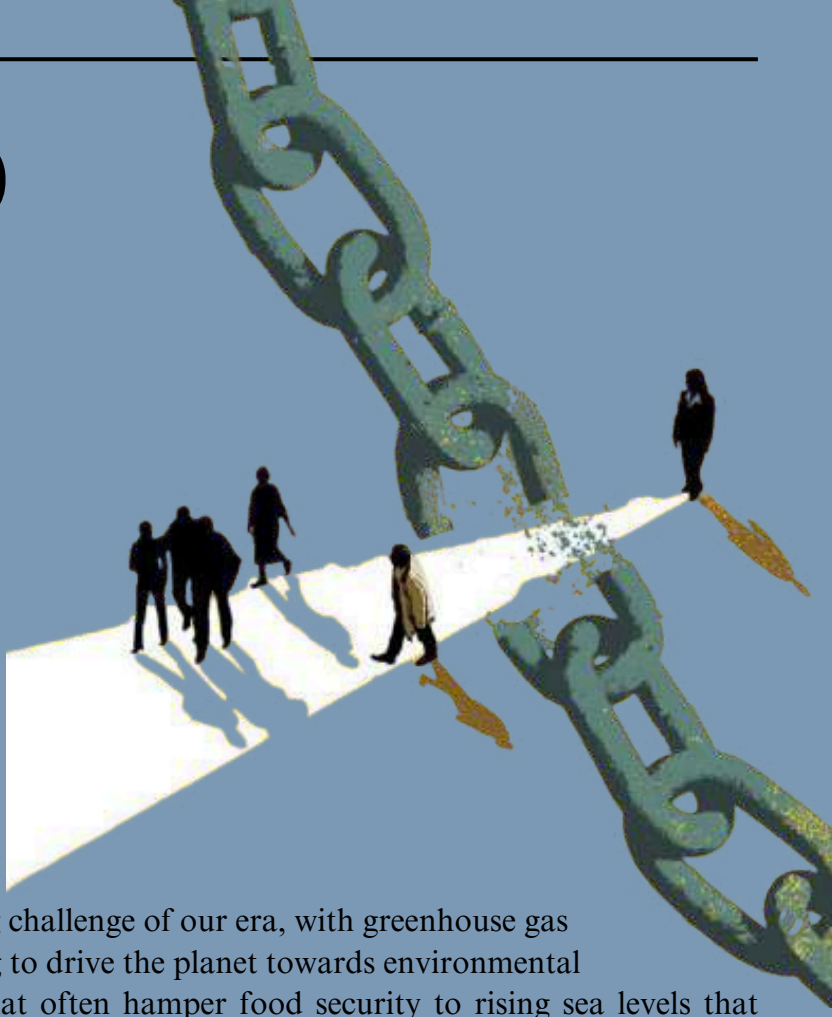

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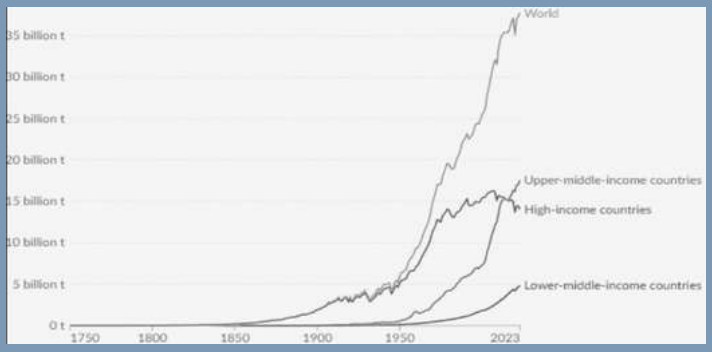
Climate change today has emerged as the defining challenge of our era, with greenhouse gas (GHG) emissions from human activity continuing to drive the planet towards environmental catastrophe. From changing weather patterns that often hamper food security to rising sea levels that enhance the threat of devastating floods, the impacts of climate change are both global in scale and unparalleled in severity (Intergovernmental Panel on Climate Change, 2023). In 2023, as per the Global Carbon Project data, global carbon emissions reached an unprecedented 37.79 billion tonnes, highlighting the urgency for effective climate action. The data shows that while the rise in carbon emissions is increasing rapidly for the upper-middle-income countries, there has been a decreasing trend since 2015 for the high-income countries (see Figure 1). Lower-middle-income countries (LMICs), home to over 85 per cent of the global population, contributed only 12.9 per cent to the global annual carbon dioxide (CO2) emissions. Thus, despite housing the majority of the global population, these economies contribute a disproportionately small share of annual CO2 emissions. This highlights the importance of carefully analysing data before determining how the burden of carbon emissions should be distributed among nations of varying income levels.

Figure 1: Annual CO2 Emissions Across Different Income Groups of Countries



Source: Compiled from Global Carbon Project database (2024)

This brings us to the question of how international trade, which is often lauded for its economic benefits, may have inadvertently exacerbated carbon emissions. Trade growth has disproportionately impacted LMICs such as India while allowing high-income economies such as the United States and the European Union (EU) to appear more environmentally conscious than they are (Chancel et al.,2023). This imbalance stems largely from differing carbon accounting methods, which play a crucial role in shaping climate policies and international negotiations (World Trade Organization, 2022).

The Evolution of Carbon Accounting: Context and Challenges

The carbon accounting methods have developed over time to measure the GHGs more accurately, aiding countries and industries to meet their climate goals under agreements such as the Paris Agreement. For this, the most common approach has been the production-based accounting (PBA) method, which tracks emissions produced within a country's borders from making goods and services (Karakaya et al., 2019). Although this method is quite simple and fits well with national boundaries, it does not always account for the global nature of modern trade and the inherent production systems.

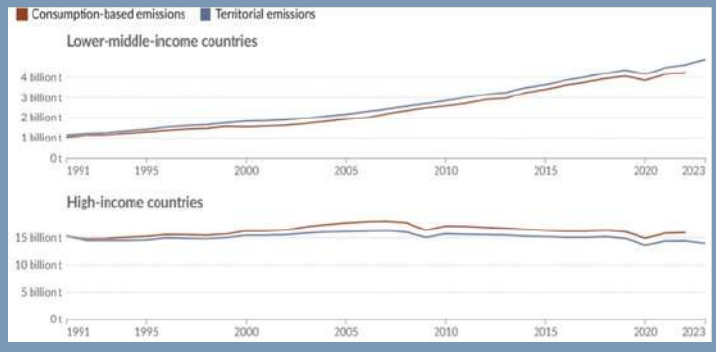
As global value chains (GVCs) have grown more complex, goods are now produced across several countries before reaching consumers (Chawla and Kumar, 2023; Banga, 2013). For instance, cotton grown in India might be processed into fabric in Bangladesh, stitched into garments in Vietnam, and then sold in the United States. Under PBA, the emissions generated during production are attributed solely to the producing country, ignoring the role of consuming economies. This has led to the phenomenon of carbon leakage (Beck et al., 2022), where stringent emission regulations in developed economies tend to push carbon-intensive production to the developing economies with less strict policies.

In response to these limitations, the consumption-based accounting (CBA) method has gained traction (Tukker et al., 2020; Frazen and Mader, 2018). CBA attributes emissions to the end consumers, accounting for the entire supply chain, right from the raw material extraction to the final disposal. Although more comprehensive, CBA has not yet been widely adopted because of its methodological complexity and the potential geopolitical challenges associated with redistributing emissions responsibility.

The Disproportionate Burden on the Developing Economies

The disparity in global carbon emissions attribution becomes increasingly evident when we compare the developed or high-income countries with the developing economies. The results are more evident in the case of the LMICs. For instance, in a study by Tukker et al. (2020), it was revealed that developed economies collectively emitted around 12.3 billion tonnes of CO2 under PBA but this amount rose to 13.8 billion tonnes under CBA. The figures were the opposite for the developing economies, where emissions were seen to be 24 billion tonnes under PBA but only 20.6 billion tonnes under CBA. Going by this study it can be interpreted that developing economies are bearing an additional burden of around 3.4 billion tonnes of emissions embodied in goods consumed by developed economies. This disparity is also evident from data sourced from the Global Carbon Budget data of 2024, where consumption-based emissions are higher than the production-based emissions or territorial emissions for the high-income economies (see Figure 2). Thus, while emissions levels are slowing down in these economies, the reduction may be primarily attributed to a decrease in the territorial-based emissions, which are being outsourced to the LMICs.

Figure 2: Consumption-Based Emissions vs Territorial Emissions

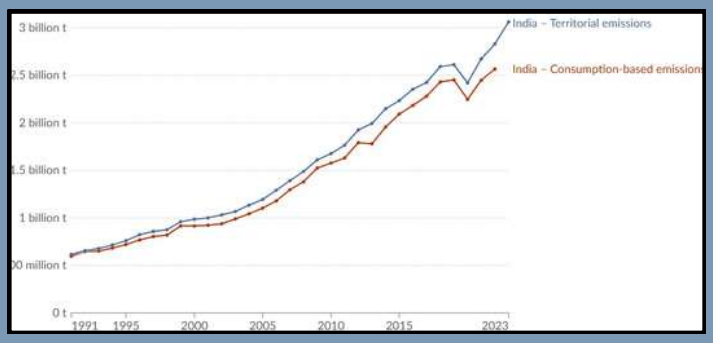


Source: Compiled from Global Carbon Project database (2024)

India, an LMIC and a major player in global manufacturing, exemplifies this inequity. As its economy grows rapidly and its export-oriented industries expand, India plays a crucial role in global supply chains.

Yet, emissions accounting under PBA (see Figure 3) disproportionately attributes emissions to India, distorting its climate responsibilities. This misattribution tends to divert critical resources from addressing imminent domestic challenges, such as poverty alleviation or infrastructure development.

Figure 3: Consumption-Based Emissions vs Territorial Emissions (India)



Source: Compiled from Global Carbon Project database (2024)

Economies such as India face a disproportionate share of the global carbon burden due to their pivotal roles in global manufacturing and trade. These economies are often pressured to prioritise economic growth and poverty alleviation while being held accountable for emissions that are generated during the production of goods that are mostly consumed in high-income countries. For example, studies show that nearly 30 per cent of India's carbon emissions during the study period of 2000-2014 were linked to the production of goods for export, driven largely by coal-powered energy and the export of carbon-intensive goods such as textiles and steel. Such international demand raises India's emissions profile, placing an undue burden on the country (Wang et al., 2020).

In an earlier study by Peters et al. (2011), it was found that developed economies outsource around 20 per cent of their carbon emissions to the developing economies through the medium of trade. This exacerbates the environmental as well as financial burden on these economies. Coupled with this, a majority of the LMICs and the low-income economies are often faced with barriers to transitioning to low-carbon economies due to limited access to low-carbon technologies and financial resources. For countries like India, these challenges are further compounded by high energy intensity and rapid urbanization, making it even more difficult to balance development goals with international climate commitments.

These inequities in carbon emissions attribution and the structural challenges which are faced by developing economies underscore the need for a more equitable framework. Such a framework should not only recognise the shared but differentiated responsibilities of economies and support developing countries in achieving sustainable development while addressing global climate challenges.

The Role of the Global Value Chains

The global attribution of carbon emissions is getting further complicated due to the rise in global value chains (GVCs). The traditional 'made in country x' tag is becoming almost obsolete as goods are now made in multiple stages across different countries. This generates emissions at different stages in different locations. For instance, a smartphone For instance, a smartphone may involve components manufactured in Southeast Asia, assembled in China, and then sold in Europe, with each step adding to the carbon footprint.

Recent research has proposed innovative methods to address the complexities of carbon accounting, such as differentiating between self-responsibility (emissions from purely domestic value chains) and shared responsibility (emissions associated with GVCs). However, accurately computing emissions along value chains remains challenging, requiring deeper understanding and more comprehensive data to inform effective policy making. Findings from Meng et al. (2023) reveal that developing countries' GVC-based emissions responsibilities have surpassed those of developed countries since 2012. This highlights the urgent need for a more equitable approach to carbon accounting. Many

researchers advocate for shared responsibility frameworks, which allocate GHG emissions between producers and consumers. These approaches address the shortcomings of PBA, which fails to capture emissions embedded in goods produced abroad but consumed domestically, resulting in an incomplete picture of a country's environmental footprint.

In this context, the role of emerging economies like China and India is particularly significant. While China's growth in carbon emissions slowed down following the 2008 financial crisis, India's emissions have continued to rise, driven by its dependence on carbon-intensive energy sources and expanding trade activity. These trends emphasise the need for structural changes in both production and consumption patterns, improved energy efficiency, and stronger global cooperation. A balanced and inclusive approach to carbon accounting, coupled with targeted interventions in key economies, is essential for addressing global carbon emissions effectively.

Policy Implications and Recommendations

As discussed, the disparities in carbon accounting can have significant implications for global climate policy. The Paris Agreement today focuses on territorial emissions, which are easier to monitor but fails to address the emissions embedded in international trade which is crucial in today's interdependent world of trade and GVCs. To achieve meaningful progress, policymakers must adopt a more nuanced approach that incorporates CBA and addresses shared responsibilities along GVCs. Some of the recommendations that can be adopted to ensure a fairer distribution of emissions responsibility are:

First and foremost, there is an urgent need to adopt **consumption-based accounting across the globe.** This transition from PBA to CBA is essential to reflect the true environmental impact of consumption in high-income economies with more consumption-based emissions. While it is not feasible immediately, small steps in the right direction can have a large impact. There is a need for international consensus and the development of standardized methodologies to ensure consistency and comparability across countries.

Second, there is a need to strengthen the multilateral climate agreements. These should be able to explicitly address the role of GVCs and establish frameworks for shared responsibility. Developing countries should be supported through financial and technological transfers to mitigate emissions without compromising economic growth.

Third, solutions such as the introduction of Carbon Border Adjustment Mechanisms (CBAMs) should be considered. This process imposes tariffs on imported goods based on their carbon intensity, which can help in creating a level playing field. The European Union (EU)'s proposed CBAM is a step in this direction, but it must be designed in such a way to avoid penalising developing economies disproportionately.

Fourth, sustainable supply chains need to be promoted. This can manifest when developed economies foster partnerships with trading partners committed to low-carbon technologies and sustainable practices. Incentives related to green production and certification schemes can help drive emissions reductions across the supply chain.

Fifth, for any effective policymaking data is very crucial and as such, there is a need for ensuring data transparency. Detailed data on the carbon intensity of imports and exports is crucial and international cooperation is also needed to improve data collection and sharing, enabling more accurate tracking of emissions.

Last, there is a need to look in-depth at domestic consumption-based emissions. For instance, in the EU, around 69 per cent of these consumption-based emissions are generated from trade within member states. Targeted measures, such as

promoting energy efficiency and sustainable consumption patterns, can significantly reduce these emissions.

Conclusion

As the world confronts the escalating climate crisis, it is crucial to rethink carbon accounting methods to ensure equitable and effective emissions reduction. The limitations of production-based accounting have long placed an unfair burden on LMICs like India, while high-income economies may benefit from an incomplete representation of their environmental impact. In this case, transitioning to consumption-based accounting, coupled with frameworks addressing shared responsibilities within global value chains, offers a pathway to a more just and sustainable climate regime.

International collaboration and innovative policy solutions are vital to ensuring that this fight against climate change is both effective and fair. A comprehensive framework must account for disparities in emissions responsibility, recognising the unique challenges faced by countries least responsible for global emissions but most vulnerable to climate change impacts. By aligning carbon accounting practices with principles of equity and shared responsibility, the global community can drive meaningful progress toward a sustainable future. The stakes are high, but with collective efforts and nuanced approaches, it is possible to build a fairer and more resilient global response to climate change.

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THE HIDDEN COST OF EXPLOITATION AND

By Anu Rajesh, Policy Scholar, Global Governance Initiative and M.Sc. Economics, University of Nottingham' 22

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MARGINALISATION IN THE INDUSTRY

In a world where trends come and go at lightning speed, fast fashion brands like Shein and H&M have become household names, offering affordable, trendy clothing at a fraction of the price of traditional retailers. However, behind the allure of cheap prices and stylish designs lies a darker reality—one that is deeply rooted in the exploitation and marginalization of workers in developing countries. This phenomenon reflects the broader Economics of Marginalization, where vulnerable populations are forced into cycles of poverty, poor working conditions, and limited upward mobility.

The Hidden Cost of Cheap Fashion: Exploitation of Workers

Fast fashion brands like Shein and H&M rely on an intricate supply chain that often stretches across multiple low-wage countries, primarily in Asia, Africa, and Latin America. Workers in these regions are frequently paid meager wages for long hours, subjected to unsafe working environments, and given little to no opportunity for advancement. They are often forced to work in informal, unregulated sectors where labor laws are weak or non-existent, resulting in the systematic marginalization of millions of people.

1.Gendered Nature of Fast Fashion

The fast fashion industry is predominantly reliant on women, who make up 80% of the garment workforce globally. While this presents an opportunity for women's economic participation, it is marred by exploitation and systemic inequities. Garment factories often seek female employees, exploiting cultural stereotypes that portray women as compliant and adaptable. These stereotypes perpetuate a work environment rife with verbal and physical abuse, sexual harassment, and excessively low wages (Kornblum, n.d.)

Women in these roles frequently face additional challenges, such as balancing household responsibilities, inadequate childcare, and financial insecurities. These factors limit their ability to seek better work opportunities or demand improved labor conditions. This exploitation underscores the intersection of gender inequality and economic marginalization within the fast fashion sector (Kornblum, n.d.)

2. Child Labor and Fast Fashion

The demand for affordable clothing has also led to the exploitation of children, especially in countries like India, Pakistan, and Bangladesh. To meet the demands of Western companies for low-cost production, subcontractors often resort to cost-cutting measures that include the reliance on child labor (Baruta, 2021)

Although there was a decline in child labor from 2000 to 2012, the trend reversed between 2016 and 2020, with an increase of 8.4 million children entering the workforce. As of 2021, approximately 160 million children are engaged in work that deprives them of education and proper care (UN News, 2021). A significant portion of these children are employed in the fashion industry, performing tasks like cotton picking and sewing, where their small hands are deemed advantageous for precision work (The Guardian, 2017). The systemic exploitation of women and children underscores the intersection of gender inequality and economic marginalization in the fast fashion industry. Addressing these issues requires a collective effort involving ethical consumer behavior, corporate accountability, and systemic reforms.

3. Environmental Impact of Fast Fashion

The fast fashion industry not only exploits human labor but also wreaks havoc on the environment. According to Business Insider, fashion production is responsible for 10% of global carbon emissions —equivalent to the total emissions of the European Union. Beyond the carbon footprint, the industry severely impacts water resources. Garment production consumes vast amounts of water, contributing to the depletion of freshwater sources and the contamination of rivers and streams (Business Insider. (2021, September 29)

Furthermore, a staggering 85% of textiles produced each year end up in landfills. The environmental burden doesn't stop there—washing clothes also releases microfibers into the ocean. Each year, an estimated 500,000 tons of microfibers are released, which is equivalent to the waste from 50 billion plastic bottles. This contributes to the growing problem of marine pollution and poses a significant threat to aquatic life and ecosystems.

a) Cognitive Dissonance and the Marginalization of Workers

Why do we continue to support fast fashion brands, even when we know the environmental and human cost? This disconnect between our values (sustainability, ethical consumption) and our actions (buying from exploitative brands) can be explained through the lens of cognitive dissonance. While we may claim to support fair wages and ethical production, the allure of cheap, trendy clothing often overrides our ethical considerations. We buy into the narrative that fashion is disposable, and that purchasing inexpensive clothing is a necessary indulgence.

In the same way, workers in the fast fashion industry experience their own form of cognitive dissonance. They often have no choice but to accept poor working conditions because their immediate survival needs outweigh the desire for better, more equitable treatment. This economic marginalization perpetuates a system where workers are caught in a vicious cycle of exploitation, unable to break free from the pressures of poverty and limited options.

b) The Alignment and Clarity Theorem: A Path Toward Sustainable Change

To shift away from this cycle of exploitation and marginalization, we must transcend the rigid societal constructs and biological conditioning that drive our consumption habits. This is where my Alignment and Clarity Theorem comes into action. This theory advocates for aligning our actions with long-term values, helping individuals, companies, and governments make more conscious decisions that move beyond immediate gratification and towards sustainable, ethical practices.

1. Rising Above Fear-Based Decisions:

The fear of loss and the immediate satisfaction of cheap fashion often prevent us from considering the long-term consequences of our consumption. By embracing a mindset that prioritizes sustainability over short-term trends, we can begin to align our purchasing decisions with ethical and environmental values.

2. ***Questioning Societal Norms:***

Fast fashion thrives on societal pressure to "keep up with trends" and "look fashionable." This creates false identities tied to brands and external appearances. By questioning these societal norms and embracing more sustainable, authentic choices, we can break free from the cycle of consumerism that sustains fast fashion.

3. Aligning Actions with Values:

The key to shifting away from fast fashion lies in aligning our actions—not just our thoughts—with our values. This means opting for clothing that is sustainably sourced, supporting brands with fair labor practices, and investing in quality items that last longer. By doing so, we help break the systemic cycle of exploitation that fast fashion perpetuates.

c) Practical Actions to Combat Marginalization in Fast Fashion

To create real change, it's essential to move from awareness to action. Here are practical steps for individuals, influencers, and governments to tackle the exploitation and marginalization embedded in the fast fashion industry:

1) For Individuals:

1.1. Cultivate Self-Worth Beyond Brands:

Detach your self-worth from branded products and embrace the idea that sustainability is trendy. Invest in timeless, quality pieces, and consider thrifting or upcycling as an empowering alternative to fast fashion.

1.2. Support Ethical Brands:

Choose brands that prioritize fair wages, sustainable production methods, and environmental responsibility. Look for certifications like Fair Trade, GOTS (Global Organic Textile Standard), or B Corp status as indicators of ethical practices.

1.3. Reflect Before You Buy:

Ask yourself, "Does this purchase align with my values?" Take a moment to consider the environmental and social impact of your choices.

2) For Influencers:

2.1 Normalize Sustainability:

Use your platform to normalize thrift culture, upcycled fashion, and other sustainable practices. Challenge the idea that new, mass-produced fashion is the only way to stay stylish.

2.2 Highlight Ethical Brands and Practices:

Showcase brands and designers that prioritize ethical production and environmental responsibility. Help reshape the narrative around fashion to highlight long-lasting, sustainable choices.

3) For Governments and Industries:

3.1 Implement and Enforce Labor Laws:

Governments must strengthen labor laws to protect workers in the fast fashion industry, ensuring fair wages, safe working conditions, and the right to organize.

3.2 Promote Circular Fashion:

Support initiatives that encourage the recycling and upcycling of clothes, reducing waste and promoting a circular economy. This includes offering incentives for com--panies that recycle or repurpose materials.

3.3 Tax Incentives for Sustainable Practices:

Provide tax incentives for companies that prioritize sustainable and ethical practi--ces. This can level the playing field, making sustain--ablity. more accessible and affordable for both consumers and producers.

d) Creating a Ripple Effect for Systemic Change

The key to combating the marginaliz--ation inherent in the fast fashion industry lies in focusing on what we can control—our own actions—and creating a ripple effect that influences others. When consumers make informed, ethical choices, they encourage brands to adopt more sustainable practices, while also contributing to the broader societal shift away from exploitative consumption.

By aligning our actions with our long-term values, we can reduce cognitive dissonance and break the cycle of exploitation in the fashion industry. We have the power to transform fast fashion into a movement of sustainaibility and ethical

ethical consumption.

e) Call to Action: Let's Lead the Change

It's time to redefine what fashion means in the 21st century. Let's move beyond trends and fast consumption and focus on what truly matters—creating a world where both people and the planet can thrive. Together, we can shift the narrative, reduce marginalization, and make ethical, sustainable fashion the new standard.

Start today:

1) Shop second-hand or from sustainable brands.
2) Learn to repair and upcycle your clothes.
3) Support influencers and policies championing eco-friendly practices.

Together, we can break free from fast fashion and build a more just, sustainable world.

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EDITORIALS

Pains from Trade:

A Study of Socio-Economic Injustice of Tea Workers in Assam

By Shivalee Duara, B.A. (H) Economics, Year II, Daulat Ram College, University Of Delhi

Introduction

Duflo and Banerjee in their book "Good Economics for Hard Times" mention how Paul Krugman, a liberal economist, and Greg Mankiw, a frequent critic of Krugman's view, both like trade. there is a consensus for trade in economics trade. Drawing from the theory of comparative advantage by David Ricardio, which states that countries can benefit from specialisation in producing goods with the lowest opportunity cost, trade allows countries to participate in Global Value Chains, leading to faster growth.

From 1990 to 2017, developing countries increased their share of global exports from 16 percent to 30 percent; in the same period, the global poverty rate fell from 36 percent to 9 percent (World Bank Group, 2023). Economists like Hume have even suggested that poorer economies might benefit more from international trade and foster growth. However, the effects of global trade have not always been advantageous, as its impact has even adversely affected economies and, specifically, certain groups of people.

Failure of model and a case study of various economies

The Stolper-Samuelson theorem has two implications: firstly, opening up the economy to global trade increases GNP in all countries. Secondly, opening up to trade reduces inequality in poor countries but can increase inequality in rich countries. However, more often than not, this is not the case.

Petia Topalova, in her study of the impact of trade liberalisation after 1991, found that the more exposed a particular country was to trade, the slower poverty reduction was in that district. In subsequent studies, she found that the incidence of child labor dropped less in districts more exposed to trade (Edmonds et al., 2010).

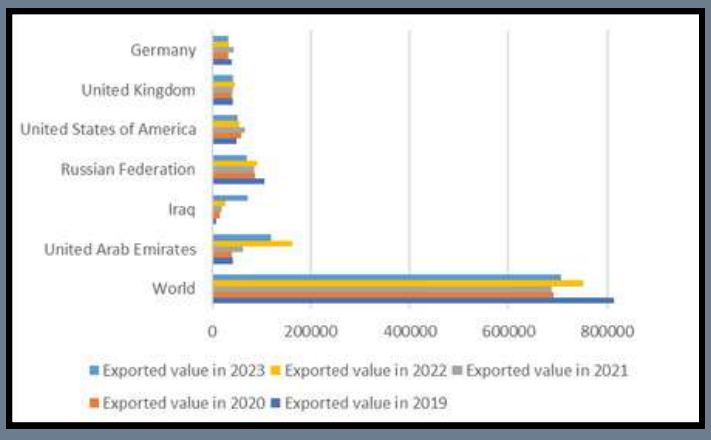
Further, between 1985 and 2000, Mexico, Colo -mbia, Brazil, India, Argenti -na, and Chile all opened up to trade by drastically cutting their tariff rates. Over the same time, inequa -lity increa- sed in all of these countries (Ba- nerjee & Duflo, 2020). These are just a few examples that show the failure of the Stolper-Samuelson model. It is important that we study them in depth and analyse the socio-economic impact, which brings us to focus solely on the tea gardens of Assam which have been victims of the trade.

Explaining the condition of Assam

Assam is India's largest producer of tea and is well known globally for its tea prowess. The top six export destinations for tea from India are the United Arab Emirates, Iraq, Russia, the

United States of America, the United Kingdom, and Germany. India's total exports to the world experienced an increase of 9.18% from 2021 to 2022 and then faced a decline of 5.95% from 2022 to 2023. But data from the trade map shows that this decline was not just limited to India, but the total export of tea declined by 5.86%, so India has been able to maintain exports.

Source: Trade Map



The tea industry blossomed in Assam because the British realised the soil and climate in Assam were suitable for the growth of tea. This led to the British exploiting not just the environment but also thousands of Adivasis or tea tribes. The British decided to recruit laborers from the neighboring states of present-day Jharkhand, Chhattisgarh, Odisha, and West Bengal. The employment opportunity allowed them a chance to live a better life and escape from the violence prevalent in their states. Having been transported from familiar habitats of eastern India, the Adivasi workers in Assam tea gardens soon found their position shackled in all respects as colonial masters had imposed several restrictions on them and forced them to lead secluded lives with no interaction with the outside world (N.K. Das, 2016). This is one of the many instances in history where migration in the guise of economic opportunities has led to exploitation. What followed after this was a series of even more atrocious actions which were inflicted by the British upon the tea tribes.

In the initial decades from the 1850s until around the 1920s, the working conditions were akin to slavery, with flogging, rape, torture, and even the throwing of dead workers in rivers (Toppo 1999). A study in 2004 by The North Eastern Social Research Centre showed numerous violations of the existing Acts including inadequate or completely non-existent provisions for drinking water, crèches, schools, proper health facilities, sanitation for women workers (who form the majority of tea industry labor), and shelter (Bharali 2004). The education level of children in the 14-16 age group is especially miserable in plantations (Fernandes, Barbora, and Bharali 2004). It is observed that most children in plantations miss the opportunity of free education on account of neglect from the management, whom the law obliges to facilitate the education of children below 12, but they do so only on paper (N.K. Das, 2016).

The living conditions are even more terrible and mostly inhumane. The 'coolie lines' established by

the British are still maintained, which are extremely small compounds where families, no matter the size, live. These coolie lines are below housing standards and are extremely congested. There is a simple imitation of the practices in the British times, and these lines remain idyllic, ghettoized compounds.

There also remains a huge gender bias that has yet to be addressed. Almost 80% of the workers employed in the tea industry are women tea workers. Plucking, which is the most intricate and labor-intensive work, is exclusively performed by women but is not considered a skilled job, which has led to women being heavily underpaid as compared to their male counterparts. Moreover, women are generally believed to be more efficient in this job due to their nimble fingers; gender discrimination heavily impacts the employment opportunities women choose. The tea garden management authorities show a wider preference towards the women workers as they are prepared to work at lower wages, are expected to be more docile and submissive, and hence face physical or sexual assault at the workplace, which adds to their problem (Banik, 2013). Apart from being underpaid and also facing heavy discrimination, there are no social welfare benefits under the Plantation Labour Act; hence, plantation workers have no medical or maternity benefits.

Conclusion

The particular case of Assam draws attention to the fact that while trade has benefited Assam to grow economically, it has done so at a huge social cost. There remains no accountability in the hands of tea management and even the government. The discriminatory practices are followed even today, and there has been very little done to bridge the inequality gap.

As the world increasingly adopts the benefits of trade, we need to register accountability and follow sustainable practices so that we do not stop people from living a basic, dignified life in the guise of economic growth.

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FINANCIAL INCLUSION OF STREET VENDORS

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ABSTRACT

The growing economic disparity between the rich and poor in India calls for new financial inclusion mechanisms and increased awareness among the people. This article aims to critically analyze the status of financial inclusion among street vendors. It examines various government schemes related to financial inclusion to identify the reasons for increasing inequalities in the country. Furthermore, the article highlights the important role of street vendors in the economic development of India and advocates for more policy steps to include them financially. It also emphasizes the need for programs to raise awareness about existing schemes and programs.

INTRODUCTION

Street vendors are an essential yet frequently undervalued part of urban economies worldwide. They embody resilience, entrepreneurial spirit, and adaptability. With an estimated global presence of approximately 37 to 80 million, they serve as the backbone of informal economies in developing and emerging nations. Despite their considerable economic contribution, estimated at 10-15% of urban employment in many developing countries—street vendors consistently face financial exclusion that undermines their economic potential and personal economic security.

Financial exclusion is more than just an economic issue for street vendors rather it is a significant socio-economic barrier that limits both individual and collective economic progress. Inadequate access to formal banking, credit facilities, and financial tools, puts these micro-entrepreneurs in a state of perpetual insecurity. More often than not they are seen as high-risk borrowers by traditional financial institutions, leaving them excluded from mainstream financial systems.

The stark paradox is despite generating significant economic value, street vendors stay disconnected from the formal financial system to a large extent. Due to cash-based undocumented transactions, they get excluded from building credit histories, acquiring loans, and benefiting from formal financial services. This exclusion traps them in a cycle of economic marginalization which obstructs opportunities for business growth, personal investment, and long-term financial planning. However, springing research and innovative policies are starting to recognize street vendors as vital economic contributors who need tailored financial inclusion strategies. Digital technologies, progressive policy reforms, and adaptive financial models are making way for their integration into formal financial ecosystems.

This article delves into the complexities of financial exclusion faced by street vendors, explores global challenges, evaluates successful intervention models, and proposes actionable strategies to unlock their economic potential through inclusive financial mechanisms.

CURRENT ECONOMIC LANDSCAPE:

The informal vending sector represents an important yet complex part of urban economies, particularly in developing nations. According to the International Labour Organization (ILO), street vendors account for approximately 15-20% of non-agricultural employment in Asia and up to 25% in several African nations. This significant economic contribution is defined by unique operational practices and persistent financial challenges.

In India alone, the National Association of Street Vendors of India (NASVI) estimates that street vendors contribute 2% to the national GDP, with over 10 million vendors operating across urban centers. Despite this significant economic contribution, the sector faces severe financial constraints. World Bank data indicates that nearly 70% of street vendors operate without any access to formal credit systems, compelling reliance on informal lenders who usually charge interest rates exceeding 300% annually.

The economic vulnerability of street vendors is further exemplified by their daily income patterns. Research by WIEGO (Women in Informal

Employment: Globalizing and Organizing) reveals that the average daily earnings of street vendors range from USD 2-10 in most developing countries, with significant seasonal fluctuations. This income instability is compounded by the lack of financial safety nets – studies by the Asian Development Bank show that less than 5% of street vendors have access to formal insurance products.

Digital transformation presents both opportunities and challenges. The Global Findex Database 2021 indicates that while mobile phone ownership among street vendors exceeds 80% in most urban areas, digital financial literacy remains low at 30-40%. This digital divide creates a significant barrier to financial inclusion initiatives.

FINANCIAL INCLUSION MECHANISMS

At the macroeconomic level, financial inclusion acts as an anchor for sustainable economic growth and reducing income inequality in India. It fosters job creation, reduces vulnerability to economic shocks, and encourages investments in human capital. As per the Centre for Economics and Business Research, the Indian economy is projected to achieve the $10 trillion milestone by 2035. However, despite significant economic advancements, the distribution of these benefits remains disproportionately skewed, particularly against marginalized communities like street vendors.

The *World Inequality Report 2022* highlights that India ranks among the most unequal nations globally, with the top 10% of the population accounting for 57% of the national income, while the top 1% alone controls 22%. Contrary to popular belief, the bottom 50% contribute a substantial 64% of the Goods and Services Tax (GST) revenue, compared to a mere 4% contribution by the top 10%. These disparities underscore the urgent need for focused policy interventions to drive inclusive growth. Financial inclusion emerges as a strong facilitator, accelerating economic output, reducing poverty, and addressing income inequality. In particular, targeting enhanced financial inclusion for street vendors could empower lower-income groups, fostering greater economic equality.

India's commitment to financial inclusion dates back to 1956 with the nationalization of life insurance companies. This was followed by the nationalization of banks in 1969 and 1980, and general insurance companies in 1972. These measures culminated in the launch of the Pradhan Mantri Jan Dhan Yojana (PMJDY) in August 2014—a landmark initiative aimed at ensuring universal access to basic financial services. By utilizing India's expansive banking network and technological progress, PMJDY has significantly bridged banking gaps across the country.

Technological innovations have further revolutionized financial inclusion among street vendors. Mobile phone infiltration has fueled the rise of digital payment platforms like the Unified Payments Interface (UPI), which was launched by the National Payments Corporation of India (NPCI). UPI enables instant bank-to-bank transfers via mobile devices, streamlining transactions, particularly among street vendors. The Aadhaar system, introduced in 2009, stands as the world's largest biometric identity program, providing portable identity proof for millions. By linking Aadhaar to mobile phones and bank accounts, India has created the 'JAM Trinity' (Jan Dhan-Aadhaar-Mobile), which facilitates the efficient delivery of welfare schemes through Direct Benefit Transfers (DBT).

To extend financial services to underserved areas, the Reserve Bank of India (RBI) introduced the Business Correspondent (BC) model in 2006. BCs act as authorized agents, delivering essential banking services such as account opening, cash deposits, and withdrawals to remote populations. This model has played a pivotal role in bringing financial services to India's hinterlands. Looking ahead, the RBI plans to launch the Unified Lending Interface (ULI), a platform aimed

at streamlining the credit appraisal process and enabling the secure digital exchange of information with borrower consent. This initiative has the potential to address the significant credit gap faced by sectors such as agriculture, small businesses and street vending, transforming India's lending landscape.

In addition to government-led initiatives, microfinance institutions, self-help groups, and financial literacy programs have significantly advanced financial inclusion among street vendors. However, a glaring gap exists in the form of targeted employment and social security schemes for street vendors. Programs like the PM SVANidhi Yojana and the Swarna Jayanti Shahari Rozgar Yojana (SJSRY) have made strides in addressing these gaps. For instance, under the PM svanidhi yojana street vendors have been credited with about 90,00,000 rs. Over the past five years and under the same scheme Swadisht Vyanjan Ki Adhunik Dukaan (SVAD) an agreement between MoHUA and online food delivery platforms such as Zomato and Swiggy was proposed to increase the delivery footprint of street vendors. The e-commerce companies help street food vendors with menus digitisation, FSSAI training, licensing, PAN card application and so on.

Expanding these targeted initiatives can empower street vendors and other vulnerable groups, offering them access to financial security and opportunities for upward mobility.

POLICY ANALYSIS

Street vendors form the backbone of India's informal economy, supplying affordable goods and services to millions daily. Despite their pivotal role in urban economies, they remain one of the most vulnerable and underserved groups. Government initiatives like PMJDY and PM SVANidhi have made progress in enhancing financial access, but they often fail to tackle deeper systemic issues. Financial literacy among vendors remains low, and many are either unaware of available schemes or face bureaucratic obstacles in accessing them.

Digital tools like UPI have revolutionized transactions for some, with monthly payments surpassing 10 billion by March 2024. However, widespread adoption is hindered by limited infrastructure, poor connectivity, and a lack of training, particularly in rural areas. Similarly, the Business Correspondent (BC) model, operational since 2006, has extended banking services to remote regions but suffers from inefficiencies, curtailing its impact on street vendors.

Programs like the PM SVANidhi Yojana have provided over ₹20,000 crore in loans to more than 50 lakh vendors, offering vital financial support. Additionally, initiatives like SVAD, which integrates vendors with e-commerce platforms like Zomato and Swiggy, aim to modernize their operations. However, these programs often fail to benefit vendors without access to digital infrastructure, leaving significant gaps in coverage.
A major challenge is the lack of reliable data on street vendors. Organizations like NASVI estimate that their population exceeds 10 million, but the absence of a centralized and updated database hampers effective policymaking. Accurate data collection is essential for understanding their needs and designing targeted interventions.

While innovations such as the SVAD initiative have created new opportunities by linking vendors to e-commerce platforms, they only benefit a small segment of vendors—primarily those with existing digital capabilities. Meanwhile, critical issues such as harassment, the absence of legal vending spaces, and unstable incomes persist, further exacerbating their challenges.

To genuinely empower street vendors, policies must extend beyond merely improving financial access. Comprehensive strategies should focus on granting permanent vending rights, providing social security benefits, and delivering targeted financial literacy programs. Expanding digital infrastructure and addressing systemic barriers—such as the lack of trust in formal financial systems—are crucial to ensuring the benefits of financial

inclusion reach every street vendor. These efforts can promote financial stability, enhance economic mobility, and create a more inclusive environment for one of India's most essential yet overlooked communities.

Conclusion

Financial inclusion policies are incomplete without integrating digital financial inclusion and the role of fintech. While the Jan Dhan-Aadhaar-Mobile (JAM) trinity has significantly advanced financial inclusion in India, further efforts are needed to strengthen the digital financial ecosystem. This includes increasing awareness of digital transactions, expanding access points, and ensuring a secure environment based on consent and privacy principles. With fintech expected to evolve, it is crucial to enhance the understanding of digital financial services among regulators, providers, and customers, particularly newly included users, through targeted awareness and literacy initiatives.

To evaluate the impact of financial inclusion policies, a comprehensive and scientific approach to data collection is essential. Beyond relying on financial service providers' data, surveys, customer feedback, and Big Data can provide granular insights into service coverage, usage, and quality. These insights are critical for understanding the true impact on financial well-being across diverse groups.

Street vendors, as key contributors to India's informal economy, play a pivotal role in advancing financial inclusion. Empowering them with digital tools enables them to accept digital payments, access micro-credit, and build credit histories. Addressing their challenges—such as low financial literacy, limited trust in digital modes, and the need for simple payment systems—through targeted campaigns and fintech solutions will ensure their inclusion in the digital economy.

In summary, achieving meaningful financial inclusion requires bridging gaps in digital services, empowering underserved communities, and campaigns and fintech solutions will ensure their inclusion in the digital economy.

In summary, achieving meaningful financial inclusion requires bridging gaps in digital services, empowering underserved communities, and ensuring all stakeholders—from policymakers to street vendors—are active participants in building an inclusive financial ecosystem.

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BREAKING BARRIERS:

How Gender Stereotypes Hinder Hiring, Promotion, and Performance

By Chavi Singal, B.A.(H) Economics, Year IInd, Daulat Ram College, University of Delhi

Although progress has been made in terms of gender equality, workplaces around the world are still characterized by stereotypes that limit opportunities for women, gender minorities, and other marginalized groups. These are biases, culturally, historically, and socially based, which are evident in hiring and promotions and in the way workplaces are evaluated, and which produce systemic effects. This paper looks at the global and the Indian context of gender stereotypes, tracing their historical development, how they are sustained, and their consequences for work organizations. It also reviews strategies such as unconscious bias training, inclusive policies, and flexible work arrangements to break these barriers. Thus, by promoting inclusiveness, organizations can realize the value of a diverse workforce and, in turn, contribute to the generation of equal opportunities.

A highly qualified male-dominated candidate with woman applies for a leadership role in a industry. Despite her flawless resume, a male comparable qualifications is chosen instead.

Despite significant progress in the movement for gender equality, stereotypes about men and women continue to influence workplaces across the world. These stereotypes, shaped by cultural, historical, and societal norms, significantly limit opportunities for women, gender minorities, and marginalized groups. Although much has been done legally to promote fairness, ingrained biases remain a substantial barrier, particularly when it comes to hiring, promotions, and leadership roles. This issue is global , with specific challenges posed by socio-cultural factors unique to each country.

In India, for example, deep-rooted patriarchal traditions continue to shape workplace dynamics. Even with progressive laws and policies that aim to uplift women, workplace practices often fail to reflect these ideals. This article explores how gender stereotypes impact hiring, promotions, and workplace performance—both globally and in India. Through real examples, we discuss ways to break these barriers and create more inclusive workplaces.

Historical Context: Gender Roles Across Cultures

Global Perspective

Throughout history, gender roles have been shaped by the socio-economic factors of various societies. Men were supposed to work and earn, while women were expected to play the role of caregivers and homemakers. These roles were also enabled by religious, cultural, and economic factors, limiting women's participation in the public and professional world. In many Western countries, women gained access to education and jobs only in the 20th century. Nevertheless, these gender norms prevailed, especially in jobs deemed "suitable" for women, such as teaching, nursing, and domestic work.

Women's rights to vote, work, and be educated equally with men were among the rights that were pushed for by the feminist movements, especially post-World War II. However, despite these strides, gender roles continued to influence professional environments, with women struggling to break through in male-dominated industries like STEM and leadership.

India's Historical Context

Gender roles have a very intricate and multifaceted history in India, deeply intertwined with social, cultural, and religious influences. In the Vedic period, women enjoyed relatively equal status and were allowed to take part in intellectual and spiritual activities. However, patriarchy and colonialism limited their participation and confined them to domestic roles. Economic systems that were preferred by the colonialists were mainly gendered towards the male gender, and this prevented women from engaging in the public domain which reinforced gender roles.

Post-independence, India witnessed efforts toward gender equality through constitutional provisions and progressive labor laws. However, there are still deeply rooted cultural and social norms today, mainly in the rural areas, which support the patriarchal systems and prevent women's economic and professional activities.

This creates a dual challenge for women in India: navigating modern legal frameworks while confronting societal norms that often restrict their potential.

The Roots and Mechanisms of Gender Stereotypes

Gender stereotypes are not inherent; they are learned and reinforced through family upbringing, education, media, and workplace practices. Many of these stereotypes are hidden and affect people's perceptions and actions toward other people and the opportunities they are willing to offer. One of the most common forms of gender discrimination is implicit bias. Research shows that both men and women exhibit biases that favor men in leadership roles. Studies like those by Moss-Racusin et al. (2012) reveal that resumes with male names are often rated more favorably than identical resumes with female names. This bias is especially evident in the fields of engineering, technology, and finance, where leadership is assumed to be masculine.

Another major problem is the "motherhood penalty," which describes the penalties that women with children face. Mothers are usually thought to be less dedicated and capable and are paid less, have fewer opportunities for career progression and are not offered management positions. On the other hand, men with children are said to receive a 'fatherhood bonus' since fatherhood is considered an added advantage to their leadership. This discrimination leads to the perpetuation of gender inequalities in professional development. Occupational segregation is another factor that worsens these situations as women are more likely to be found in low-paying jobs that involve caring and services such as teaching, nursing, and administration. Such professions that are traditionally viewed as feminine are usually paid less and are considered to be of lower rank than similar professions occupied by men, that is, technical and managerial positions. It limits women's opportunities for better-paying jobs and, at the same time, perpetuates gender roles of what work is suitable for men and women.

Additionally, the concept of intersectionality reveals how gender stereotypes interact with other forms of discrimination, such as caste, race, class, and ability. In India, Dalit and tribal women experience various forms of oppression that go beyond gender-based stereotypes. Similarly, LGBTQ+ individuals, particularly transgender and non-binary people, face many workplace barriers that include discrimination in hiring and the exclusion of leadership positions from them. This is important to consider when working to address the multifaceted ways in which gender-based discrimination occurs and to work toward creating more inclusive and equitable environments.

The Role of Gender Stereotypes in Hiring

Global Trends

Research across multiple countries demonstrates how gender stereotypes affect hiring practices. Studies have shown that women are less likely to be hired for positions perceived as masculine or requiring leadership qualities. A landmark study by Moss-Racusin et al. (2012) found that science faculty members rated resumes with male names as more competent, regardless of the qualifications listed. This bias is not confined to academic fields but extends across industries like technology, finance, and law.

Hiring Practices in India

In India, hiring practices are ingrained with gender biases. For example, women are often expected to conform to certain norms during interviews, such as dressing conservatively or providing justifications for gaps in employment due to family care responsibilities. Women are also frequently asked questions about their marital status and family planning, questions that are rarely posed to male candidates. Such practices reflect the gendered expectations that women must prioritize family over career, resulting in discrimination in hiring.

In addition to explicit bias, implicit biases often influence recruiters' decisions, leading them to favor male candidates for roles requiring leadership or technical skills. This systemic bias is particularly evident in male-dominated industries like technology and finance, where women continue to face significant barriers to entry and promotion.

Promotion Inequality and the Glass Ceiling

Global Context

The "glass ceiling" is the term given to the invisible barriers that prevent women and marginalized groups from rising to the top. Despite efforts to address gender inequality, women are still being barred from top executive roles. In the U.S., for example, women hold only 26.7% of executive or senior-level positions in S&P 500 companies, a figure that has remained stagnant for years. Moreover, women often face "benevolent sexism," where they are perceived as less capable of handling high-stakes leadership roles, limiting their access to career-advancing opportunities (Kaiser et al., 2013).

India's Glass Ceiling

In India, however, the glass ceiling is even more pronounced. According to a 2022 report by Grant Thornton, Indian companies have 18% women in senior leadership roles. In many Indian organizations, leadership is still viewed through a male-dominated lens, with male leaders typically occupying top positions. The informal networks and power structures within companies further exclude women from critical decision-making roles. This lack of representation at the top creates a self-reinforcing cycle of exclusion, as women are often seen as unfit for leadership roles, leading to fewer mentorship opportunities and less access to key growth positions.

The Gender Performance Bias: Impact on Workplace Behavior and Evaluation

Gender stereotypes influence not only hiring and promotions but also how employees are evaluated and how they perform in their positions. These biases shape both the perception of performance

and the actual workplace experiences of individuals.

Performance appraisals are a key aspect of the workplace, and as such, they are often biased by gender stereotypes that lead to incorrect assessments. Research indicates that women's accomplishments are more likely to be attributed to external factors such as luck or assistance, whereas men's successes are credited to their personal skills and competencies (Heilman, 2012). This bias is especially evident in male-dominated industries, where women are more likely to be reprimanded for mistakes and must consistently prove their competence. As a result, their contributions may be undervalued or overlooked in workplace assessments.

However, not only external assessments are influenced by gender stereotypes, but also self-perception and confidence. Women, especially in male-dominated fields, are prone to what is called 'imposter syndrome', a psychological pattern where one doubts one's abilities and fears being exposed as a fraud even when one is extremely capable. This low confidence can hamper the growth of a career, as women may not feel confident enough to take up high-profile projects that are necessary for growth.

Additionally, work-life balance expectations disproportionately affect women's workplace performance and evaluations. Women are often expected to juggle professional and domestic responsibilities, leading to increased stress and reduced productivity. When they take parental leave or request flexible work arrangements, their commitment to their jobs is frequently questioned, which can limit career progression (Kossek & Ozeki, 1998).

These biases collectively reinforce systemic barriers, making it crucial for organizations to implement policies that foster a fair and supportive work environment

Strategies for Change: How to Overcome Gender Stereotypes

Overcoming gender stereotypes in the workplace requires strategies that challenge the biases at various stages. One effective approach is unconscious bias training, a way of ensuring that employees and employers are made to recognize and mitigate the hidden biases that are present in the recruitment process, career growth, and work performance. Many individuals believe they act objectively, yet unconscious biases often shape their decisions. Regular workshops and seminars can raise awareness of the existing biases, and then follow-up training sessions can help modify the behavior. When leaders and HR professionals understand their biases, they are more likely to adopt fairer and more inclusive practices (Devine et al., 2012).

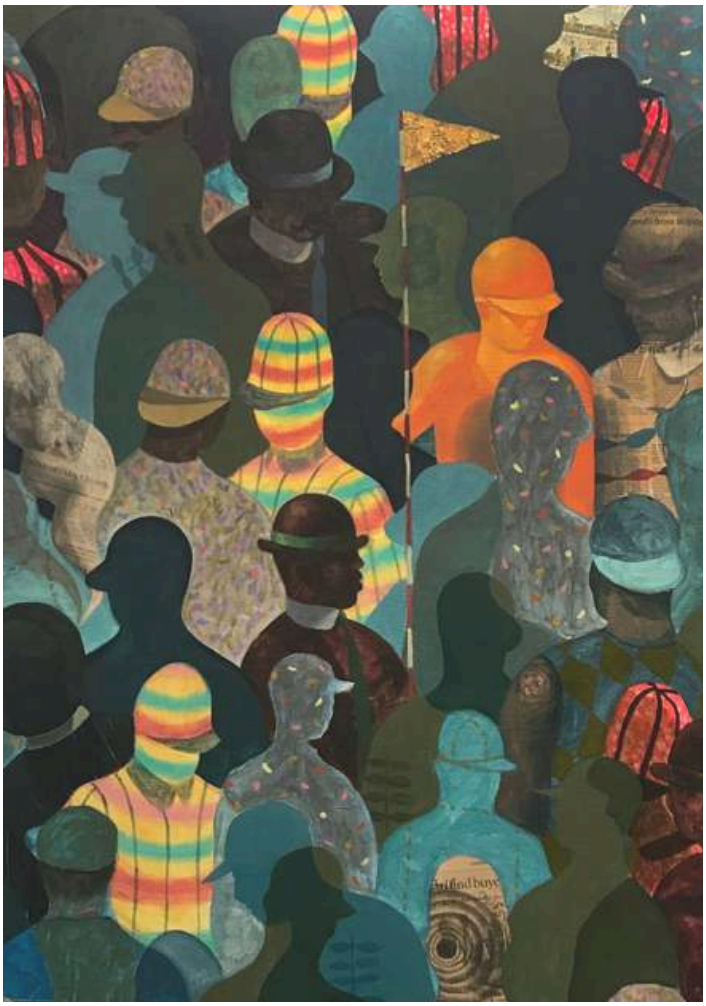
Another important strategy is to develop policies for inclusive recruitment and promotion to prevent gender differences in career progression. This includes writing job descriptions without gender-specific terms, forming diverse hiring panels, and ensuring that gender is not considered in the initial shortlisting of candidates. Additionally, organizations should establish standardized promotion criteria that are based on performance and not on assumptions about the gender of the employee. Providing mentorship programs tailored for women and marginalized groups further ensures that career advancement is based on merit rather than the need to overcome systemic biases (Kalev et al., 2006).

This paper also advocates for the integration of flexible work policies as a way of fostering equality in the workplace. Some of the policies include work-from-home, flexible work hours, and leave policies, which help employees balance work and other responsibilities, especially women. These policies enable both men and women to tackle the challenges that come with having a career and other responsibilities without the fear of being penalized, thus giving them a fair chance to grow in their careers.

When flexibility is normalized for all employees, it helps create a workplace culture where career advancement is based on capability rather than outdated gender expectations (Kossek & Ozeki, 1998).

Conclusion

Gender stereotypes continue to hinder progress in the workplace, perpetuating inequalities in hiring, promotion, and performance. While legal frameworks and policies have made strides toward gender equity, ingrained biases, and outdated perceptions still create systemic barriers for women and marginalized groups. By addressing the root causes of gender stereotypes and implementing actionable strategies, organizations can create more inclusive and equitable workplaces that unlock the full potential of all employees. In doing so, they not only contribute to social justice but also benefit from the increased innovation, productivity, and profitability that come from a truly diverse workforce.



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TRADE PROTECTIONISM

The Hidden Barriers in Global Market

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Abstract

International trade has been essential for spurring economic progress, even while protectionist laws and practices—such as tariffs, subsidies, and other quotas—benefit developed countries. Due to market distortion, less competition, and barriers to entry for developing countries, these activities worsen economic imbalances. EU farm subsidies and the US steel tariff are two instances of how such policies negatively impact global distributiveness in terms of consumer welfare. The article advocates for a more open and equitable global trading system by strengthening regional trade agreements, combining fair trade standards with local protection, and expanding market access for developing nations.

Introduction

Global trade has been a very integral part of economic development and international relations. However, the world of global trade is scarred by huge inequalities resulting from national policies designed to protect domestic industries. Such protectionist measures, ranging from tariffs and quotas, and subsidies, to trade agreements can distort global markets and perpetuate inequalities between the developed and the developing nations. The article discusses the intricacies involved in global trade inequities and reasons for policies that result in protectionism in their economic implications.

The Nature of Global Trade Inequities

Global trade inequalities refer to the imbalances between the benefits or gains from international trade accruing to different countries. This arises mainly because of systemic reasons: the disparities in levels of economic development, technology, and political powers. Globalized networks are mainly dominated by the developed world due to the associated economic and technological superiority and therefore control the rules and practices of trade. However, emerging nations frequently encounter obstacles to entering international markets, including stringent trade laws and unfair competition from wealthier nations' supported sectors. These disparities are made worse by the unequal negotiating power in trade talks, which exposes developing nations to unfair trade conditions that impede their economic development.

The United Nations Conference on Trade and Development (UNCTAD) continually points out imbalances in gains by developed nations in the worldwide trade system. For instance, developed countries trade more than 70% of the world whereas LDC's share is well below 2%. This therefore indicates that problems are systemic hence perpetuating trading inequalities.

Protectionism: Means of Economic Protection

Protectionist policies aim to protect home industries from the competition of foreigners. Such policies may ensure economic stability and employment within a country but usually have the effect of making global trade inequities worse. Here are some of the most common protectionist measures:

Tariffs: Taxes on imported goods to make them more expensive than similar goods produced domestically. For instance, the U.S. has long used tariffs on steel and aluminum imports to protect its domestic metal industry.

Quotas: Quantitative restrictions on the quantity of specific goods that can be imported, hence controlling market saturation. Japan's restrictions on rice imports are a good example of this approach. This preserves the domestic rice farming industry.

Subsidies: The local industries are supported by the government so that they can compete with the lower-cost foreign producers. The European Union's Common Agricultural Policy (CAP) gives enormous subsidies to its farmers at the cost of agricultural exports from outside the EU.

Non-Tariff Barriers (NTBs): Such administrative regulations as having quality standards or licensing requirements that indirectly limit imports. The very tight technology certification standards in China act as a huge NTB that restricts entry by foreign tech companies.

Currency Manipulation: Deliberate and systematic undervaluation of the currency of one's own country to make exports cheaper and imports more expensive. China has quite often been accused to be adopting this strategy and gaining a competitive advantage in world markets.

Case Studies: Protectionism in Action

The United States and Steel Tariffs In 2018, the U.S. imposed tariffs of 25% on steel imports and 10% on aluminum imports based on national security under Section 232 of the Trade Expansion Act. Though it safeguarded the domestic steel producers, this move made the cost of the sectors reliant on steel go up, such as the automotive and construction industries. It also strained trade relations with key allies such as Canada and the European Union, which retaliated with tariffs on U.S. goods.

The European Union and Agricultural Subsidies The EU's CAP commits about $60 billion in subsidies to farmers in Europe each year so that they may export agricultural products at competitive prices. This, however, frequently tends to depress world commodity prices and hurts farmers in developing countries, who have no such support. For example, West African cotton farmers cannot compete with heavily subsidized cotton exports from Europe and America.

India's Pharmaceuticals India's pharmaceuticals sector has grown steadily, helped along by policies like extremely high duties on imports of medicines and patent protections favoring the locals. In turn, the policy measures have led to a strong domestic generic medicine sector and helped transform India into the "pharmacy of the world." Unsurprisingly, such protectionism has brought significant trade frictions with the developed countries on the issue of patents and access.

China's Technology Standards China employs some protectionist mechanisms such as heavy technology standards, and localisation requirements for firms to grow its nascent tech industry. The policies enabled companies like Huawei and Xiaomi, Chinese firms that now dominate not only the markets within China but also globally have raised trade disputes with the United States and European countries over entry to the market as well as the issue of proprietary rights.

Conservation of Market Power

The impact of protectionist policies on global trade inequities is multi-faceted:

Widening Development Gaps Protectionist policies in developed nations often undermine the competitiveness of industries in developing countries. For example, subsidies provided to farmers in richer nations depress global commodity prices, making it difficult for farmers in poorer countries to earn a sustainable income. This phenomenon is especially evident in the global sugar and cotton markets.

Protectionist policies cause inefficiency in international markets. For example, tariffs will prevent inefficient home-based industries from competing with other nations, therefore deterring the companies from investing in innovation and increasing productivity. Subsidies will lead to overproduction, wastage, and environmental destruction.

Retaliatory measures often lead to trade wars as the affected nations impose retaliatory measures. For example, the U.S.-China trade war launched in 2018 has had billions of dollars in tariffs imposed on goods traded between the two countries, causing global supply chains to go haywire and slowing down economic growth.

It hurts the consumers because it forces them to pay higher prices and suffer from fewer choices. After all, there are fewer imports. In the case of U.S. steel tariffs, increased costs of raw materials were passed to consumers at higher prices for cars, appliances, and infrastructure projects.

Quantitative Analysis: The Global Impact of Protectionism

Below is a table summarizing the impact of common protectionist measures:

Measure	Example	Impact on Trade Flows	Implications for Global Equity
Tariffs	U.S. steel tariffs	Reduces imports, raises prices	Benefits domestic producers; harms global suppliers
Subsidies	EU agricultural subsidies	Increases exports, depresses global prices	Disadvantages non-subsidized producers
Quotas	Japanese rice imports	Limits foreign competition	Protects domestic industry; reduces trade volume
Non-Tariff Barriers	China's tech standards	Restricts market access	Creates barriers for foreign firms

Graph 1: Global Tariff Rates and Trade Volume (2020-2023)

Coogan, T. (2017, November 17). Global Trade - Value vs. Volume - The Sounding Line. The Sounding Line. https://thesoundingline.com/global-trade-value-vs-volume/

Year	Average Tarrif Rate(%)	Trade Volume (Trillion USD)
2020	4.5	18.4
2021	4.2	19.1
2022	4.0	20.3
2023	3.8	21.0

The downward trend in tariff rates corresponds to an increase in global trade volumes, highlighting the importance of trade liberalization.

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Policy Suggestions

Ensure stricter regulations against unfair trade practices like dumping and excessive subsidies are implemented within international trade organizations, such as the WTO. Mechanisms of dispute resolution need to be strengthened for the promotion of fair results.

Improving Market Access for Developing Nations Developed countries can offer special trade conditions to developing countries to increase the level playing field. Organizations such as a Generalised System of Preferences can be pivotal in this scenario. Balancing protectionism with global equity Nations should balance the protection of domestic industries and the protection of global trade equity. Policies must be structured to cause minimal setbacks to developing nations. One such example is the gradual process of reducing tariffs, which enables the industries in the developing nations to catch up with competition at the global level.

Promotion of Regional Trade Agreements Regional trade agreements, such as the African Continental Free Trade Area (AfCFTA), can help developing nations build stronger trade networks and reduce dependency on developed markets. Such agreements also promote intra-regional trade, fostering economic resilience.

Capacity building. Developing nations must invest in infrastructure, education, and technology in order to gain competitiveness in international markets. Aid programs to these countries must have capacity-building projects as priority components for long-term development.

Conclusion

Trade imbalances around the world have been one of the persistent problems, buttressed by systemic inequalities but espoused and aggravated by

protectionist policies. Once seen as necessary to protect domestic industries from undue influence by foreign competitors, these measures perpetuate unequal balances between developed and developing countries in full. It leads to this distortion of global markets, undermines competition, and creates barriers to entry into international trade, especially for countries that wish to enter the fray without being at a disadvantage. The multifaceted approach demands that national interests be balanced with the quest for global equity. International organizations must ensure that there is fair and equitable trade among nations while developed nations provide avenues for entry into global networks of trade by developing countries. Promoting regional trade cooperation, capacity-building investment, and innovation can open paths toward an increasingly inclusive global trade environment.

Ultimately, achieving more equity in international trade requires concerted efforts where nations would put the interests of long-term sustainability and mutual prosperity over the short-term gains of protectionism. With the reimagining of policies and cooperation in international trade, the world will be able to establish a fairer and more balanced system that serves the best interests of all nations, regardless of their economic status.

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INSTITUTIONAL BARRIERS TO ECONOMIC MOBILITY

HOW POWER STRUCTURES PERPETUATE MARGINALIZATION

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The path to economic prosperity remains strikingly uneven across the globe, shaped by the invisible hand of institutional barriers that can either propel or constrain social mobility across generations. This reality becomes clear when comparing social mobility rates between nations: in 2015, while a child born into a low-income family in Denmark had a 46% chance of reaching the top income quintile during their lifetime, their counterpart in India faced just an 8.4% chance of achieving the same mobility (Asher et al., 2022). This stark disparity illustrates how deeply institutional structures can influence life trajectories.

The Preservation-Creation Paradox

According to the World Bank's World Development Report (2024), economic developments face a critical conflict: on one end, forces of creation drive progress, but on the other, equally powerful forces of preservation arduously work to retain existing power structures. This dynamic creates what Acemoglu and Robinson (2012) term "extractive institutions" — systems that concentrate power and opportunity in the hands of a select few. Perhaps nowhere is this tension more evident than in the development and utilisation of human capital, where institutional barriers systematically impede the nurturing of talent needed for economic advancement.

The Talent Imperative in Economic Development

The convoluted relationship between talent and economic progress is fundamental in understanding developmental barriers. Middle-income countries face a unique challenge: their economic progress perceptibly depends on skilled human capital, yet systematic barriers hinder this development and the consequent utilisation of this integral resource. As the World Development Report (2024) emphasises, "Talent drives economic progress, but social immobility holds back talent development," creating a self-reinforcing cycle of stagnation.

The significance of talent in middle-income economies stems from their position in the global economic hierarchy. Unlike low-income countries, where growth might depend on resource extraction or basic manufacturing, middle-income nations require skilled workers to facilitate technological adaptation, drive innovation, and enable structural transformation. However, the preservation forces actively work against this necessary evolution.

The Triad of Preservation Forces

The World Development Report identifies three interconnected forces that work to maintain social immobility in middle-income countries: elite networks that consolidate power, geographic determinism that constrains opportunity, and patriarchal norms that perpetuate systemic exclusion. These forces create a robust framework of barriers that collectively impede social and economic mobility.

Elite Networks and Power Consolidation

At the institutional level, elite pacts emerge as powerful mechanisms for maintaining social immobility. These networks, as detailed in the report, "facilitate the formation of groups that can determine access to jobs, services, and policy-making." The impact extends beyond immediate economic opportunities, creating systematic barriers that control access to crucial resources and opportunities, devalue merit-based advancement, perpetuate inequities of opportunity, and suppress expectations for upward mobility.

The persistence of these networks creates a self-reinforcing cycle where power begets power, effectively shutting out talented individuals from marginalized backgrounds.

Geographic Determinism and Opportunity

The second preservation force operates through spatial dynamics. Neighbourhoods, far from being neutral spaces, actively shape access to opportunities and aspirations. The report identifies several critical ways in which geographic factors limit mobility:

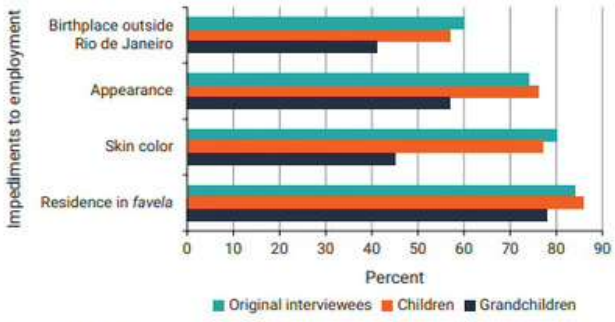
- Impeding physical and economic migration
- Hindering productive agglomeration
- Slowing knowledge diffusion
- Blocking pathways for small enterprises to scale

This geographic determinism creates isolated pockets of limited opportunity, effectively trapping individuals and communities in cycles of economic stagnation.

A compelling case study from Rio de Janeiro illustrates how residential location can become a powerful barrier to economic opportunity. Research by Perlman spanning multiple decades revealed that simply living in favelas (informal settlements) was perceived as the single greatest impediment to employment, even more significant than factors like skin colour or migrant status. In a longitudinal study conducted between 1969 and 2001, residents consistently reported that their favela address was the primary reason for job discrimination, with over 80% of respondents across three generations citing it as a major barrier. Intriguingly, while the original interviewees and their children experienced strong discrimination based on multiple factors, including appearance and skin colour, their grandchildren reported location-based discrimination as the predominant obstacle, highlighting how geographic stigma can persist and even intensify across generations. This

across generations. This demonstrates how residential segregation creates a self-reinforcing cycle of economic exclusion, where one's address becomes a proxy for social status and a mechanism for systematic discrimination. The Rio case study powerfully illustrates how geographic determinism functions as an institutional barrier—what appears on the surface as individual hiring decisions reflects a deeply embedded system that transforms physical location into a persistent, multi-generational force for preserving social inequality.

Figure B5.2.1 Slum residents in Rio de Janeiro identified their residence in a *favela* as the largest impediment to getting a job



Source: Perlman 2010.
Note: The figure shows the responses of residents of *favelas* in Rio de Janeiro surveyed in 1969 and 2001.

Patriarchal Norms and Systemic Exclusion

Perhaps the most pervasive preservation force operates through social norms, particularly patriarchal structures that systematically exclude women and marginalized communities. The report emphasizes that these norms effectively prevent "the development and growth of talent among half the population of middle-income countries." This exclusion manifests through:

- Limited access to educational opportunities
- Restricted labor force participation
- Barriers to professional advancement
- Constrained economic decision-making power

Recent research quantifies the substantial economic costs of gender-based discrimination through the Global Gender Distortions Index (GGDI). Developed by researchers at Yale University's Economic Growth Center, this innovative metric reveals how gender gaps in labour markets directly impede economic growth. The index demonstrates that women's economic potential is often constrained by two key factors: labour demand distortions that create wage-productivity gaps, and occupational preferences shaped by social norms and other labour supply barriers. Historical evidence from the United States supports this framework - policies that reduced discrimination against women and African Americans contributed up to 30% of post-World War II economic growth, highlighting the significant economic dividends of advancing equal opportunity.

The GGDI's practical application in India provides compelling evidence of these effects. A cross-sectional analysis of Indian states revealed that labour demand distortions have tangible negative impacts on state-level economic development. For instance, poorer states like Bihar could potentially gain 10% in state GDP simply by removing labour demand distortions, while more developed states like Kerala could see a 4% GDP increase. This quantification of lost economic potential reinforces how gender-based barriers not only limit individual opportunities but also significantly impair broader economic development.

The Economic Cost of Preservation

The cumulative impact of these preservation forces extends far beyond individual marginalization. By "holding back the energies that drive creation," these institutional barriers impose significant costs on national economic development. The preservation of existing power structures results in:

- Underutilization of human capital
- Reduced innovation potential
- Limited economic diversification
- Stunted productivity growth
- Persistent inequality

Breaking the Cycle: Implications for Policy and Reform

Addressing these deeply entrenched barriers requires a comprehensive approach that recognizes their interconnected nature. The necessary reforms must target three key areas simultaneously.

- **Dismantling Elite Networks:** Effective reform must begin with breaking down the concentrated power structures that perpetuate inequality. This requires establishing independent oversight bodies to monitor and regulate public resource allocation, ensuring that opportunities and resources flow beyond established networks. Organizations must implement blind recruitment practices across both public and private sectors, eliminating the advantage of social connections in hiring processes. Equally crucial is creating transparent pathways for policy participation, backed by robust legal enforcement mechanisms. These efforts should be complemented by progressive taxation on inherited wealth and intergenerational transfers, directly addressing the mechanisms through which economic privilege is preserved across generations.

- **Transforming Spatial Dynamics:** Addressing geographic barriers demands a multifaceted approach to spatial integration. Priority should be given to developing comprehensive transportation networks that connect marginalized areas to economic hubs, effectively breaking down physical barriers to opportunity. This infrastructure development must be paired with location-blind hiring policies, supported by legal enforcement mechanisms that prevent discrimination based on residential addresses. Economic integration can be further encouraged through targeted incentive programs for businesses operating in underserved areas, creating local opportunities for employment and growth. Additionally, investing in digital infrastructure can enable remote work opportunities, helping overcome geographic constraints in access to quality employment.

- **Reshaping Social Norms:** Transforming restrictive social norms requires bold policy interventions that directly challenge existing power structures. This begins with mandatory gender pay transparency and equal pay legislation, creating accountability for wage discrimination. Supporting these measures should be comprehensive parental leave policies and subsidized child care programs that enable full workforce participation. Structured mentorship programs targeting underrepresented groups can help break down informal barriers to advancement, while established quotas for women and minorities in leadership positions can accelerate the pace of change. These policies must work in concert to challenge and transform deeply embedded social expectations and opportunities.

Conclusion

The challenge of overcoming institutional barriers to economic mobility requires recognition of both their complexity and their cost. As the World Development Report (2024) makes clear, preservation forces actively work against the creation necessary for economic progress. Only by understanding and systematically addressing these barriers can middle-income countries hope to unlock their full economic potential and create genuine pathways for mobility.

The stakes are high: continued preservation of existing power structures not only perpetuates individual marginalization but also significantly impairs national economic development. Moving forward requires both political will and systematic reform efforts that address all three preservation forces simultaneously.

The cost of inaction is staggering: each year of delayed reform represents not just lost economic potential but the perpetuation of intergenerational poverty for millions. As middle-income countries face increasing global competition and technological disruption, the luxury of gradualism has expired. The choice is stark: embrace comprehensive reform now or risk condemning future generations to persistent inequality and economic stagnation. The institutional barriers that preserve privilege for the few are, in effect, placing a ceiling on national development itself.

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POVERTY IN THE RICHLAND

Economics Behind Colonialism

By Adwita Sinha, B.A.(H) Economics, Year Ist, Daulat Ram College, University of Delhi

In 1776 in the "Wealth of Nations", Adam Smith coined the term mercantilism which sought to explain how countries could increase their income by maximising exports and minimising imports. Such a system was already thriving credit to colonialism. The practice long existed before the word for it was coined. Countries were being used as scapegoats in efforts to optimise the economy of some other country.

Colonialism was a reality to many regions till very recently and remains one of the most impactful phenomena observed in human history. The entire course of history for many significantly altered. On the other end, count. The legaries and empires rejoiced in new found economic success. How--ever, the main cause of colonialism remai--ned rooted in the unending desire of po--wer and the economic benefits accom--panying its legacy of colonialism radia--tes to this very day, felt by all former colonies as they try to strive for ward carrying the baggage along.

Most colonies were rich in natural re--sources which held great importan--ce to their colonisers, many even existed as prosperous econom--ies of their own before the ar--rival of colonialism. As histo--ry would have it, these places rich whether in resources or e--conomically would suffer a fate that would leave them impaired in almost every sense.

In order to understand the full extent of colonialism we need to understand the constitution of colonial economies.

Features of a colonial economy:

Colonial economies in no shocking fashion worked primarily to appease to and profit the colonizing power. The colonists had complete control over the economy such as spending, compositions and resources. The indigenous population existed as a participant in the economy in terms of providing labour and human resources but wielded no actual power to change the order and hierarchy.

Trade:

The colonising powers maintained a ne--ar monopolistic control over foreign trade in these nations. In India for in--stance, over half of India's foreign trade in the British Raj was confined to Britain itself. In order to create a m--ore uniform system of trade, the c--olonisers forced upon the indig--enous populations, their lang--uage, customs, currency and other forms of cultural heg--emony as a method to stim--ulate trade amongst colon--ies. Different Colonial p--owers managed things d--ifferently, like French be

-ng more protective of their colonies than England, and Spain used the mercantile theory, devising a system to maximise its exports at the expense of its colonies. However, in periods of economic slowdown, it was noted that trade would become more bilateral and colonies were forced to trade directly with the colonial powers.

Infrastructure:

The investment into colonies was inevitable on the part of the powers, to maximise their own economic endeavours. Railways and seaports popped up in areas existing without. Most, if not all, were set up for the ulterior motives of the colonial powers and not for the general development of the masses. Between 1865 and 1914, railway expansion absorbed 42% of British capital exports. There were purely military and strategic reasons behind certain railway projects like those in Afghanistan or East Africa (Huff 2007: i134). Even if they are written in the good books of imperialism, they remained only for the gain of colonists. In the Indian railway for that matter, the colonial government saw returns exceeding their initial investments paid for by the Indian taxpayers rather than British, even though none of the employees in the Indian railways was Indian.

In French Indochina, Vietnam saw rapid development of airports, seaports, and other infrastructure. The architect of this development, the then Governor Paul Doumer, ensured it was carried out in a way most profitable to France, aiming to exploit natural resources as quickly as possible. Laos and Cambodia, the other constituents of French Indochina, remained neglected – Laos to an even greater extent. It was economically uninteresting to the French; hence, it saw little capital investment but remained exorbitantly taxed.

Plantations and slave trade:

The main objective of colonialism was control over resources, and its most vehement forms can be observed in the plantation economy and the ensuing slave trade. Plantations are large agricultural estates owned by individuals or legal entities with significant capital, utilizing industrial processing machinery and a labour force primarily made up of wage labourers residing on the estate (Paige 1975: 4). In many places, plantations were monopolised. with ownership almost exclusively in the hands of foreign landowners. As observed in Ceylon and its flourishing coffee plantations, land prices were set so high so as to perpetuate British ownership and exclude native populations from their own land.

Due to the high demand of manual labour in plantations, the solution was deemed to be slavery or indentured labour. Slavery, in the context of Western Colonialism, was initiated by the Portuguese and the Spanish during their conquest of the 'New World'. Given the extraordinary agricultural potential in the Americas and the diminishing native population, the Spanish and the Portuguese transported slaves from the West African coast to these colonies. A similar system was soon followed across much of the West Indies and the Americas. In the British Empire, indentured labour – a form of contracted labour – emerged after the abolition of the slave trade in 1807.

Regardless of the legal status of workers, plantation conditions remained poor. Although plantations were equipped with modern agricultural technology, the work was relentless and intense. Coupled with poor living conditions, diseases and workplace accidents, these factors led to dire consequences for the workers.

Agriculture:

Even if not for an exploitative system, agriculture in general was gravely affected. It was believed that small-scale agriculture need not be less exploitative than plantations. Agriculture shifted more towards commercialisation. The image of a 'yeoman farmer', a small land holding and self-sufficient farmers, was idealized in the United States and its colonies, such as the Philippines, to romanticise the exploitation of peasants. The farmers involved in

cash crop production were no less exploited than plantation workers. In certain places, marketing boards were set up to regulate the production of cash crops. However, these boards soon monopolised markets by underpaying peasants. Instead of profits being distributed among farmers, officials hoarded the earnings, creating severe economic inequality and negatively affecting farmer's sufficiency.

EFFECTS OF THE COLONIAL ECONOMY:

After many years of such unscrupulous and unrelenting policies, the economies of colonies were retarded in ways that still persist today. Many efforts to understand these effects yield various results; however, we start with the common finding that colonialism did not have uniform effects on every country but rather had more heterogeneous effects. This is because colonialism ended up creating very distinct sorts of societies in different places (Acemoglu et al. 2001, 2002)

Economic Institutions

As per many studies, historic institutions have extensive influence on the current well-being of regions and societies. This is even more evident in discussions about colonialism since the institutions of colonised countries underwent drastic changes in their economic constitutions. Economic institutions include the laws, practices and norms of a society that structure the economy.

In places with high population densities, extractive institutions were set up which intended to extract vast amounts of rent from the indigenous population. This, in turn, stripped them of any incentives or opportunities for development. Countries with such institutions in the past can be linked to some form of poverty in the present. Conversely, in places with lower populations, colonizers settled themselves.

As per Acemoglu et al. (2001), two-thirds of income equality can be attributed to differences in economic institutions. In a follow-up study in 2002, settler mortality rates and population density of the indigenous people can explain 30% of the variation in economic institutions and if urbanisation rates are to be added in the mix, then the number would rise to about 50% which would mean European Colonialism.

Drain of wealth

The most influential impact of colonisation was the drain of wealth from colonies to their colonis--ers. A significant amount amount of capital flowed from these countries to imperial powers. Originally coined by Dadabhai Naoroji to describe the systemic transfer of wealth from India to British hands, this phenomenon was driven by various factors such as taxes, unequal trade,de-industrialisation etc. However, it would not be completely wrong to use the term for other colonies as well like those of Indonesia, Vietnam, Scramble for Africa wherein similar practices were implemented.

Due to the absolute and mercantile nature of colonising powers, and their control over production, agriculture, resources, factors of production and infrastructure, a significant portion of the colony's income was spent in ways not always beneficial to them, draining their wealth.

Inequality in trade

The trade policies perpetuated by colonising powers created an inequality in trade by importing necessary inputs from colonies while selling their own goods in these markets, as observed in India, Africa, and French Indochina. This restricted the freedom of choice in these markets that consumers previously enjoyed. Additionally, the nature of goods being imported and exported played a role. Colonies were exploited for their natural resources, such as cash crops and mining outputs, which

would be exported to the colonising powers and the rest of the world and were considered low-value goods. Meanwhile, in Europe, especially around the nineteenth century, the Industrial Revolution led to the production of high-value goods.

The trade patterns set years ago can still be observed in geopolitics today, with developed countries– many of which happen to be former colonising powers– having greater influence over the volume and direction of world trade.

Social consequences

Investments in infrastructure were far from sufficient and were once again based on the convenience of the colonisers. This created striking long-term impacts. For example, in India, it was found that areas directly under the rule of the British Crown showed higher levels of present-day poverty and inequality (Jha and Talathi, 2021). Similarly, other former colonies exhibit greater economic inequality compared to their former colonisers, as interpreted by the Gini coefficient.

Colonialism was also accompanied by social evils, most notably racism, and was responsible for discriminatory systems against native populations, such Apartheid in South Africa. Disdain for native populations even led to significant population losses, as seen with the indigenous peoples of the Americas and Aboriginal Australians. In places without settler colonialism, other forms of cultural hegemony were imposed, such as the suppression of native languages, proselytization, brutality – partly stemming from the belief that natives in colonies were 'uncivilised'.

Conclusion

The legacy of colonialism is one of exploitation, discrimination, and inequality, shaping the current economic landscape of the world. It was an era where profit flourished over people. Industrial revolutions were funded by the impoverishment of other nations, resulting in severe disparities.

When a colony was liberated, it was left to string together its run-down pieces into a functioning nation. The economy was battered, and its resources were exploited. Therefore, for the colonies, existing in an economic system that continuously worked against them for decades, it is only rational that its aftereffects are still felt today. Every aspect of their identity was modified. Since independence, every former colony has strived to regain its distinct sense of self while also attempting to rebuild itself into a functional socio-economic entity.

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Climate change is not only an environmental problem but also a profound injustice that exacerbates and expands inequalities across the globe. Although its impact cuts across borders, it disproportionately falls on developing and underdeveloped countries—the least contributors to global emissions.

These nations are at risk of dire outcomes, ranging from sea level rise to extreme weather to food insecurity and public health emergencies, all while lacking the capacity to address any of those problems. In contrast, the industrialized world, the main polluter of greenhouse gases, has somehow been allowed to reap the reward of their industrial heritage and to delay decisive action. COP 2024 is the latest version of such a failure to deliver on pledges, deepening the rift over the scope for accountability, partnership, and justice.

The History: How It All Began

The origin of the climate crisis we experience today dates back to the industrial revolutions of the 19th and 20th centuries. Developed countries, such as the United States, the United Kingdom, and Germany, built their economic progress on burning fossil fuels leading to high concentration of atmospheric carbon dioxide. According to Global Carbon Atlas data, the United States alone has released over 400 billion metric tons of carbon dioxide since 1850, and it is considered the biggest historical emitter. The European Union is also closely behind, with ~350 billion metric tons.

Together, these regions account for more than 70% of cumulative emissions, while developing countries—the majority of the world's population —are virtually negligible in their contributions. For example, India, a country of more than 1.4 billion, has made up only 3% of emissions in the period of its engagement, whereas the entire African territory has contributed no more than 5%.

Current inequalities compound historical disparities. Average U.S. emissions stock exceeds 15 metric tons of CO2 per year, whereas CO2 emissions per capita in much of sub-Saharan Africa are less than 1 metric ton. These contrasts highlight the moral responsibility of developed countries, given their disproportionate historical contributions to climate change.

The Role of Private Sector and Grassroots Initiatives

Despite the inaction of governments, private industry, and grassroots groups, climate change is being given attention. Corporations in developed countries are becoming more active about financing carbon offset projects, renewable energy systems, and green procurement. This growing attention towards climate change is exemplified by Microsoft, which has pledged to be carbon-negative by 2030 and, more ambitiously, return all emissions it has ever emitted by 2050. By effort on the ground, community-driven programs in the most marginal areas are already having an important impact. In Southeast Asia, mangrove restoration efforts have contributed to the

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protection of coastal communities from storm waves as well as to erosion and have secured a sustainable income source. Likewise, agroforestry in sub-Saharan Africa is enhancing soil fertility, boosting crop yields, and addressing desertification. Nevertheless, this work, commendable as it is, cannot substitute for the larger-scale systemic changes at a global level. Developing countries will lead the fight against climate change not only by giving and seeking the greatest effort on mitigation but also by looking after the groups most affected by its consequences.

Unequal Impact of Climate Change

Climate change exacerbates existing vulnerabilities in developing and underdeveloped nations, pushing them into cycles of crisis and recovery. Sea level rise is a threat to the survival of coastal countries and island states. Bangladesh is the example, in which land is being eroded at a much accelerated pace. According to the World Bank, 17% of the country's land will be flooded by 2050, displacing more than 20 million people. Small island nations like Tuvalu and Kiribati are bound to be completely submerged, thereby resulting in a loss of sovereignty and an end to cultural identities. Even wealthier nations are not immune. Miami, Florida, incurs millions of dollars per year in flood defence, but those working in developing nations have an inadequate financial allocation and, as such, are more at risk of being displaced and experiencing economic disaster. The frequency and intensity of extreme weather events are on the rise, which is very destructive. In 2022, Pakistan suffered a catastrophic flood, submerging one-third of the country, displacing 33 million people, and causing $30 billion in damages. Typhoons like Idai in 2019 that ravaged Mozambique killed over 1,300 people and cost US$2 billion in damages.

Sub-Saharan Africa, which depends on rainfall as its main source of moisture for agriculture, is highly sensitive to drought and abnormal rainfall conditions. According to the UN Food and Agriculture Organization (FAO), climate change will likely reduce crop yields in this region by 40% in 2050, leading to hunger and malnutrition. South Asia, with a population of more than 1.3 billion in states such as India, Nepal, and Bhutan, will be affected by the loss of freshwater resources due to melting Himalayan glaciers. Water wars can trigger further instability in the area.

Climate change has also driven the increase in vector-borne diseases like malaria and dengue, in which temperature-dependent processes accelerate their range. It says WHO, this could lead to another 250,000 annual deaths by 2030 in most developing countries. Already dangerous heatwaves killing people in some countries, including India, have lately become a frequent nuisance to health sectors.

COP 2024: A Lost Opportunity

The summit at COP 2024 was supposed to be a tipping point for climate action around the world. Instead, it became an

opportunity missed once more as the developed countries failed to fulfill their commitments. Unmet Financial Pledges; Perhaps the most obvious failure has been the lack of ability to deliver on the commitment of $100 billion each year for climate finance that was first proposed in 2009. As per an OECD report, actual payments are lagging behind by around $17 bn per year. That funding gap keeps vulnerable nations from putting in place key adaptation measures like building flood defenses or switching to renewable energy.

Developing nations had high hopes for the operationalization of a Loss and Damage Fund to compensate for irreversible climate impacts. Countries such as Mozambique and Tuvalu are asking for this kind of support to restore infrastructure and resettle populations. However, COP 2024 failed to finalize the fund, with disagreements over funding sources and governance stalling progress.

The economic price tag of climate change is staggering, even for resource-poor countries to cope with them. The World Bank estimates that 132 million more people will be pushed into poverty by 2030 as a result of climate change if left unmitigated. GDP in the world will probably decrease by a maximum value of 10% by 2100, and developing countries will suffer the most.

The financial cost of lack of action for most developing countries is economic and lethal. Entire countries are at risk of further submersion because of rising sea levels, and extreme weather events quickly destroy infrastructure faster than it can be replaced. Recovery costs result in unsustainable debt and detract further from development.

Bridging the Gap

Global action for the reduction of climate change inequalities is a pressing need. Developed countries must fulfil their promises and increase climate finance to the scale of the crisis. The UN estimates that developing countries will need $1.3 trillion in one year to achieve their climate targets by 2030. Greater access to environmentally friendly technology is key to achieving the capacity to foster low-carbon development skills in low-income nations. Technology transfer to renewable energy is the top example of technology transfer projects in India, which is the International Solar Alliance (ISA).

Grassroots solutions are essential. Mangrove-inspired restoration which involves using of mangroves or imitating the natural ability of mangroves is a lifesaver for coastal communities. It being adopted for the coastal communties of Southeast Asia, preventing soil erosion and mitigating the effects of storms. Aerosol-mediated air pollution, where atmospheric particles can influence climate change by reflecting sunlight back, can increase resistance for sub-Saharan Africa agroforestry against desertification. While this method appears to be useful but it comes at a cost of severe health impacts of pollution. The action platform of COP has to guarantee that each step recorded and the action undertaken is accounted for. The Loss and Damage Fund should be made operational, and developed countries should commit to emission reductions.

Unsustainable debt weighs heavily on a number of developing countries and restricts their capacity to invest in climate resilience. Debt-for-climate exchange, i.e., the reduction of debt service in exchange for climate adaptation project investments, might free up urgently needed funds for climate action. Innovative financial instruments like green bonds and climate insurance warrant their applicability to developing countries, enabling investments in sustainability.

Conventional climate finance, predominantly from public sources, has been demonstrably inadequate. By extending the menu of climate financing instruments to include private sector investment, blended finance, and public-private partnerships, it will be possible to boost the flow of liquidity required to respond to climate impacts. Encouraging investment in renewable energy, sustainable agriculture, and green infrastructure can generate long-term economic growth for developing nations while mitigating climate risks.

Adequate climate governance is a necessity to ensure sustainable and equitable use of mobilized funds and resources. Institutes for developing countries need to be strengthened, transparency needs to be increased, and reliable mechanisms must be in place for monitoring and reporting of climate-related investments. Developed countries also have the capacity to offer technical expertise and assistance to facilitate good governance in fragile states.

With climate change making displacement more severe, especially in sub shores and coastlines, states have to coordinate to establish a structure for protecting climate refugees. Developed countries should prioritize policies that offer asylum and resettlement options to those displaced by climate impacts while investing in climate adaptation in areas at risk of migration.

Conclusion

Climate change is a planetary problem; however, its effects are not evenly distributed. Countries which have contributed to the least amount of emissions in a developing and an underdeveloped trajectory bear the severest consequences. Bangladesh, Pakistan, and sub-Saharan African countries are exposed to increasing sea levels, extreme weather, food and water shortages, and health emergencies while the developed world that emits the vast majority of emissions is doing far too little. The failure of COP 2024 to meet key commitments, such as fulfilling financial pledges and operationalizing the Loss and Damage Fund, highlights the inadequacy of global efforts to address these disparities.

Thus, there is an urgent need to address the issue of climate change for building a sustainable world. The developed nations must fulfil their financial and technological support and commit to binding emission reductions. This support from developed nations is crucial for vulnerable countries to adapt to and mitigate climate impacts. Without such support, the economic costs of inaction will be devastating, with millions being pushed further into poverty. Furthermore, it is necessary for people to realize the repercussions of their actions on the environment.

Therefore, nations must give equal importance to community driven initiatives for enhancing local resilience and sustainable practices. Raising awareness helps in creating a ripple effect of informed action. People, when equipped with solutions, become active participants in building a sustainable future.

Climate change is a problem that is environmental and moral. The fight against climate change demands a collective and inclusive effort. This fight calls upon every citizen and nation to contribute towards creating a fairer, greener world- one that fosters well being of the present as well as the future.

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CLIMATE CHANGE AND
THE COST FOR DEVELOPING NATIONS

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Climate Change and Economic Vulnerability: The Cost for Developing Nations

The global climate crisis poses significant challenges, especially for emerging nations. These economies characterized by weaker financial systems and insufficient infrastructure are vulnerable to the impacts of climate change. This article addresses the linkage between climate change and economic fragility in poor countries, examining the processes by which climate shocks exacerbate poverty, undermine progress and impose an additional financial strain on already impoverished economies.

Introduction

Climate change is one of the most urgent issues of our time, with substantial impacts on the environment, economies and societies across the globe. According to the IPCC 2023 report, there is a more than 50% chance that global temperatures will rise to or surpass 1.5°C (2.7°F) between 2021 and 2040. Losses and damages from climate change disproportionately affect the poorest and most vulnerable populations. Rising temperatures, inconsistent weather patterns and extreme events such as floods and droughts disturb lives and livelihoods, pushing vulnerable communities deeper into poverty.

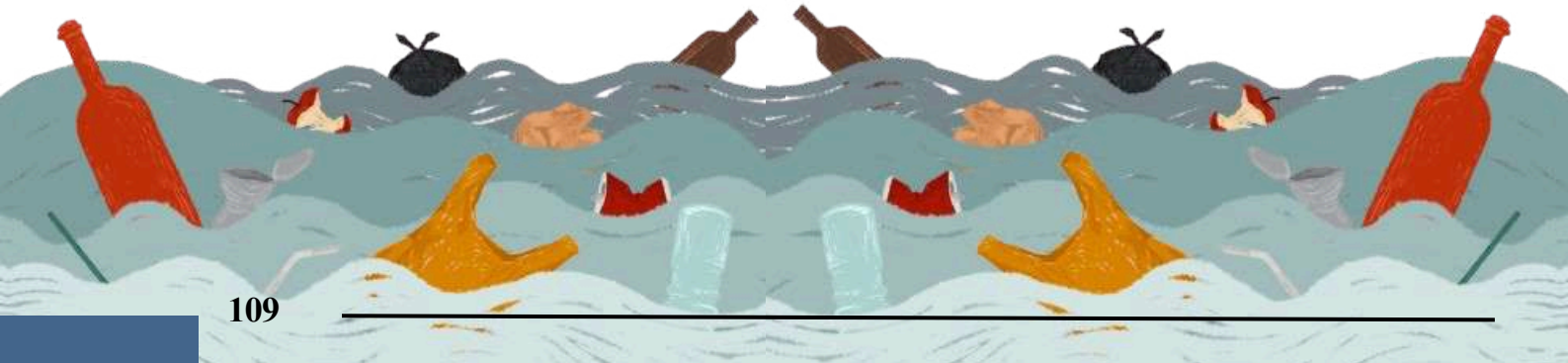
Economic inequality has also become more extreme, with climate change widening the gap between developed and developing countries by 25% since 1960. In addition, without the urgent action before 2030, more than 130 million people in poverty-stricken regions worldwide may be pushed into impoverishment caused by climate-related shocks.

As recovery expenditure grows so do long-term productivity losses, climate change exacerbates current inequalities and hinders development initiatives. Addressing this crisis requires understanding the link between climate change and economic fragility along with strategies to build resilience. This article highlights the challenges faced by developing nations and explores pathways to strengthen their economic resilience.

The Climate-Change Burden on Developing Economies

Disrupted Agriculture and Food Security

Agriculture is a critical source of livelihood for developing economies, providing a significant portion of their workforce. Climate change disrupts this industry by changing weather, drought and flood. In 2024, global warming intensified the hydrological cycle, leading to record-breaking rainfall in some regions, such as Southern California, which faced "hydroclimate whiplash" with alternating floods and wildfires having economic destruction surpassing $550 billion4. These disruptions reduced crop yields, caused livestock losses and exacerbated food insecurity with hunger affecting 770 million people



ECONOMIC VULNERABILITY

in changing precipitation and extreme weather events.

Ripple effects extend to higher food prices, reduction in export earnings and high levels of poverty in rural areas. Furthermore, the Economic Vulnerability Index (EVI) highlights the vulnerability of agricultural production as a key contributor to economic vulnerability in a timelier manner for countries that mainly rely on agriculture and have low adaptability to environmental change6.

Infrastructure Damage and Recovery Costs

Extreme weather events such as hurricanes and floods, often devastate critical infrastructure in developing nations. Damaged roads, ports and energy systems disrupt supply chains and hinder economic productivity. Major commercial ports in countries like Mumbai and Dar es Salaam face threats from rising sea levels, potentially impacting trade and economic stability7. Extreme weather events in 2024, including floods in Afghanistan and Pakistan, highlighted the fragility of the infrastructure of both countries and led to significant economic damage and loss of human life8.

In countries with depressed fiscal space, reconstruction turns into an extended and costly activity that bleeds money from the necessities of the health and education sectors. This is made worse by the difficulties of geographical isolation and lack of accessibility (landlocked), which compound economic disparities by raising freight costs and impeding access to global markets.

Health Impacts and Workforce Productivity

Rising temperatures and recurrent episodes of extreme weather events lead to health emergencies, such as heat stroke, vector envenomation, and malnutrition. Warmed climates increase the risk of waterborne and foodborne diseases by 2 billion people with access to unsafe drinking water, and 600 million people annually with foodborne diseases 9. Developing countries coping with poor health care infrastructure are in a growing dilemma for dealing with such problems.

The decline in the economy from climate-related health issues in the workforce more than doubles the effect of climate impacts leading to increased vulnerability of the economy of the country and its resilience. The EVI describes this risk by stating that those who reside in both low-elevation coastal areas and dry lands have greater economic hardship because of both scarcity of resources and lower production.

Financial Strain and Adaptation Challenges

Rising Costs of Adaptation

Debt Traps and Economic Instability

Many low- and middle-income countries are going to external loans and grants to finance climate adaptation. This may give it short-term relief but comes with a long-term attrition. Loans financing climate resilience may create a vicious cycle of debt, and keep these developing countries in a state of economic distress. Loans with very high interest rates from international financial institutions increase the debt burden and leave the countries with very limited space for economic growth.

This economic burden is not only growth-retarding but also hinders the creation of sustained-growth economies. The EVI's focus on export dynamics and its heavy weight on agriculture, forestry and fisheries yet again points to the precariouseconomic situation of numerous developing countries

Pathways to Resilience

International Support and Climate Financing

Global partnerships are an important part of tackling the climate emergency and assisting developing countries to achieve resilience. The Paris Agreement set a target to mobilize $100 billion annually in climate finance for developing

.countries by 2020.While this goal was not met by the initial deadline, developed nations achieved it in 2022, providing and mobilizing $115.9 billion in climate finance11. International climate funds like the Green Climate Fund, are indispensable to these nations providing and enabling the financial resources they need to address climate change.

Besides financial aid, technological transfers, capacity building programs and Know-how developed countries can also offer examples to enhance the adaptive capacity of developing countries. By strengthening international cooperation, the community around the world can thus ensure that the developing countries are somewhat more ready to deal with the dangers of climate change.

Strengthening Domestic Policies

To enable developing countries to achieve long-term climate resilience, robust domestic policies are needed. Administrations need to embed climate change adaptation into national development schemes, with a view to achieving integration of environmental and economic values. Agricultural, water, and energy sustainability practices have to be encouraged to decrease the risk associated with climate impacts. Moreover, enhancing disaster risk reduction measures such as systems for early warning and emergency response mechanisms can offset the effects of extreme weather events. Good governance, transparency, and accountability are of paramount importance to make sure that climate adaptation money is effectively used.

Community-Led Adaptation

Community grassroots activities and community-level adaptation play an important role in buffering the local impacts of climate change. In many developing nations, communities are already implementing innovative solutions like in Kenya's "Farmer-Managed Natural Regeneration" (FMNR) has restored degraded lands by involving communities in tree planting and land management.

These initiatives showcase the effectiveness of community-led solutions in creating sustainable, context-sensitive and culturally appropriate outcomes. However, scalability challenges remain, such as limited funding, inadequate policy support, and the need for capacity building to replicate these successes across regions while maintaining their local relevance.

Conclusion

Climate change presents a daunting challenge for developing nations, placing immense strain on their economies and exacerbating existing vulnerabilities. As adjustment is required while at the same time financial needs–read debt is restricting, the endeavours for sustainable development are faced with severe challenges.

However, by internationally coordinated actions, domestically strong policies, and grassroots movements, developing countries can become resilient and mitigate the impacts of climate change. On a global level, action is required and support is warranted before vulnerable countries become overlooked. Action by and between nations and the global community is essential to building a better and more resilient future for all. Today, however, more than ever before the world ought to take action with a view to mitigating the climate crisis and that no country should be left to bear the full weight of the effort.

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PARENTHOOD'S

THE COST OF MOTHERHOOD

By Charu Anuraj, B.A.(H) Economics, Year Ist, Daulat Ram College, University of Delhi

In **1979, women earned 63 cents** for every dollar a man made. By the turn of the century, this increased to 81 cents on the dollar but specifically for unmarried, childless, and urban women. By 2012, unmarried women closed the pay gap by 96%. We clearly see an upward trend in pay parity, so why has the gender pay gap been at the forefront of the gender equality crusade for decades now? Well, the answer to this is simple- according to the Global Gender Gap Report **2024, women earn just 77 cents on each dollar** a man earns. The gap closed rapidly during the 80s and 90s but it has more or less stagnated in the 21st century, with a meagre 0.1 percentage point increase yearly. Simultaneously, the pay gap of unmarried women widened to 92% by 2023. Even with this setback, unmarried women are closer to pay parity than average women, which is **parenthood**. While the less informed may think parenthood has a detrimental effect on the income of both mothers and fathers, it's unsurprising to know that motherhood charges a penalty and fatherhood bears a premium. Economist Jane Waldfogel's research showed that 40-50% of the gender gap can be explained by the impact of parental and marital status on men's and women's earnings. Hence parenthood is identified as having a "divergent effect" on the pay parity. However, interestingly, the distribution and extent of these effects are not uniform across different countries, professions, or employers.

Understanding the Parenthood Wage Gap

Whereas women generally experience a wage decline with the birth of each child (Budig and England 2001; Gangl and Ziefle 2009; Gough and Noonan 2013; Yu and Kuo 2017), men often see their earnings rise upon becoming fathers (Glauber 2008; Hodges and Budig 2010; Killewald 2013), hence the terms "motherhood penalty" and "fatherhood premium" were coined. Besides this, it is important to note that the workforce participation of women and opportunities for women post-motherhood drastically fall. The motherhood penalty does not account for this decreased labor force participation.

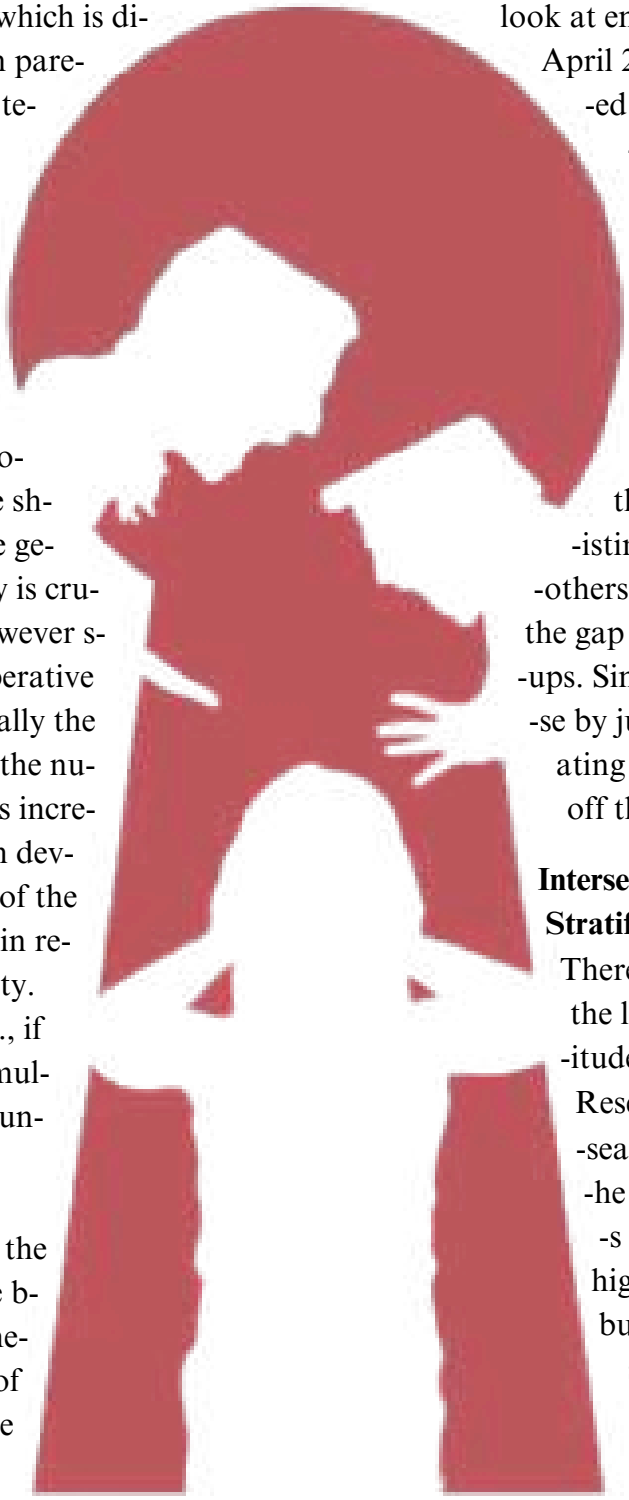
The causes of these parental premia and penalties are partly rooted in the socio-cultural biases and traditional notions of man as the breadwinner and woman as the child-rearer. But beyond that the factors affecting 'mom fine' result largely from individual choices and circumstances, according to a key milestone research published by Bolotonyy and Emanuel in 2023. The intersectionality of this parenthood effect with multifaceted aspects such as economic development, organizational dynamics, modern workplaces and non-traditional work roles, and family planning and dynamics, shape the incomes of working moms and dads.

Due to the vague nature of these penalties and premia, it is hard to measure their exact proportions. Major international and national report publishing agencies have failed to address this gap in research and data but some individual researchers have attempted to calibrate it using existing data. Averagely, the **motherhood wage penalty is 4-13%** (2024) while the **dad bonus ranges from 3% to 10%** according to a Harvard study published in 2012.

INVISIBLE TAX AND BONUS OF FATHERHOOD

Intersection with Economic Development

Developmental levels of economies can tell us the degree of motherhood gap that exists. Developing countries tend to have a larger penalty as compared to developed ones which is directly linked to the policies on parenthood. Developed countries tend to have more liberal policies that support mothers with employers who are well-adjusted to such provisions. However, in some countries like Austria, where the motherhood gap in the long run is 50%, the causation of the policy regime is true only for the short term. In the long term, the gender conservatism of a society is crucial. Developing countries however struggle with setting up a cooperative policy regime. Although globally the motherhood gap increases as the number of children a woman has increased, evidence suggests that in developing countries, the gender of the child plays an important role in reducing the motherhood penalty. The period of this penalty, i.e., if it is a one-time event or accumulates over time, varies from country to country.



Economic downturns such as the COVID-19 pandemic provide backing to the existence of fatherhood premia. Due to a lack of data on wage comparisons, we look at employment rates in the U.S. In April 2020, employment rates dropped across all groups due to COVID-19, but the impact varied. Mothers saw a 9.3 percentage point decline, slightly less

look at employment rates in the U.S. in April 2020, employment rates dropp -ed across all groups due to COV -ID-19, but the impact varied. Mothers saw a 9.3 percentag -e point decline, slightly less than non-mothers (9.6 poi -nts) and non-fathers (9.9 p -oints), while fathers experi -enced a smaller decrease of 7.4 points. This indicates that the pandemic reinforced pre-ex -isting employment patterns for m -others and non-parents but widened the gap between fathers and these gro -ups. Similarly, Fathers layoff rates ro -se by just 6.8 percentage points indic ating they were less likely to be laid off than mothers and non-parents.

Intersection with Labor Market Stratification

There exists a relationship between the level of earnings and the magn -itude of parental penalty or bonus Researchers, using quantitative re -search models, have shown that t -he motherhood wage penalty wa -s similar for low-, middle-, and high-income earners in the 1980s but it decreased in the 90s, more so for the high earners. By the early 2010s, the penalty was a -lmost eliminated for high-wa

ge earners but the low-wage bracket continues to pay the penalty. Similarly, the fatherhood bonus increased in the 1990s but particularly more for the high-earners, and by the early 2010s, high-wage earners enjoyed a significantly large fatherhood premium. Conversely, fatherhood premium and motherhood penalty are higher among lower- and mid-skilled workers (Budig & Hodges, 2010; Killewald & Bearak, 2014; Dias et. al, 2020).

Intersection with Corporate Structures

The magnitude of premia and penalties changes across and within firms. However, we see a peculiar phenomenon where mothers experience a wage penalty and fathers do not enjoy a premium across employers, and hence inter-firm mobility becomes difficult after transitioning into parenthood. Intra-firm income is not affected for mothers unless they choose to cut back on hours but fathers enjoy the fatherhood premium. This is likely due to employers trusting their employees more than a new hire after transitioning into parenthood.

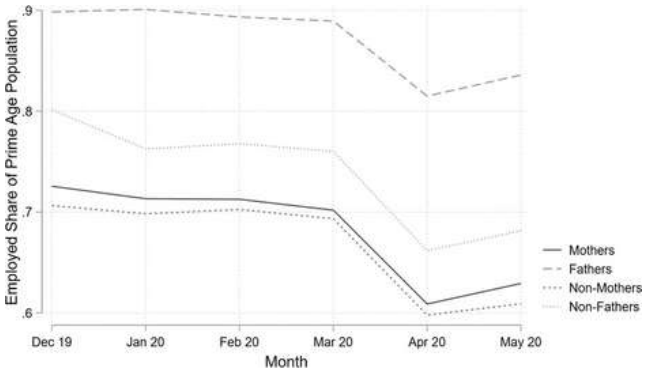
Multinationals are the face of corporate work-life. Recent studies on the effects of parenthood on incomes in MNCs show that while motherhood penalties are not amplified by the multinational environment and wage disparity exists across firms, fathers receive double the bonus received by them in local firms. The structural challenges existing in MNCs like the masculine corporate culture, positive biases towards men with children because of their traditional perception as responsible and reliable, global work environment, and professional roles favoring men, etc. drive fatherhood premium. A common factor in all these is lack of flexibility- in time, workplace, and company culture.

Intersection with Modern Workplace Revolution

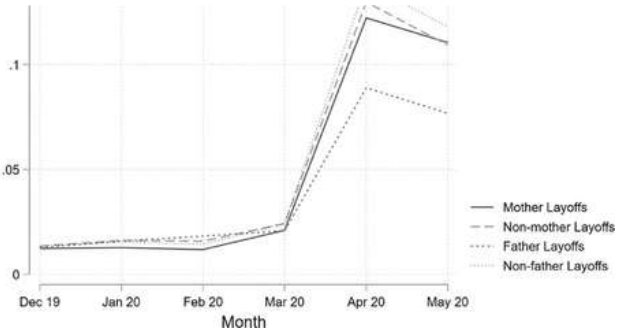
The problem of a flexible work environment is answered by the modern work roles of work-from-home (WFH) and gig economy. They offer more adaptable work structures in terms of time and place, redistribute caregiving responsibilities, responsibilities, and create new economic opportunities for parents. WFH especially benefits women as it increases their workforce participation, though there is no analogous effect found for men. The gig economy has become especially popular in China and evidence suggests that the motherhood penalty has almost vanished. This unfortunately has also transformed conventional dad premium into a penalty due to the work pressure and gender-segregated nature of the occupation.

Hustle culture and the startup ecosystem have taken the business domain by storm and it has exacerbated the traditional parental income outcomes due to precisely the same causes as MNCs. Women, especially mothers, find it increasingly hard to navigate these modern work structures due to their lack of consideration for work-life balance. To cancel out these penalties women have pushed major milestones that have altered family dynamics as well.

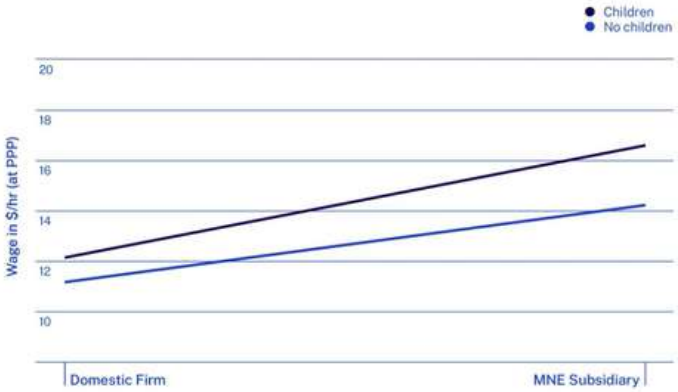
Evolving Family Dynamics and Economic Implications



- *Graph of Employment Rates by Parental Status and Gender (Source: Current Population Survey)*



- Graph of Layoff Rates by Parenthood in U.S. Labor Force (Source: Current Population Survey)



- Graph of Parenthood wage gaps in Multinational Enterprises (Source: World Economic Forum)

The causality between changing family dynamics such as late marriage among women and reduced children has not yet been established. But it can be hypothesized. As we discussed previously unmarried women are closer to gender pay parity than married women and we see all around us that the median age of marriage amongst women has increased, it can be correlated to a certain degree. Married women are also more likely to become mothers and may experience certain wage penalties causing women to put off marriage among other more pronounced factors.

Amidst men, the fatherhood bonus is affected by marital status and spousal employment. Married biological fathers living with their children (residential) see a wage increase of around 4%, while unmarried residential fathers, non-residential fathers, and stepfathers do not experience a fatherhood premium. Additionally, married residential fathers gain no significant wage advantage if their wives work full-time. About 15% of the wage premium for these fathers can be attributed to changes in their skills and job characteristics (Alexandra Killewald, 2012). These statistics may drive future family dynamics and influence the familial choices of men and women.

Bringing the spotlight to single mothers, who face a disproportionate accumulation of disadvantages. Be it divorced, separated, widowed or unmarried moms, the economic insecurity deepens due to social prejudice, restricted mobility, and inaccessibility to better pay and welfare. This leads to intergenerational effects and endangers the retirement welfare of the mother. The penalty is larger for previously married mothers than those who were single at first childbirth because they see larger declines in their earnings following childbirth (Susan Harkness, 2022).

The estimated motherhood wage gap of an average U.S mom was 3.6%-3.8% per child (2020) which is significant when considering the already declining fertility rates in many developing nations. This emphasizes how urgent it is to overcome income gaps brought on by parenthood. The financial costs associated with motherhood possibly are making or will make demographic issues worse as families, particularly women, put off or decide not to have children.

Policy Imperatives and Economic Efficiency

Fatherhood bonus and motherhood penalty showcase a critical market failure where discriminatory practices create inefficiencies and inequities. The economic cost of poorly designed policies is substantial. Lost productivity from skilled women leaving the workforce, reduced consumer spending power, and lower tax revenues create significant drags on economic growth. These can be addressed by restructuring organizational and social dynamics that reinforce gender stereotypes, especially relating to mothers and fathers. Parent-supportive national policies can help facilitate these changes. Publicly funded childcare, especially for children under the age of 2, is linked to smaller wage penalties, while extended parental leaves, such as Germany's 3-year leave policy, are associated with larger penalties for mothers. Yet a study in Sweden found that for every month of paternity leave taken by dads and mothers, wages rise by 7% indicating a balanced parental leave policy is important. As traditional

family structures evolve and remote work becomes more prevalent, the opportunity to reshape parenthood's impact on earnings has never been more tangible. The key lies in recognizing that narrowing these wage gaps is not just about pay parity, but about optimizing human capital utilization in an increasingly competitive global economy.

Conclusion

Today, the child penalty typically accounts for more than 80% of the earnings gap. These penalties arise due to significant adjustments women make upon having children and reduce the overall welfare of the economy. Many argue that this loss is a consequence of individual choices taken by women but on a closer glance, the constraints on those choices become transparent. These forced choices have long-term costs on the lifetime income and poverty risk of the mother and the child. As women's earnings have a greater impact on a child's well-being, the penalty on maternal income becomes economically inefficient.

As global economies grapple with aging populations and declining fertility rates, addressing these parenthood wage effects becomes not just a matter of equity, but of economic sustainability and stability.

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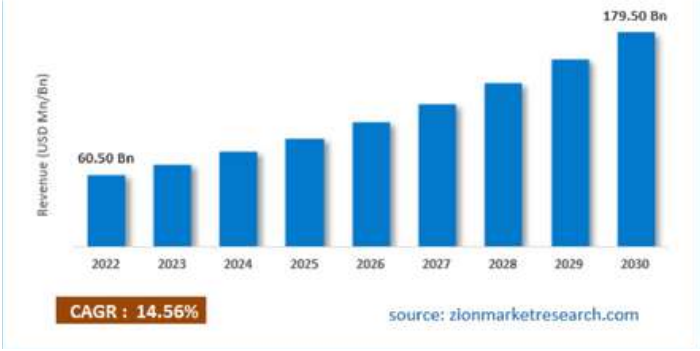
FAST FASHION

An Economic Boom or Environmental Doom

By Pakhee Dubey, Year 1st, B.A. (H) Economics, Daulat Ram College, University Of Delhi

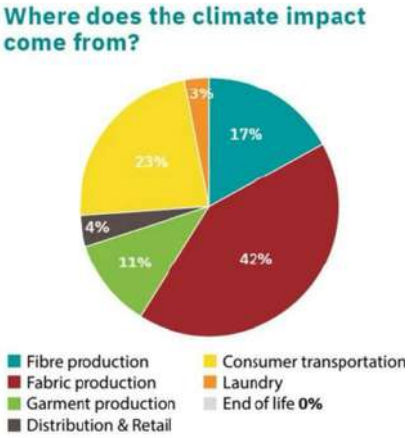
Imagine wearing the latest runway trends for less than the cost of a fancy coffee. That's the allure of fast fashion—cheap, trendy, and oh-so-accessible. Beneath the glitter, however, lies a darker reality that's reshaping our planet and lives. While fast fashion has revolutionized consumer habits and democratized access to style, its hidden costs have emerged as a significant threat to the environment and ethical standards worldwide.

Fast fashion has undeniably spurred economic growth on a global scale. The apparel market, valued at approximately $1.7 trillion in 2023, owes much of its expansion to fast fashion brands that have mastered the art of swift production. By efficiently designing, manufacturing, and distributing clothing at record speeds, these brands have created millions of jobs across the globe. In developing nations, textile factories employ countless workers, while urban centers thrive on retail activity fueled by affordable prices. These low costs encourage mass consumption, boosting revenues for companies and generating economic momentum. For countries like Bangladesh, Vietnam, and India, garment manufacturing has become an economic cornerstone, contributing significantly to export earnings. This prosperity has also benefited auxiliary industries, including logistics, e-commerce, and advertising, creating a ripple effect of economic vitality.



Fast Fashion Industry Annual Growth Rate till 2030 (Source: Zion Market Research)

However, the rapid growth of fast fashion has come at a monumental environmental cost. The industry's practices are unsustainable, depleting resources and polluting ecosystems. Synthetic fibers such as polyester rely heavily on fossil fuels, while cotton production demands enormous quantities of water and pesticides. Producing a single cotton shirt, for example, consumes about 2,700 liters of water—enough to sustain one person for 2.5 years. The throwaway culture promoted by fast fashion has resulted in approximately 92 million tons of textile waste annually, much of which ends up in landfills or is incinerated. Alarmingly, the industry contributes around 10% of global carbon emissions—more than the combined emissions of all international flights and maritime shipping. The environmental toll extends to waterways, as textile dyeing is one of the largest sources of water pollution. Synthetic fibers also shed microplastics during washing, significantly contributing to the plastic pollution crisis in oceans.



Climate Impact in Fast Fashion (Source: Medium)

Equally concerning are the social ramifications of fast fashion. The industry relies heavily on cheap labor, often exploiting workers in developing countries. Many garment workers endure unsafe working conditions, long hours, and inadequate pay. According to the non-profit organization Remake, 80% of apparel is produced by young women aged 18 to 24, who are particularly vulnerable to exploitation. The devastating 2013 Rana Plaza factory collapse in Bangladesh, which killed over 1,100 workers, stands as a grim reminder of the human cost of prioritizing profit over people. Despite global outrage and some reforms, labor rights abuses remain a pressing issue, underscoring the need for stricter

enforcement of ethical labor practices.

The unprecedented speed of fast fashion production further compounds its issues. Brands like Zara have pioneered models that reduce the time from design to retail to as little as 15 days, allowing them to capitalize on ever-shifting consumer trends. While this agility has economic advantages, it exacerbates overproduction and overconsumption, accelerating environmental degradation. McKinsey highlights that this relentless pace must shift toward a more sustainable paradigm if the industry is to remain viable in the long term.

The fast fashion industry now stands at a crossroads. Reconciling its economic benefits with its environmental and social responsibilities requires bold and innovative solutions. Transitioning to a circular economy, where clothing is designed for durability, repairability, and recyclability, offers a path to reducing waste and conserving resources. Investing in eco-friendly materials such as organic cotton, hemp, and recycled fibers is another crucial step, as is exploring groundbreaking innovations like lab-grown fabrics and biodegradable textiles. Educating consumers about the environmental impact of their choices is equally vital. Mindful purchasing, secondhand platforms, and rental services can help curb the demand for new production. Governments, too, have a critical role to play by implementing stringent environmental regulations, incentivizing sustainable practices, and penalizing violators. France's initiative to unite 150 brands under sustainability goals exemplifies the potential of policy-driven change. Finally, ensuring fair wages and safe working conditions for garment workers is imperative to address the industry's deeply entrenched social inequities.

BASIS	FAST FASHION	SUSTAINABLE FASHION
Production Costs	Low due to cheaper materials and labour	Higher due to ethical sourcing and fair wages
Carbon Emissions	High due to mass production and synthetic materials	Lower with eco-friendly processes and renewable energy
Water Usage	Extremely high, especially for dyeing processes	Reduced through water recycling and organic materials
Product Lifespan	Shorter due to lower quality and trend-based designs.	Longer with durable, timeless designs.

Fast fashion epitomizes the tension between economic development and sustainability. While it has revolutionized how we access and consume fashion, the environmental and ethical costs are too significant to ignore. For the industry to thrive in a way that aligns with global sustainability goals, it must undergo a transformative shift. Collaboration among brands, consumers, and policymakers is essential to redefine fashion's purpose—not merely as an expression of personal style but as a reflection of shared values and a commitment to ethical and environmental responsibility. Only through such collective effort can fast fashion evolve from a driver of environmental doom into a sustainable economic opportunity.

THE ECONOMICS OF MARGINALIZATION

ANALYSIS OF ROOTS, CONSEQUENCES, AND POLICY SOLUTIONS

By Chinmay Khare, Year IInd PhD. Student, T.A Pai Management Institute, Manipal Academy Of Higher Education

Abstract

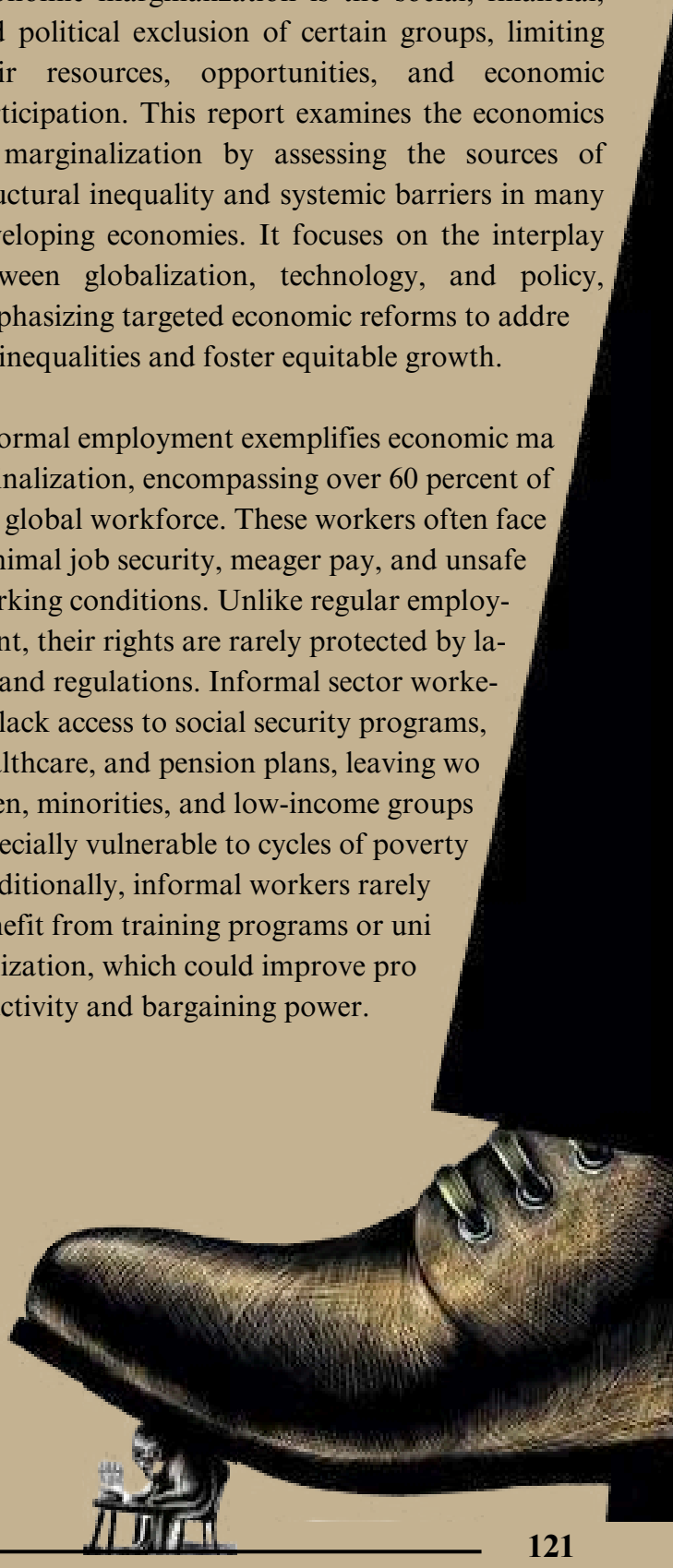
Economic marginalization constrains participation and wealth among disadvantaged people, thereby maintaining cycles of poverty and inequality, especially in developing economies. This report analyzes structural causes of marginalization: labor markets, education, gender inequalities, and resilience to climate change. A large portion of informal jobs in most developing countries is at risk, as marginalized workers lack protection against exploitation, low wages, and job insecurity. Gender-based obstacles further restrict economic mobility through societal norms, discrimination, and unpaid domestic work for women. Educational inequality limits entry into high-skilled jobs due to the cost of student debt accumulated by lower-income graduates. Globalization and technology have opened unprecedented opportunities but have also intensified marginalization, particularly in the precarious gig economy, often devoid of key labor protections. Climate change exacerbates these inequalities because resource-dependent communities are disproportionately affected and lack access to funds for adaptation. This report calls for policy interventions to address these systemic barriers, including comprehensive labor protections, accessible education, gender-responsive reforms, climate resilience support, and digital inclusion. Such policies are critical for promoting an equitable and inclusive economy with better opportunities for all.

Keywords: Economic marginalization, structural inequality, labor markets, informal employment, gender inequality, educational disparity, gig economy, globalization, climate resilience, policy solutions, developing economies, inclusive growth, digital inclusion, economic mobility.

Introduction

Economic marginalization is the social, financial, and political exclusion of certain groups, limiting their resources, opportunities, and economic participation. This report examines the economics of marginalization by assessing the sources of structural inequality and systemic barriers in many developing economies. It focuses on the interplay between globalization, technology, and policy, emphasizing targeted economic reforms to addre -ss inequalities and foster equitable growth.

Informal employment exemplifies economic ma -rginalization, encompassing over 60 percent of the global workforce. These workers often face minimal job security, meager pay, and unsafe working conditions. Unlike regular employ-ment, their rights are rarely protected by la-ws and regulations. Informal sector worke--rs lack access to social security programs, healthcare, and pension plans, leaving wo -men, minorities, and low-income groups especially vulnerable to cycles of poverty Additionally, informal workers rarely benefit from training programs or uni -onization, which could improve pro -ductivity and bargaining power.



Gender-Based Economic Marginalization

Gender inequality significantly contributes to economic marginalization. Women are underrepresented in high-paying sectors and leadership roles. Discrimination in hiring, combined with societal norms, widens the wage gap and fosters economic dependency. The "motherhood penalty," where women's earnings decline after childbirth, contrasts with the "fatherhood premium," where men's earnings often increase as they are perceived as more responsible.

In many developing economies, women's work remains unpaid. Housework and childcare, predominantly carried out by women, are critical to household and community economies yet are excluded from GDP calculations. Recognizing unpaid care work in economic metrics would validate these contributions and guide policies to provide resources and support to caregivers. Comprehensive reforms—such as equal pay, childcare support, and flexible workplace policies—are essential for fostering a more inclusive economy.

Educational Inequality and Barriers to Economic Mobility

Educational inequality is a key driver of economic marginalization. Access to quality education is crucial for upward economic mobility, yet disparities in quality and accessibility persist. Marginalized groups often lack access to quality schooling, limiting their ability to secure high-paying, skilled jobs. Inequalities in resources—such as curriculum quality, teacher competency, and infrastructure—further entrench economic disparity. Student debt is an additional constraint, particularly in economies where education costs have outpaced wage growth. For lower-income graduates, this debt limits opportunities for investment in housing, entrepreneurship, or further education. Addressing these disparities requires prioritizing accessible education, subsidizing higher education for underprivileged groups, and regulating private loans to make education affordable.

Globalization, Technology, and Marginalization

Globalization and technological advancements have created new economic opportunities but have also deepened marginalization. In developing countries, traditional industries have been disrupted by multinational corporations, displacing workers into precarious, low-wage jobs. Additionally, the rise of digital platforms has expanded the gig economy, characterized by low job security and minimal benefits. During the COVID-19 pandemic, this trend accelerated, with many platforms classifying workers as independent contractors to avoid providing labor protections like minimum wage guarantees or health benefits. These developments disproportionately affect low income workers, who are more likely to depend on gig economy jobs. Addressing this requires regulating platforms to ensure fair wages and benefits while fostering a sustainable gig economy that offers economic security.

Climate Change and Economic Marginalization

Climate change has added another dimension to economic marginalization, particularly for communities dependent on agriculture and natural resources. Extreme weather events disproportionately impact developing economies, where vulnerable populations often lack the financial means to recover. These communities face higher costs for insurance, credit, and disaster relief, further exacerbating inequality. To address these challenges, climate financing policies must prioritize vulnerable communities. Community-based adaptation programs that empower marginalized groups can build resilience against climate risks. International financial institutions should provide targeted funds to support climate adaptation and disaster relief for these communities.

Policy Solutions and Use of Technology

Addressing economic marginalization requires targeted interventions across labor, education, climate adaptation, and gender equality.

Labor Protections: Policies should extend

minimum wage guarantees, health benefits, and job security to informal and gig economy workers. A comprehensive social security scheme for informal workers can serve as a safety net, offering healthcare, pensions, and unemployment benefits.

Digital Inclusion: Technology can play a vital role in reducing marginalization. Digital literacy programs, particularly in rural areas, can bridge the digital divide and increase access to online education, remote work, and e-commerce. Regulating e-commerce and gig platforms to ensure fair wages and benefits will foster a sustainable gig economy.

Educational Reform: Policies should focus on allocating resources to marginalized regions, particularly rural and underdeveloped areas. Enhancing infrastructure in primary and secondary education and making higher education affordable through scholarships, grants, and interest-free loans can bridge the educational attainment gap.

Gender-Responsive Policies: Unpaid work should be included in GDP calculations to acknowledge its economic value. Promoting parental leave for both genders and implementing flexible workplace policies can help women participate more fully in the labor market. Stronger anti-discrimination laws and incentives for gender-balanced hiring can further advance gender equality.

Conclusion

Addressing the economics of marginalization requires tackling deep-seated inequalities in labor markets, education systems, and climate policies. Inclusive economic policies are essential for enabling all citizens to participate fully in economic life. By addressing systemic barriers, policymakers can create an economy that is stronger, more equitable, and inclusive for all, rather than just a privileged few. Such reforms lay the foundation for sustained growth and shared prosperity.

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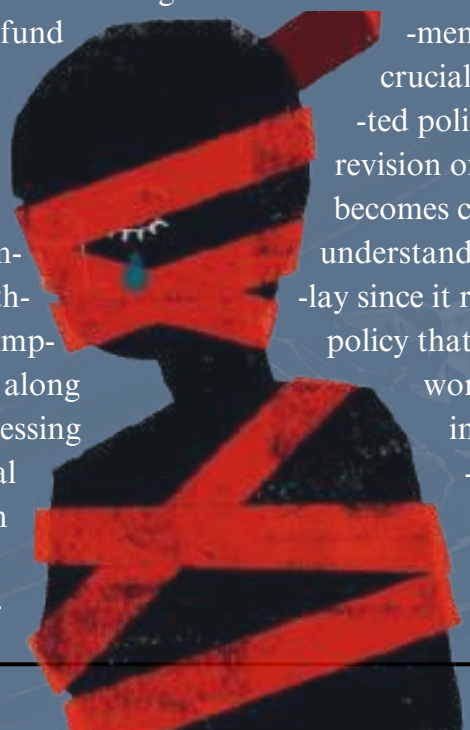
TOWARDS EQUITY:
ENSURING SOCIAL PROTECTIONS FOR GIG WORKERS

By Lakshmi K. Rajeev, Year IInd, IIFT IPM'28

Post-COVID-19, the gig economy has witnessed exponential growth driven by the growth of technology and the growing demand for flexible work options, which have become yet another integral component of many people's daily lives. With a GDP contribution of 1.25% and a CAGR of 17%, the gig economy has generated a gross value of $455 billion. However, despite its significance, gig workers in India lack access to essential social protections, such as health insurance, paid leave, and retirement benefits, raising concerns about their economic security and well-being.

The Social Security Code 2020 is one of the four labour codes introduced by the Government of India to consolidate labour laws and to provide a more structured framework for ensuring social security access. According to the provisions of SSC 2020, social security is defined as "protection afforded to employees, unorganised workers, gig workers, and platform workers to ensure access to healthcare and to provide income security, particularly in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a breadwinner". A key highlight of the SSC 2020 is the Social Security Fund created for the very purpose of achieving the aim of extending access to social security for gig and informal workers, where the funding may be done wholly by the government, or in part by central, state, and stakeholders employees and aggregators through provisions of the social responsibility fund as under the Companies Act 2013 or as per any other specified sources. In the most recent report by NITI Aayog, 'India's Booming Gig and Platform Economy: Perspectives and Recommendations on the Future of Work', there has been a clear call to action for implementing provisions of the SSC 2020 along with other recommendations for addressing the widening inequality in the informal sector. At this outset, an introspection into the entire case helps us primarily identify four key challenges in developing a comprehensive policy solution for the gig economy workforce: a) Improper implementation of Social Security Code 2020, b) Skewed access to social security scheme and fair compensation, c) Ambiguous labor laws and lack of access to and awareness of legal protections d) Absence of career growth opportunities.

One recommendation is a four-phase policy approach starting with landscape assessment, framework development, pilot testing and evaluation, and ending with scaled-up implementation and continual monitoring. Current data regarding the gig economy is as per 2021 estimates and has a limited nature due to the absence of other demographic parameters, including but not limited to gender and age. Newer estimates from the Directorate General of Employment (DGE) will help not only play a crucial role in developing properly targeted policies but also address demands for revision of minimum wages in India. It also becomes crucial for the government to fully understand the power-interest dynamics at play since it requires the government to form a policy that balances the interests of both gig workers as well as other aggregators, including platform companies. For ward this would be the development of the 'Guarantee, Advance, and Protect' framework hereafter called the GAP framework.



The three key action points address the key challenges identified before by combining provisions of SSC 2020 along with recommendations of the NITI Ayog committee as follows :

Guarantee: Implementation of Social Security Fund provision as per Social Security Code 2020 and recommendation of NITI Ayog report for those with a minimum of 6 months of contributions to access benefits and continuous contributions for at least 3 years for pension eligibility. Contributions to the funds are to be made as per the provision i.e, 1-2% of annual company turnover + 1-2% employee contribution (monthly). The fund shall also have an earmarked contribution by the government or through integration with current schemes, including but not limited to the Atal Pension Yojana, Pradhan Mantri Shram Yogi Maan-dhan, Pradhan Mantri Jeevan Jyoti Bima Yojana , Pradhan Mantri Suraksha Bima Yojana etc. The fund can then be backed by G-Sec if required;

Advance : Transformational upskilling for workers presently engaged in skill development and career progression, enabling the transition to formal employment through a transparent, merit-based framework using skill bands, micro certifications and a badge system that can be linked with the Skill India initiative if desired by the aggregator;

Protect : Guaranteed occupational disease and work accident insurance coverage as is present in Indonesia. This can be designed in partnership with insurance companies or designed and offered in collaboration with the government. It shall also include initiatives for increased awareness for subscription to government schemes, welfare programmes and knowledge of employee rights through targeted SMS, social media, radio campaigns etc.

While the framework and its action points might sound foundationally strong, its implementation path is not without hurdles. Pilot testing in tier 1 and 2 cities with relatively high concentrations of gig workers and aggregators can help gauge the efficiency and feasibility of the framework through monitoring of key metrics such as worker participation rates, platform compliance rates, contribution collection rates, fund disbursement efficiency, reported worker satisfaction, and awareness levels. Post this, in case of successful and satisfactory implementation in a minimum of 3 major zonal areas, scaling up of the initiative pan-India along with the development of a monitoring dashboard and formation of the regulatory body, i.e the National Social Security Board. If successfully implemented, this can help increase the informal sector's access to social security schemes, including but not limited to health insurance, disability coverage, and maternity/paternity benefits; promote worker upskilling and empowerment through skill development schemes and financial and non-financial incentives;

It becomes important here to understand that there exist multiple approaches, with a potential one being the merging of the e-Shram platform with the Employees' Provident Fund Organisation for a single streamlined framework for social security matters. However, this would involve a larger degree of legal changes and deliberation, including revision of eligibility criteria, fund segregation, increase awareness of employee rights and entitled benefits; increase the role of companies in employee welfare and increase the government's capacity to track and monitor formalisation trends across workforces through the enrollment of the unorganised sector in government platforms such as e-Shram and other related welfare schemes. Four key challenges that the government might face in the implementation of the outlined policy include the identification of a revenue source to fund the Social Security Fund, the analysis and development of the

infrastructure (IT, etc.) required for increased policy targeting and coverage, and delays arising from amendments in existing legal provisions and company compliance for participation.

It becomes important here to understand that there exist multiple approaches, with a potential one being the merging of the e-Shram platform with the Employees' Provident Fund Organisation for a single streamlined framework for social security matters. However, this would involve a larger degree of legal changes and deliberation, including revision of eligibility criteria, fund segregation, disbursement, etc., along with public interactions. In conclusion, addressing the challenges faced by gig workers in India demands a multi-faceted and inclusive policy approach that ensures social security, economic stability, and career growth. The implementation of the GAP framework, based on the groundwork provided by the Social Security Code 2020 and recommendations from the NITI Aayog report, lays a promising foundation for advancing towards the goal of empowering the gig workforce. However, hurdles such as funding, infrastructure development, legal amendments, and stakeholder compliance challenge the seamless implementation of the policy. Hence it does not go without saying that, with collaborative efforts from the government, aggregators, workers, and other stakeholders, this vision can become a reality, ensuring that the gig economy continues to thrive while safeguarding its workforce.

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The Cotton Conundrum:
Sustainability and the Future of Currency

By Arindam Roy & Pratyus Behura, B.A. (H) Economics, Year IInd, Hindu College, University of Delhi

Introduction

The word "currency" has its origins in the Latin term "currentia," which derives from "currēns," the present participle of "currere," meaning "to run" or "to flow.". From the ancient Lydian rules known for their currency metallurgy to the paper-money-issuing Tang Dynasts of China, the currency system has been recognised as essential to every economy, serving as the backbone of financial transactions, economic stability, and empires themselves. An ever-growing supply of money was only seen as a sign of growth as it facilitates trade by acting as a universally accepted medium of exchange, enabling specialisation and efficiency among producers.

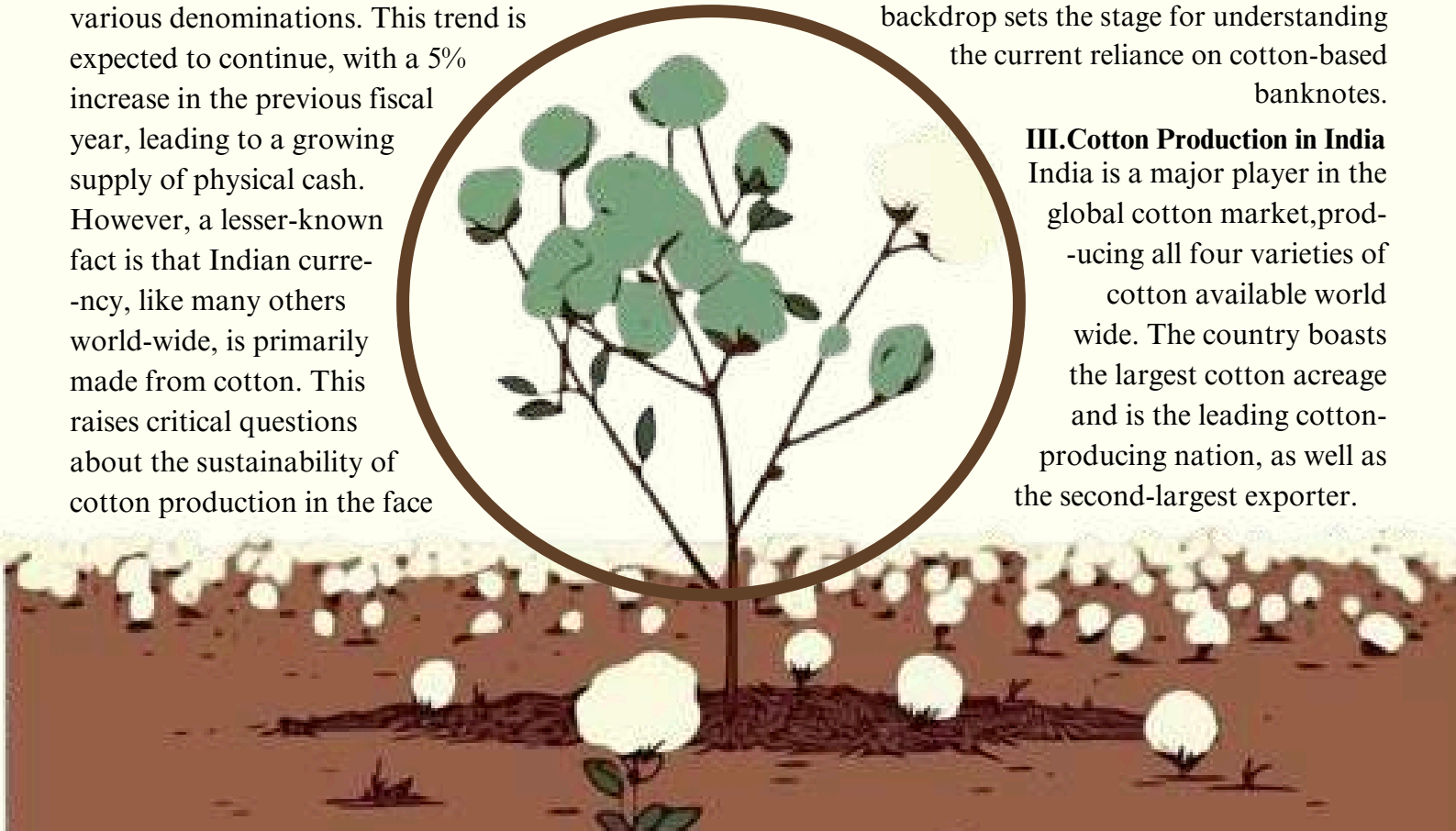
In contemporary India, the Reserve Bank of India introduced over ₹27,00,000 crores (2022) worth of banknotes into the economy, which accounted for more than 5 lakh banknotes of various denominations. This trend is expected to continue, with a 5% increase in the previous fiscal year, leading to a growing supply of physical cash. However, a lesser-known fact is that Indian curre--ncy, like many others world-wide, is primarily made from cotton. This raises critical questions about the sustainability of cotton production in the face of climate change and increasing consumer demand, which we shall explore in this paper.

Historical Context of Currency in India

The evolution of currency in India has undergone several transformations, beginning with the barter system, where goods were exchanged directly. Over time, commodities such as cattle and salt became widely accepted as money, leading to the development of commodity money. The discovery of metals marked a significant shift, resulting in the creation of coins, with historical evidence of ancient Indian coins (Mudras) dating back to the Indus Valley Civilisation. The Mughal era saw the standardisation of coinage, while the British colonial period introduced paper money, monopolised by the British government through the Paper Currency Act of 1861. This historical backdrop sets the stage for understanding the current reliance on cotton-based banknotes.

III.Cotton Production in India

India is a major player in the global cotton market,prod--ucing all four varieties of cotton available world wide. The country boasts the largest cotton acreage and is the leading cotton-producing nation, as well as the second-largest exporter.



However, challenges such as land fragmentation, poor management systems, lack of irrigation facilities, pest problems, and the use of genetically modified variants that require more fertilisers have hindered productivity. For instance, India's productivity per hectare is significantly lower compared to countries like Mexico and China, which raises concerns about the sustainability of cotton production for currency manufacturing.

Correlation between Cotton Production and Cost of printing money

From news outlet sources available from 2018, 2020, and 2023, we plot the cost of producing one 500 rupee note against the total production of cotton in those years, from which we can derive the following table as well as the graph. The table below displays a negative correlation coefficient of -0.823 as well, displaying the negative relation between the cost of producing a note and total cotton production in India.

Source- Ministry of textiles

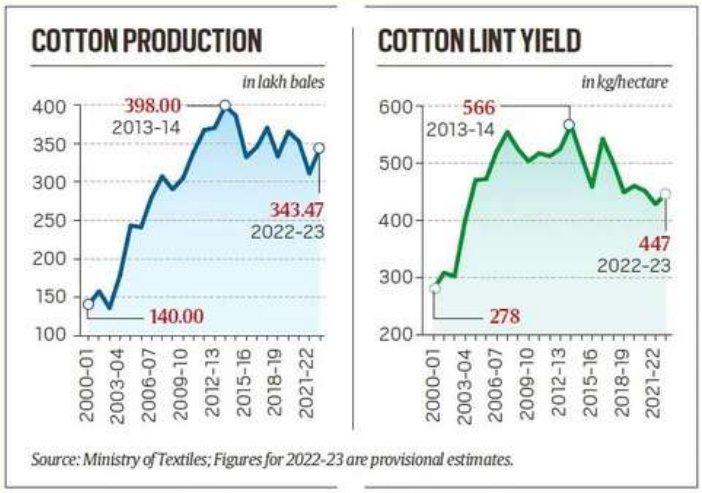
Year	Cost of Producing One Rs 500 Note (Rs)	Cotton Production in India (10 Million Bales)
2018	2.57	3.330
2020	2.29	3.650
2023	2.94	3.366

Pearson's Coefficient of Correlation can be calculated through:

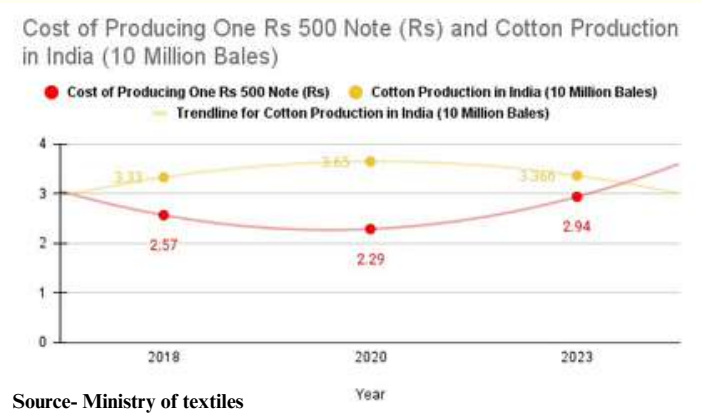
$$r = \frac{\Sigma(x_i-\bar{x})(y_i-\bar{y})}{\sqrt{\Sigma(x_i-\bar{x})^2 * \Sigma(y_i-\bar{y})^2}}$$

$$r = \frac{-0.267}{0.3244} = -0.823$$

What this would imply is that a lower cotton production in India leads to a higher cost of producing a single rupee note and vice versa. A higher cost of production would diminish the goals of self-sustainability, and an ever-growing demand for such cash can only lead to the creation of cost-push inflation, where the government is compelled to print even more money to maintain liquidity against rising production costs and meet its obligations.



The Soft Power of Cotton Currency



Source- Ministry of textiles

Cotton banknotes offer several advantages over paper or polymer alternatives. They are more durable, lasting up to two to three times longer than polymer notes, with a lifespan of around 5 to 15 years depending on handling and environmental conditions. The tactile feel of cotton currency is distinct, making it easily identifiable by touch, which helps reduce counterfeiting. Additionally, cotton banknotes can incorporate advanced security features such as watermarks and threads, significantly decreasing counterfeit rates. Environmentally, cotton currency is biodegradable and produces 80% less CO2 emissions compared to synthetic alternatives, making it a more sustainable choice. The European Union (with special focus on the Netherlands), United States are successful examples of the same, with the former utilizing sustainably sourced cotton.

Challenges of Cotton Currency Production

Despite the benefits, there are notable challenges associated with cotton currency production. The

cost of producing cotton banknotes is generally higher than that of paper notes, with production costs being 20-30% more expensive due to raw material and manufacturing complexities.

Furthermore, cotton banknotes are susceptible to water damage, fading over time, and higher contamination risks compared to synthetic options. The reliance on cotton production also makes the currency vulnerable to agricultural challenges, such as droughts and pest infestations, which can significantly impact supply and increase production costs.

Sustainable Practices and Policy Recommendations

To address the sustainability concerns surrounding cotton currency, two potential solutions emerge. One is highly ambitious: that the entire economy, every single person, goes fully digital, which is purely a wishful scenario but nonetheless possible only in the distant future.

The other approach involves environmental and ethical considerations, displayed excellently by the European Union. This approach utilises sustainable methods of producing such banknotes. It involves using leftover cotton bits from cotton and cloth mills to make the currency notes; since 2004, the European Union (EU) has been conducting a comprehensive Life Cycle Assessment (LCA) to evaluate the environmental impact of euro banknotes throughout their entire lifecycle, from raw material extraction to disposal. This assessment has informed various sustainability measures aimed at reducing their environmental footprint, with a particular focus on energy efficiency and renewable resources. Innovations in ATM technology have significantly reduced energy consumption during banknote production and distribution, contributing to a smaller overall environmental impact.

Additionally, the European Central Bank (ECB) is committed to increasing the use of renewable energy in its operations, thereby minimising carbon emissions associated with cash transactions. To systematically monitor the environmental impact of euro banknotes, the ECB employs the Product Environmental Footprint (PEF) methodology, which provides a detailed analysis of various ecological factors. Recent developments also include exploring alternative materials for banknotes, such as hybrid substrates made from certified organic cotton and responsibly sourced wood pulp, enhancing sustainability while maintaining quality and durability.

Nations like the Philippines have also found a way around sustainability challenges. Being an island nation rich with banana plantations, it sources banana fibres after harvesting the crops. This natural fibre came to be known as "Manila Hemp", which is then integrated into their banknotes.

These methods not only conserve resources but also align with environmental and ethical considerations. To prevent a potential clash between the increasing demand for physical cash and the declining levels of cotton production, a policy change is essential. This change should focus on utilising leftover cotton bits instead of rags for currency production and providing farmers with institutional and technological support to enhance sustainable cotton farming practices in India. Such measures could help restore healthy cotton production levels and ensure a stable supply for currency manufacturing.

Conclusion

The cotton conundrum presents a complex interplay between currency production, environmental sustainability, and economic viability. As India continues to navigate these challenges, it is crucial to raise awareness about the implications of cotton-based currency and the need for sustainable practices. By adopting innovative solutions and implementing supportive policies, India can secure its position as a leader in cotton production while ensuring the sustainability of its currency in the future. The journey towards a more sustainable currency system is not only necessary for economic stability but also vital for the well-being of the environment and society as a whole.

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STITCHING SEAMS, /ˌSTi CHiiNG/ SCHEMES AND PROFITS:

Unravelling the cost of the fast fashion economy

By Gauri Garg, B.A. (H) Economics, Year IIIrd, Hindu college, University of Delhi

***"Fast fashion isn't free. Someone, somewhere, is paying."* As billions of garments flood the market each year, the question arises: are we really saving money, or is someone else paying the price? - Livia Firth**

Introduction

Fast fashion has successfully introduced the world to a culture of disposable commodities, capitalising on a rational consumer's maximum utility derived from lesser expenditure. As the name suggests, it emphasises fast production and consumption, always leaving the consumer wanting more! Affordable clothing made more quickly has effectively targeted the supply chain and consumer behaviour so that it has become easier to ignore the negative externalities accompanying the tide of fast fashion, as who doesn't like a good deal? This article aims to evaluate a possible shift in consumer behaviour in India and also shed light on pressing environmental concerns due to the monopoly of fast fashion in markets worldwide and the violation of labour standards by fast fashion brands.

The Trends are Fading Faster than Ever

The glitzy and brightly coloured clothing found on the racks of Zara, Forever 21, and H&M hides a much uglier story. With fast fashion, consumers can now purchase clothing faster, cheaper, and more conveniently than ever before. But the issue is that it poses significant threats to the environment and the labour it employs and is the driving force behind individual consumerism.

The sensitive facet of the labour cost of fast fashion puts the spotlight on the unfriendly, unreasonable working conditions such as low wages, environmental pollution due to toxic gases, and social discrimination that plague the garment industry and the need for greater consciousness and change in this unsustainable system.

Some might call this an attempt by the West to recolonise the East, as fashion's dark underbelly, dialling countries like Bangladesh, China, and even India, raising their pollution levels is not new information.

Until the mid-1980s, production in the fashion industry in Western countries like the USA was based on low-cost mass production of standardised styles that did not change frequently due to the design restrictions of the factories and the nature of technology back then, such as Levi's 501 jeans and a man's white shirt, although there were exceptional cases of rapidly changing haute couture (Brooks 1979).

It was seen that consumers during that time were less sensitive toward style and fashion changes and preferred basic apparel. Bailey and Eicher (1992) reported a sudden increase in the import of fashion-oriented apparel for women as compared to the standardised apparel in the 1980s, which reduced the demand for simple and mostly static fashion as consumers started to crave new styles and became more fashion-conscious.

In the fashion industry, market demand is highly volatile, forcing fashion apparel retailers to take recourse to the 'speed-to-market' approach, capitalising on fashion not in racks of their competitors' stores, and feeding the increased consumer demand for immediate gratification. What needs to be noted here is that if brands are not quick enough to introduce a new product line in stores, it directly impacts their profitability as their competitors can capitalise on the trend's peak and maximise their sales at the cost of other brands. Delays in bringing products to the market can also lead to excess inventory, forcing companies to sell the unsold stock at discounted prices, eating up profit margins. Brands are also able to lower their operation costs due to the speed-to-market approach.

Beyond the mass production and its heavy reliance on petrochemical manufacturing and supply chains that circle the world, fast fashion companies also use lower-quality materials and industrial applications of chemical coatings like formaldehyde that are toxic to human health. The textiles industry relies heavily on non-renewable resources, approximately 98 million tonnes per year, including oil to produce synthetic fibres, fertilisers to grow cotton, and chemicals to produce dye and finish fibres and textiles.

Additionally, many fast fashion brands like H&M, Shein, Zara, etc., which are posing to be "environmentally conscious," have factories in countries like Bangladesh, where workers are forced to work in unhealthy conditions, paid less than minimum wages, and it's also responsible for the high levels of pollution in the capital city of Dhaka.

If the principles of circular economy are utilised in the textile industry, the damage caused by the mass production of fast fashion could be mitigated. Devising new business models that increase the use of clothing, clothing that is produced using renewable and safe inputs, creating solutions such that old clothes can be turned into new, and then again circling back to those business models can certainly mitigate the catastrophe caused by fast

fashion.

However, there is certainly enough awareness of the malpractices behind the guise of fashion and the dark side behind the clothes worn by models on those ramps. But consumer behaviour is favouring this mass production as the supply chain affecting this mass consumerism is based on popular demand.

Evaluating Consumer Behaviour

The low cost of fast fashion encourages a throwaway culture, where garments are discarded after a few uses, contributing to waste and environmental harm. The emergence of digital marketing, social media, and eCommerce has changed how consumers behave. Today's fashion consumers are more informed, connected, and demanding than ever before. They expect instant gratification, which translates to quick access to the latest trends and products.

Studies show that the majority of college students in India are indifferent between choosing fast fashion brands due to their affordability and switching to sustainable options in light of negative costs associated with mass production. Most individuals were willing to make that trade-off based on the easy availability of sustainable counterparts, given that they also adhere to the latest trends in fashion. One significant finding is that affordability and accessibility certainly do shape consumer preferences, and they derive maximum utility from such alternative bundles.

The increasing disposable incomes and rising fashion consciousness among Indian consumers are major drivers for the fast fashion market. With higher incomes, Indians are spending more on lifestyle products including apparel. The growing brand consciousness amongst the Indian middle class and working professionals has created demand for affordable and trendy Western fast fashion.

But in a survey, people in their middle years showcased different results (Welter and Arthur, 2015; Forson et al., 2020). People in their middle years or people who have a stable source of income tend to be more sustainably conscious. The dramatic change in the fashion apparel industry, coupled with environmental concerns, is giving rise to conscious consumers in terms of fair trade, sustainable practices, and organic clothing. The pricing strategy used for fast fashion apparel, along with an analysis of consumers' behaviour, shows that consumers are willing to pay more for environmentally friendly and sustainable fast fashion clothing. But, in a country like India, with GDP per capita at US $2,484.85 (2023, World Bank), a major share of consumers in their middle years certainly cannot afford to make this shift. However, fast fashion was the only sector that made a beeline with a 30-40% growth rate during FY24. Contrary to this, the wider Indian fashion industry grew by a paltry 6% year on year.

Fast fashion is also associated with its severe impact on the environment. According to a UNEP report (2019), the industry is the second-biggest consumer of water and responsible for 10% of global carbon emissions, which is more than all international flights and maritime shipping combined. For instance, environmentalists are concerned about the amount of water it takes to make jeans every time a fast fashion brand like Zara has to change the apparel on its racks due to changing trends and the number of chemicals used by companies to make apparel, posing a serious threat to marine life as the non-biodegradable waste is dumped into the ocean. The apparel industry's global emissions are said to increase by 50% by 2030.

Sociology behind consumer behaviour due to fast fashion

Fast fashion's impact on garment workers and the environment often leads to polarisation. This is because it raises questions about personal responsibility, ethical consumerism, and the role this industry plays in shaping our values, priorities, and thus behaviour.

There is a general argument that it is the responsibility of individuals to make informed and ethical decisions when purchasing goods and that choices to support sustainable fashion brands will certainly promote better labour practices and reduce environmental harm.

On the opposite end of the spectrum, people argue that fast fashion is merely a by-product of a larger systemic problem like globalisation, capitalism, and mass consumerism. Collective action and systemic change, including but not limited to government regulations and effective implementation of industry-wide standards, have a far greater impact than just individual purchasing decisions.

The debate surrounding fast fashion does become personal due to socioeconomic factors, such as access to information and the availability of size- and price-accessible sustainable clothing options. Those who can afford more expensive, sustainably produced garments may feel that it is the responsibility of others to make similar choices, which can be reflected in the Eurocentric nature of policies promoting sustainable decisions all over the globe.

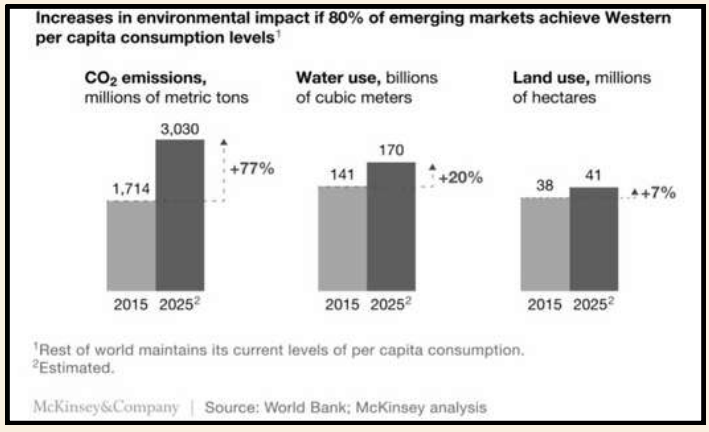
While there are more affordable options out there, those who cannot afford to make such decisions are made to feel that they are being unfairly criticised for their choices, which are driven by their financial circumstances. Those who are unable to find sustainable fashion options due to a lack of size inclusivity may feel as if they are being unfairly judged for failing to shop following their values and ethics when, in reality, it's the industry that has failed to meet their needs.

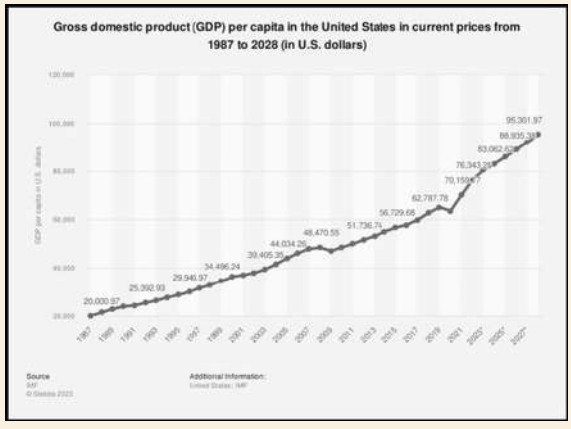
Eurocentric Policies and Labour Abuse in Bangladesh

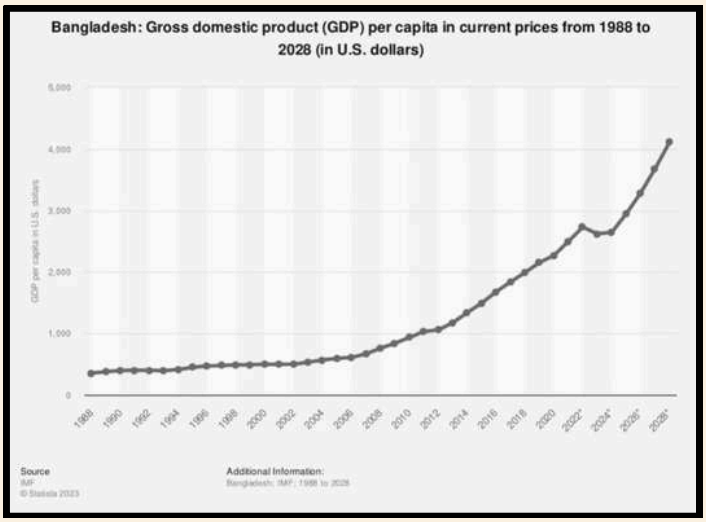
There has been a continuous stream of unfair trading practices by fast fashion companies, especially during the COVID-19 pandemic, worsening the situation of manufacturers (Islam, M. A., Abbott, P., Haque, S and Gooch, F.;2023). Suppliers had reported that retailers cancelled orders, refused to pay for dispatched goods, and on top of this, demanded a reduction in price for pre-placed orders before March 2020. During the pandemic, they continuously pressured the suppliers to reduce prices. Suppliers had also reported in December 2021 that despite the rising costs of inputs along with the additional mitigation costs due to the pandemic, 70% of retailers were still buying garments at prices similar to those in March 2020 from at least some of their suppliers.

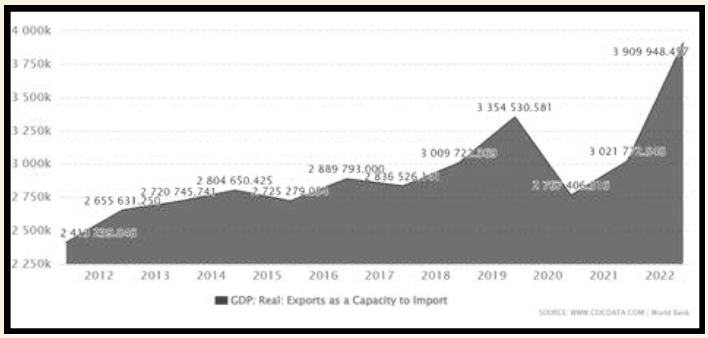
Such unfair trading practices impacted suppliers' employment practices, resulting in worker turnover, loss of jobs, and lower wages, on top of poor working conditions. Importantly, one in five factories reported that they had struggled to pay Bangladesh's legal minimum wages since the factories had reopened post the March and April 2020 lockdown.

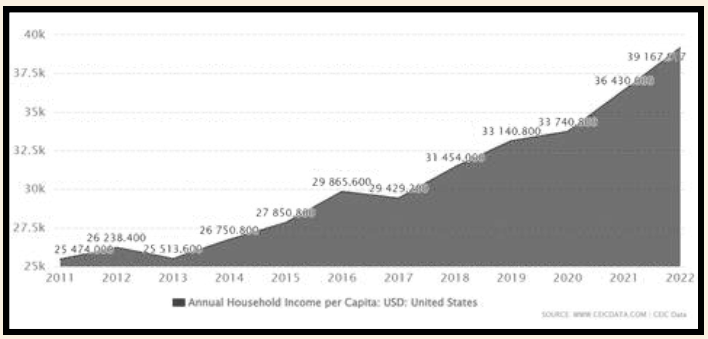
Western per capita consumption standards are well above those in Asian countries, yet their carbon footprint is higher, majorly because of unethical and largely unregulated business practices by fast fashion retail companies.



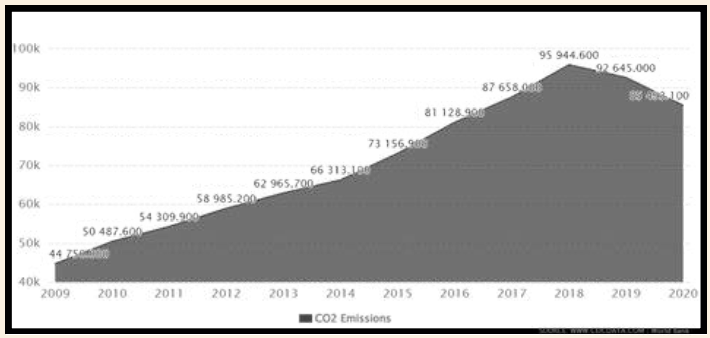




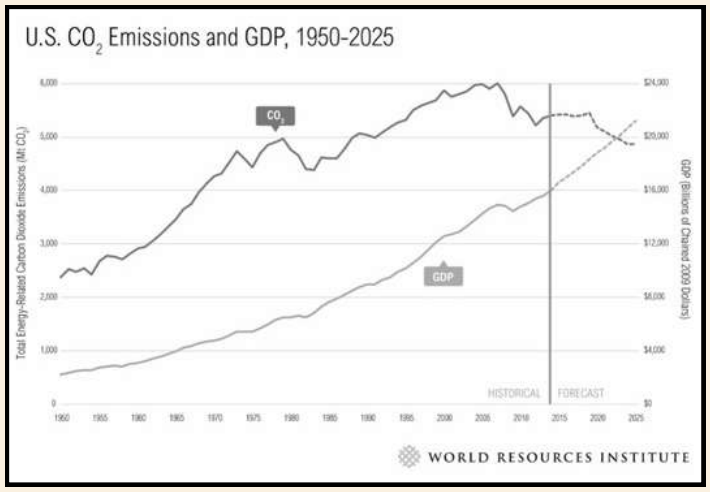




The above data on the United States and Bangladesh in terms of per capita income and GDP indicate the vast disparity that exists between the two countries, with Bangladesh lagging behind the US. But the data on carbon footprints and greenhouse gas emissions paints a completely different picture, ascertaining the Western dominance in the policy framework for promoting sustainable consumption practices that regulate the same countries, where Western companies dump their waste, without obligating the West to follow the same.



SOURCE: WWW.CEICDATA.COM, World Bank



The US ban on goods made with forced labour impacts the fast fashion industry by making it more difficult for companies to source cheap labour. However, the industry has found ways to get around the ban. For instance, in an article by Hope O' Dell (2023), brands like Shein and Temu manage to keep their prices low by circumventing a U.S. shipping provision called the "de minimis exception," which waives duty fees for any packages with a retail value of less than $800. Shein and Temu packages rarely reach the de minimis maximum—the average Shein shopper spends $100 per month, and the average Temu order size is $25. Another way such companies keep their prices low is by employing cheap labour in Southeast Asia without employment contracts.

Exploitation of female workers in the Fast Fashion factories

Karnataka is one of India's garment-industry heartlands, with thousands of factories and hundreds of thousands of workers producing clothing for international brands including Zara, Marks & Spencer, and H&M. But garment workers, according to a report by The Guardian,

said that factories refuse to pay the legal minimum wage in what is claimed to be the biggest wage theft to ever hit the fashion industry. Women garment workers in India are facing more abuse in the workplace because of pandemic-era behaviour by global fashion brands, according to a new report from the Business & Human Rights Resource Centre (2022).

The exploitation of workers in the factories producing these fast fashion garments disproportionately impacts women, who make up approximately 80% of the workers, primarily aged 18 to 35. In the global south, when it comes to garment manufacturing, the clothes on the racks of glitzy brands often come at the cost of women's dignity and safety. Gender discrimination is pervasive in countries like Bangladesh, where garments are produced. Women are frequently subjected to verbal and physical abuse, as well as sexual harassment, often in unregulated factories where workplace violence goes unchecked.

According to a 2018 report by Global Labour Justice, harassment and violence against women include threats, coercion, deprivations of liberty, and physical, mental, or sexual harm or suffering. These instances fit into a larger pattern of systemic abuse that is supported by lax labour law enforcement and a preference for profit over human rights. Issues of sexual harassment and human trafficking are predominantly faced by women, especially women of colour and those living in poverty. An example of this occurred at Natchi Apparels in India, a supplier to H&M, where worker Jeyasre Kathirvel was reportedly sexually harassed multiple times by a supervisor. She was then allegedly raped and murdered (Megan Robertson, 2024)

The exploitation of garment workers is glaringly evident in Bangladesh, a country heavily reliant on the industry. An Oxfam report reveals that 91% of Bangladeshi garment workers struggle to afford enough food for themselves and their families and 25% face some form of abuse. Despite the garment sector contributing nearly 16% to the nation's GDP and 84% of the nation's exports, workers remain poorly paid.

At least four garment workers were killed during mass protests over low wages in late 2023, and more than 100 workers and campaigners were imprisoned as a result of government repression. The minimum wage in Bangladesh was raised by 56% to $113 per month in response, although this amount is still less than the $210 monthly living wage needed to help workers escape poverty. As of August 2024, Sheikh Hasina, the former prime minister of Bangladesh, fled Dhaka due to student-led protests. This has raised concerns over garment workers' unequal wages.

Are Fast Fashion Brands becoming sustainable?

According to Sarah Willersdorf (BCG's Global Head of Luxury), some brands are pushing ahead, creating specific roles and units to address issues accompanying fast fashion. And other brands are jumping in too, as they risk getting left behind from this environmentally conscious bandwagon.

Luxury brands in this case have a head start because of the existing focus on adherence to quality standards and durability. But there's also an opportunity for contemporary brands with currently more relevant pricing points to reduce their stakes.

Brands are thinking about collaborating with competitors, as to date the industry hasn't moved as a whole, even though there are some really good examples of progress. However, such collaboration could provide an impetus for assuring affordability and accessibility as far as the latest trends are concerned, all while assuring labour security and adherence to sustainable environmental standards.

Brands will need to learn from each other and increase collaboration, especially when it comes to measurement, standardisation of certification, and areas that require sizable capital investment.

Innovation of new products and textiles will also help both reduce material usage and increase traceability. Building a product from scratch allows the traceability to be built into the production process itself, and some big brands are already investing in such ideas at an early stage.

For instance, some companies are setting up control towers that provide end-to-end visibility into their supply chains and other critical assets so that when disruptions emerge or reemerge, they can act swiftly to stabilise their operations.

Sustainable fashion is thus a complex and multifaceted issue that encompasses environmental, social, and economic considerations. While the concept of sustainable fashion is gaining traction globally, there are still innumerable challenges that need to be addressed to achieve a more sustainable future for the fashion industry.

Conclusion

A report by the UN Alliance for Sustainable Fashion states that the fast fashion business model of quick turnover, high volume, and cheap prices is under pressure from consumers who are demanding change, and they want resilient garments from a sustainable, environmentally and socially conscious industry.

Apart from examining the supply-side perspective of fast fashion, an evaluation of consumers' perception of fast fashion is important to understand the reasons behind this mass consumerism. An empirical understanding of consumer characteristics and their motivation to make purchase decisions for throwaway fashion influences fashion firms and retailers in developing effective marketing strategies to perform more effectively in this extremely competitive industry.

It will add to concluding how consumers differentiate value retailing and fast fashion retailing, as both aim to offer lower prices but follow different standards when it comes to sustainability and the cost of stitching those seams and the resultant profit depends entirely on consumer behaviour.

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GENDER AND
AB A TK BA RK

By Priyanshi joshi, BBA-Business Analytics, Year II, Indian Institute of Foreign Trade, Kakinada

Do equal rights really mean equal rights? And do we define equal rights? How does one get equal rights?

Is equal rights essentially an abstract concept or did women rea- -lly get it through their suffra -ge? This question has been haunting women and by extensi- -on minorities for a while. While we might seem equal in terms of rights, writ- -ing on the pages of the book of law does not necessarily grant them. We li- -ve in a society, not on the m -argins of a book, ruled by unsaid rules of society not officially declare -d law made by the government. You can criminalise things but not el -iminate them.

The brunt of this is being borne by wom- -en, who are treated as equal ci -tizens when it is convenient. They vote but do not get elected, they prod -uce but don't own, they live but don't choose. These statements sound vague, but there are plenty of examples who prove that they are not, being in the most powerful position one can get in, does not save them from m -arginalisation and discrimination if t- -hey are surrounded by people who do not share the same things.

In this article, we are essentially going to focus on women and the challeng- -es they face in the work field.

Gender and workforce representation

Women are essentially the inferior gender when it comes to workplace repre- -sentation. Today women form less than 40% (1) of the workforce globally. Most of them are employed in low-paying jo- -bs or lower levels of jobs in similar industries as the superior gender in terms of workforce representation. In India, the situation is even worse, with women being o- -nly 37% (2) of the workforce, and only 30% (3) in the organized sector.

This lack of representation is not just about numbers but about the nature of work and opportunities available to women. They are often trapped in roles that offer limited growth or are considered extensions of traditional domestic responsibilities. In male-dominated industries, women face significant challenges like unequal pay, lack of recognition, and limited access to leadership roles. Even in cases where women are equally qualified, societal norms and gender biases often result in their contributions being overlooked or undervalued. The situation remains dire without active efforts to create a level playing field.

Housework

Most women are employed in the industry of making homes, essentially becoming homemakers, or trad wivesbeing the new industry term. We are all aware of how this industry pans out. You stay at home, do the household chores like cooking and cleaning, and take care of children in return for no monetary reward. You earn things like food and shelter, but there is no growth or decline in your career; this essentially is what rears the financial dependency of women on earning members of their families, who are most notably men.

The dependency has caused a debate on whether housework should be included in GDP. This debate raises important questions about the value of unpaid labour and its role in the economy. Including housework in GDP would not only recognise the immense effort that goes into maintaining households but also challenge traditional notions of economic contribution. However, critics argue that monetising housework could be complex and might not address the root issue of gender inequality. Instead, the focus should shift toward reducing this dependency by encouraging skill development, creating better job opportunities, and promoting shared responsibilities within households.

Problems in Office

Most women work in the unorganised sector; hence, their exploitation is not documented properly, but even those working in the organised sector face severe gender stereotyping. Gender stereotypes and biases play a significant role in shaping workplace dynamics, often influencing critical decisions like hiring, promotions, and performance evaluations. Employers may subconsciously favour male candidates for roles perceived as demanding authority or technical expertise, based on the stereotype that men are naturally better suited for such positions. Similarly, women are often assessed through a harsher lens, where assertiveness may be misinterpreted as aggression, or personal responsibilities may unfairly raise doubts about their commitment. These biases not only limit opportunities for women but also reinforce discriminatory practices that perpetuate inequality.

The "glass ceiling" effect, in turn, reflects the obstacles women face on their way to the top. They join the workforce in huge numbers but end up as senior leaders in an extremely small proportion. An invisible glass ceiling prevents them from advancing to certain levels in spite of their qualifications and performance. Such is the perception of leadership as an exclusively male domain that women are generally barred from significant positions and left to manage middle levels, ensuring that in most industries, women are always under-represented in top positions.

Adding to that is the so-called "sticky floor," which traps women in low-waged, low-mobility occupations. Many of these women remain in jobs that have little capacity for skill-upgrading or mobility, often simply because of societal forces or a dearth of effective support systems for childcare. Unlike the glass ceiling, which bars women from higher ranks, the sticky floor keeps a significant proportion of the female workforce from even beginning their climb. Such issues call for deliberate efforts to challenge stereotypes, foster inclusive workplace cultures, and ensure equitable access to opportunities at all levels.

Gender and Parenthood

Motherhood significantly impacts women's

earnings and career advancement, often leading to what has been termed as the "motherhood penalty." This phenomenon encapsulates the wage gap and stagnation in the career that women often experience when they become mothers. Employers might view mothers as less dedicated to their jobs, thus getting fewer opportunities in terms of promotion, raises, or high-profile projects. Mothers often bear a greater burden of childcare, which makes them still take career breaks or part-time work, hence reducing their long-term earning capacity and career advancement.

On the other hand, the "fatherhood premium" draws attention to a very different reality for men. Research has demonstrated that men's wages tend to rise after having children, because they are perceived as more stable, reliable, and deserving of financial support for their families. Unlike mothers, fathers are less likely to experience workplace biases that question their commitment or ability to balance work and family life. This social double standard is therefore a factor in the continuation of traditional gender roles, which perpetuate men as breadwinners and women as primary caregivers in professional settings, thus creating an inequality cycle.

This is when the motherhood penalty is combined with the fatherhood premium, resulting in a gaping gap in career paths and earnings between men and women. To fix these issues, workplaces must come up with policies that support gender equality, including both parents' paid parental leave, normalised flexible work arrangements, and actively fighting biases against working mothers. By creating an environment in which caregiving responsibilities are shared and equally valued, it is possible to narrow the gender gap in earnings and career advancement.

Intersectionality

Gender differences often intersect in conjunction with factors such as race, ethnicity, education, or disability, contributing to the very complex layers of wage gaps and labour market inequalities. For example, women of color suffer from "a double disadvantage" whereby they face disadvantages in both genders and racialism. Black and Hispanic women receive a lower earnings share than the majority of other races, compared with white women and men in possession of similar levels of education, qualifications, or experience. This cumulative disadvantage results from structural constraints that limit the ability of women from marginalised racial and ethnic groups to access quality education, mentorship opportunities, and high-paying industries.

Equally, women with disabilities and lower educational attainment are disadvantaged in the labour market. Discrimination and societal prejudices prevent them from gaining good-paying jobs, while lack of proper accommodations in the workplace also prevents them from succeeding. Educational disparities also extend to exacerbating wage gaps; women with restricted educational opportunities often find themselves congregated in occupations that are relatively low-wage, low-mobility. These cross-cutting dynamics highlight the call for holistic policy responses that speak to gender disparity but also intersecting structural injustices that confront various groups of women in employment.

Conclusion

The persistent gender disparities in labor market outcomes reveal that achieving true equality requires more than just legal rights or policies; it demands a comprehensive societal shift. While progress has been made over the decades, women still face significant challenges in workforce representation, workplace dynamics, and economic independence. The issues facing women, ranging from undervalued housework to the lack of female leaders to intersectional compounding, can all be seen in light of historic and social inequalities.

Key Learning

All problems faced by women are connected issues. Occupational segregation, gender stereotypes, and motherhood penalties all work in combination with one another, part of the greater inequality-making machine. The societal norms, workplace

cultures, and institutional structures, often more than the economy or professions, encourage male dominance. Thus, if the glass ceiling is addressed, the sticky floor and the distribution of unequal domestic responsibilities also have to be dealt with.

Besides, intersectionality also brings out the importance of context-specific approaches towards gender equity. Women from disadvantaged racial, ethnic, or educational backgrounds, or those with disabilities, have their specific challenges that cannot be resolved through one-size-fits-all policies. The effective solutions would therefore consider the intersecting factors so that women of all walks of life enjoy equal opportunities and resources.

Real progress would come about when the workplace implements active measures, including inclusive hiring, equal pay, flexible work arrangements, and effective mentorship programs. Governments and organisations must work in tandem to facilitate skill development, ensure access to quality education, and remove structural barriers. Last but not least, societal attitudes must shift toward valuing caregiving, shared responsibilities, and diverse contributions in all walks of life.

Equality is not just about removing visible barriers; it is about reimagining a system where everyone, regardless of gender, can thrive without limitations. Only then can we truly achieve a fair and equitable society.

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SILK ROADS

Widening Horizo

By Ivana Dhiman, B.A. (H)

The Belt Road Initiative (BRI), also cited as the New Silk Road, is one of China's most monumental infrastructure projects. President Xi Jinping laid this project's foundations in September 2013 on an official visit to Kazakhstan. Two major highlights include the overland Silk Road Economic Belt and the Maritime Silk Road. First dubbed the 'One Belt, One Road' initiative, both quickly evolved into the new 'Belt and Road Initiative.'. Initially concocted to link the East of Asia and Europe, in recent years this undertaking has broadened to Latin America, Africa, and Oceania, significantly growing the economic and political influence of China.

We understand the basic grounds of this "opportunity," talking about its name. The 'Belt' part refers to the vision of a revitalised ancient legacy of over-the-land trading routes that existed roughly between the 2nd century BC and 14th century AD (accounting for around 1,601 years) connecting Europe and Asia. The 'Road' part signifies the additional plans to build new sea trade route infrastructure along the old Marco Polo route (a maritime silk road connecting China, Southeast Asia, Africa, and Europe). Now this version of the original route is envisioned to be stretched out while avoiding the Malacca Strait, incorporating fuelling stations, ports, bridges, industry, and infrastructure through Southeast Asia and into the Indian Ocean. Pakistan is seen as perhaps the most crucial partner country in this effort through the China-Pakistan Economic Corridor project.

The Original Silk Road: Echoes of an Era

The original Silk Road emerged during the westward expansion of China's Han dynasty (206 BCE to 220 CE), weaving an intricate network of trade routes across what are now the Central Asian nations of Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan, as well as parts of modern India and Pakistan. Spanning over four thousand miles to Europe, this vast network positioned Central Asia as the crossroads of early globalisation, fostering the exchange of goods, ideas, and culture between the West and East. The route thrived during the Roman, Byzantine, and Tang Dynasties but declined due to the Crusades and Mongol conquests.

The ancient Maritime Silk Route which is sometimes referred to as the Silk Route's lesser-known brother, was a complex system of sea routes that linked China to Southeast Asia, South Asia, the Arabian Peninsula, East Africa, and many other regions, including the Mediterranean, through the South China Sea. This trade route is believed to have started as early as the Qin and Han Dynasties or the third century BCE and provided a channel for commerce of goods, ideas, and technologies. These include silk and porcelain from China, tea from China and India, and silk from China, which were exported westwards while spices, textiles, and other precious commodities found their way to China from the Indian subcontinent, Middle Eastern, and African regions. It also carried cultural and intellectual currents such as the movement of Buddhism from India to the East

REIMAGINED

ns or New Dependencies

Economics, Year I, Daulat Ram Co[illegible] University of Delhi

Asian countries and developments in shipbuilding and navigation. Some of the major port cities that benefitted from the trade and cultural interchange were Guangzhou, Malacca, Calicut, Aden, and Zanzibar, among others, thus affecting art, language, and cuisine, besides architecture. However, some problems, including piracy, monsoons, and territorial wars, would occasionally hamper trade. Nevertheless, the route was most active during the Tang, Song, and Ming dynasties, though it was gradually replaced by European colonial powers and the dominance of European powers, especially in the global maritime trade.

Rationale Behind the Revival

The Belt and Road Initiative (BRI) is driven by three key motivators, fusing China's global ambitions with its domestic priorities. The first cause is its strategic rivalry with the United States. Much of China's trade passes through the US-influenced Malacca Strait, and the BRI seeks to establish alternative land-based and maritime routes to secure its economic lifelines. Beyond securing trade, the initiative aims to strengthen China's global influence by creating economic interdependence with participating nations, drawing comparisons to the Marshall Plan—though China's approach is rooted in shared economic interests rather than ideological alignment.

The second basis revolves around the aftereffects of the 2008 financial crisis. To respond to the recession, the People's Republic of China released a ¥4 trillion infrastructure stimulus that pushed the country to build more railways, highways, and airports inside its borders.

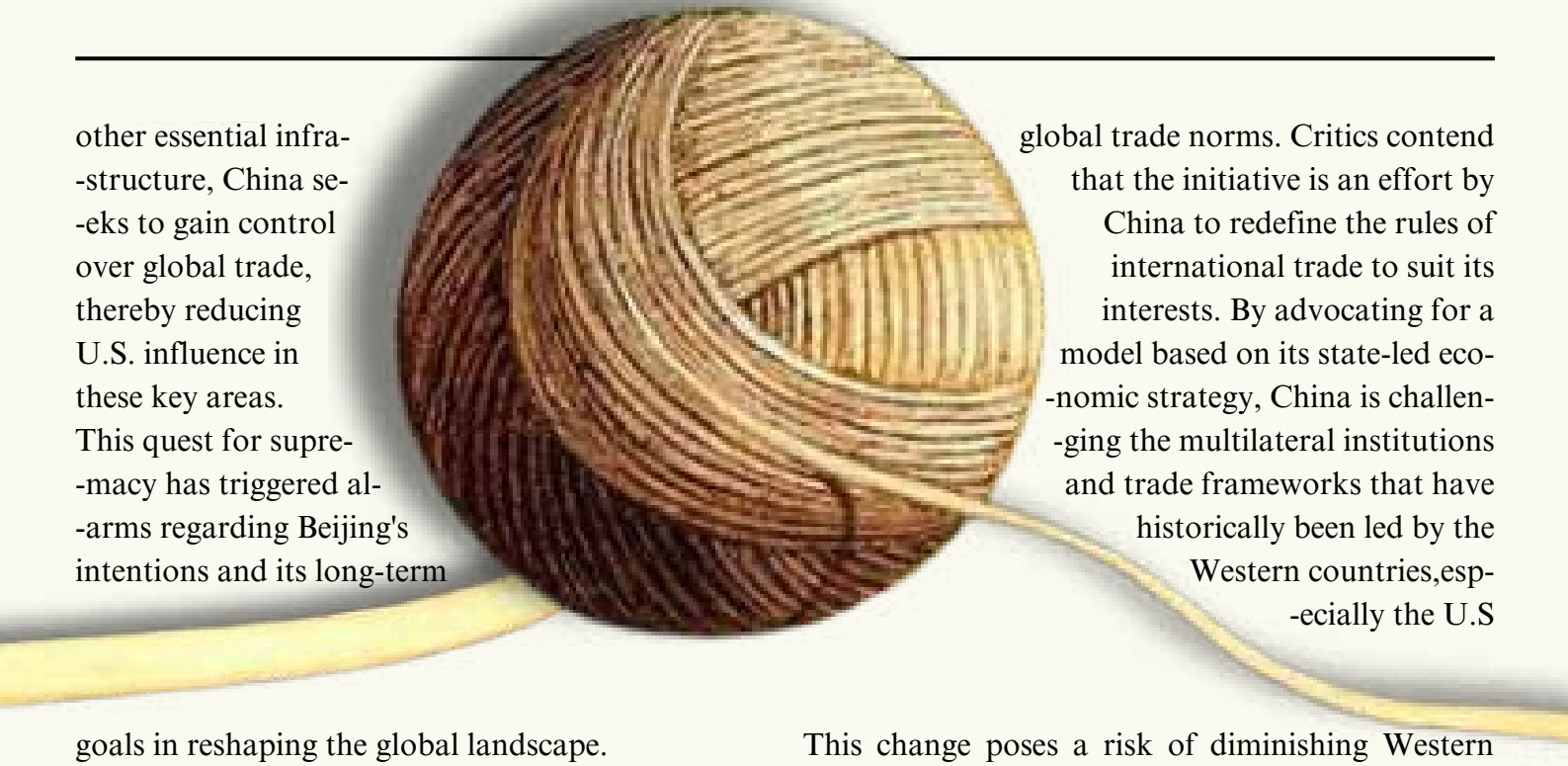
This rapid construction over-extended the market inside China, with hardly any room for further increase. The BRI strategically addresses this overcapacity by creating new international markets.

Finally, the BRI plays a crucial role in addressing China's internal economic disparities. While coastal provinces have prospered as trade hubs, central and western regions lag. By prioritising Belt and Road projects, the government directs investment into these underdeveloped areas, creating opportunities for businesses and encouraging their integration into global trade. Together, these motives tell us how the BRI works as an expansion of China's global presence but also as a domestic instrument for solving economic issues at home.

Washington's Perspective: Strategic Concerns and Responses

The United States has expressed some serious concerns over China's project, calling attention to their economic, security, and geopolitical repercussions.

China's Belt and Road Initiative (BRI) has raised significant concerns across various geopolitical and economic fronts. A major worry is the potential for geopolitical dominance. The BRI is perceived as China's strategy to foster economic dependencies among participating countries, especially in Southeast Asia, Africa, and Europe. By making substantial investments in trade routes, ports, and



goals in reshaping the global landscape.

A significant concern revolves around the strategic military implications of the BRI. Policymakers contend that infrastructure projects, particularly those involving ports and maritime facilities, might serve dual purposes. Although these projects appear to focus on economic benefits, they could also be leveraged to further China's military objectives. For example, improved port infrastructure could facilitate logistical support for naval operations, which may pose a threat to U.S. military access and presence in critical regions. This potential for dual use heightens anxieties regarding China's expanding military influence and the possible decline of American strategic supremacy.

The topic of debt-trap diplomacy has intensified the criticism surrounding the Belt and Road Initiative (BRI). Many argue that China's approach to financing, which includes providing substantial loans to developing nations, often results in these countries accumulating unsustainable debt. This financial burden can then enable China to exert political or strategic influence over them. A prominent example is Sri Lanka's Hambantota Port, which was leased to China after the nation defaulted on its debt. This situation has heightened concerns about China using economic hardship to gain geopolitical advantages, thereby creating an imbalanced power dynamic in its favour.

The implications of the BRI also reach into other essential infra--structure, China se--eks to gain control over global trade, thereby reducing U.S. influence in these key areas.

This quest for supre--macy has triggered al--arms regarding Beijing's intentions and its long-term global trade norms. Critics contend that the initiative is an effort by China to redefine the rules of international trade to suit its interests. By advocating for a model based on its state-led eco--nomic strategy, China is challen--ging the multilateral institutions and trade frameworks that have historically been led by the Western countries,esp--ecially the U.S

This change poses a risk of diminishing Western influence and positioning China as a key player in global economic governance.

To address these challenges, the United States has implemented various strategies to counter China's expanding influence. One key strategy is the Indo-Pacific Strategy, which aims for a Free and Open Indo-Pacific (FOIP). This framework highlights the importance of transparency, rule-based systems, and development driven by the private sector as an alternative to China's state-controlled model. The FOIP aspires to offer a credible and inclusive choice for countries in the region, helping to lessen their dependence on initiatives led by China.

Building strategic alliances has been a key part of the U.S. response. By nurturing partnerships through initiatives like the Quadrilateral Security Dialogue (Quad), which brings together the U.S., Australia, Japan, and India, the United States seeks to counter China's growing influence in Asia. These alliances encourage collaboration in security, trade, and infrastructure development, creating a unified stance against Beijing's expansionist goals.

The U.S. has put export controls in place for certain Chinese companies, especially those operating in critical areas such as technology and defence. These restrictions aim to prevent China from accessing advanced technologies, thereby limiting its capacity to use innovations for economic and military gain. This approach is

designed to protect U.S. interests and maintain global security by ensuring that Beijing's technological progress does not pose a threat.
The relationship between China's Belt and Road Initiative (BRI) and the counterstrategies led by the U.S. underscores a crucial competition for global influence and economic standards. China's efforts are designed to alter the world order to its advantage, while the U.S. aims to counter these challenges by providing clear, rule-based alternatives and reinforcing alliances to uphold its strategic and economic standing.

The Indian Verdict

In the year 2012, on May 13, India's Ministry of External Affairs addressed a formal response to the question of whether there would be Indian representation in the BRI. The official statement issued by the ministry first grounds the basis of what connectivity should look like.
"We are of firm belief that connectivity initiatives must be based on universally recognised international norms, good governance, rule of law, openness, transparency, and equality. Connectivity initiatives must follow principles of financial responsibility to avoid projects that would create unsustainable debt burdens for communities; balanced ecological and environmental protection and preservation standards; transparent assessment of project costs; and skill and technology transfer to help long-term running and maintenance of the assets created by local communities."
[Source: Official Statement, Ministry of External Affairs, Government of India]

India contends that the BRI fails to meet fundamental criteria for responsible global connectivity initiatives. Even beyond territorial interests, it is viewed as a strategic play by China to enhance its geopolitical reach in South Asia and the Indian Ocean region with relative impunity, often against the interests of India. Scrutinized as establishing economic and strategic dependencies within the participating countries, and this is seen as "encircling" India through what has been referred to as a "String of Pearls" strategy (a geopolitical hypothesis proposed by United States political researchers in 2004; the term refers to the network of Chinese military and commercial facilities and relationships along its sea lines of communication, which extend from the Chinese mainland to Port Sudan in the Horn of Africa) in terms of Chinese investment in ports and infrastructure around the region.

Based on these fundamental concerns, India formally declined participation in BRI.

The Dual Reality of BRI: A Perspective

The Belt and Road Initiative (BRI) is perhaps one of the most polarizing ventures in this century. It is a display of China's intention to improve global interaction and its capacity to undertake extensive developmental projects that are capable of stretching beyond borders. It is, however, regarded as an effort to counter further expansion through development aid and economic dependencies disguised under development aid. The BRI is both a promise and a threat and therefore, on the other hand, is globalisation in action and action in competition.

The Silk Road in the past used to be an important route for international trade and cultural interaction, which provided linkages among people and economic advancement. This ambitious revival aims to increase the chances of a more congested world. There will be considerable improvements in transport facilities and also an increase in trade and facilities in underdeveloped economies. However, the BRI measures also have some setbacks where the costs are larger than the benefits. The allegations of diplomacy through debt and using economic leverage to gain political influence come from China being seen not as a promoter of development but as a nation with imperial ambitions.

The BRI has both international and domestic motivations for China. Internationally, it seeks to counterbalance U.S. hegemony of the global trade

order and create alternative routes that reduce vulnerabilities, i.e., dependence on the Malacca Strait. Domestically, however, it is a resolution to internal imbalances within China by redistributing surplus industrial capacity and stimulating development in its underdeveloped western provinces. Though these goals are quite valid, they are approached in different ways, raising corresponding ethical and geopolitical issues. Such a loan repayment often renders countries vulnerable to economic paralysis and undermines their sovereignty. Cases such as Sri Lanka's Hambantota Port illustrate evidence of the possible menace behind such engagements.

The BRI raises perennial philosophical questions about the morality of connectivity. What does true connectivity mean in a world that is now globalized? Should it be underpinned by principles such as inclusion, mutual respect, and transparency, or does it have to have hidden political agendas? Though in many instances, very adept at forming economic linkages, China's approach tends to foster projects outside established norms of transparency, environmental sustainability, and respect for sovereignty. This sets a scary precedent for things to come, which could legitimise exploitative practices under the banner of development.

But even with the challenges withstanding, one can't simply overlook BRI's potential. It can offer a lifeline to economies, connect neglected terrain, and propel cultural exchanges of the kind that once characterised the Silk Road. However, that big a vision requires radical changes. That is to say, the BRI must be transparent in its project financing, respect host countries' governance structures, and abide by international norms if it is to change from a geopolitical tool into a genuine force for good. Recipient nations must also align themselves to see that the benefits of such projects outweigh the costs over their life duration and after.

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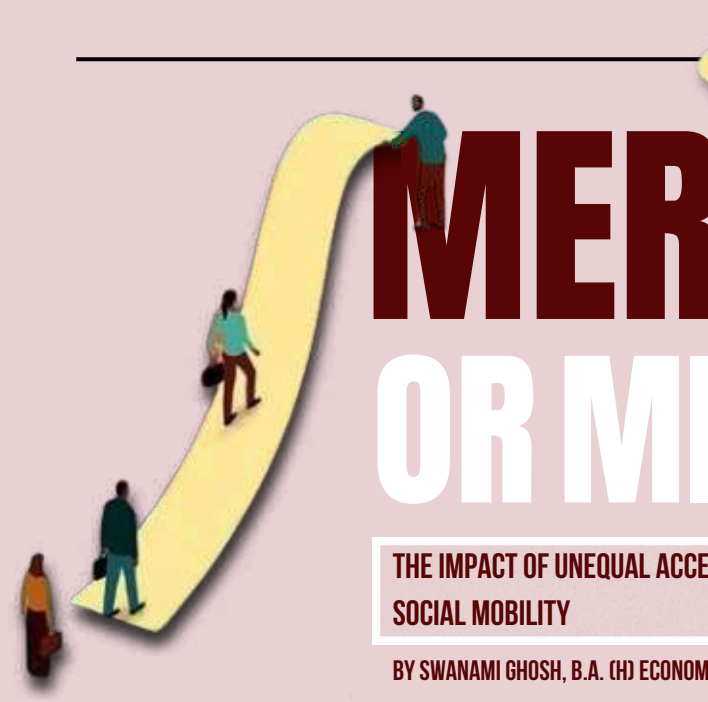

MERITOCRACY OR MIRAGE?

THE IMPACT OF UNEQUAL ACCESS TO EDUCATION ON SOCIAL MOBILITY

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"Poverty is not made by the poor. It is the result of unequal opportunities, and education is the great equalizer." – Malala Yousafzai

It is not unknown that education is an investment to enhance human capital with skills to improve people's livelihoods with higher earnings. Education often acts as an economic equaliser as unequal opportunities for education lead to unequal outcomes and often become the root of low social mobility. Countries such as Singapore and Finland have demonstrated how strategic investments in quality education can drive economic growth and social development.

"Singapore, often lauded as an educational paragon, serves as a compelling illustration of how strategic emphasis on high-calibre education, tailored to cater to the evolving economic needs, can stimulate economic growth. Despite the paucity of natural resources, the Lion City has metamorphosed into a bustling, high-income economy within a relatively short span, primarily attributable to its heavy investment in quality education" (Ashton et al., 1999). "Similarly, Finland, renowned for its top-performing education system, has shown how quality education can foster innovation and economic competitiveness" (Sahlberg, 2011).

Conversely, World Bank reports in 2019 say that many low-income countries, particularly in in sub-Saharan Africa, continue to grapple with challenges of low educational attainment and poor learning outcomes, which impede their economic development. The disparities in educational access and quality across countries underscore the critical role of education in global inequality. A study published by IZA -Institute of Labour Economics by documenting test score gaps by family background using internationally comparable data from the OECD's Programme for International Students shows that in all countries considered, there are large achievement gaps between students from families of higher versus lower socioeconomic status. Even in the best-performing countries such as Finland or Canada, the achievement of students from disadvantaged backgrounds is below the average of the OECD. Key insights gleaned from their model of skill acquisition during childhood suggest that while parents play a central role in education by shaping their children, they also establish the link between the several sources of educational inequality. Parents become aware of educational investment accruing to the success of a child and they invest in their child's skills through play, conversation, homework assistance, and subsequently studying. Yet they are constrained in terms of time, skills, and money, and investments may be affected -like the quality of schools in the

neighbourhood, thereby creating a huge gap in education spending between high- and low-income groups. Studies have repeatedly shown a strong correlation between parent and child education. It has been estimated that an additional year of a father's schooling lowers the chance of a child's being retained by 10 to 20 per cent, whereas an additional year of a mother's education lowers the probability of low birth weight by about another 10 per cent. The extent of education inequality usually leads those with lower access to dropouts and low social mobility.

The myth of equal access to education: Philosopher John Rawls' idea of "Fair Equality of Opportunity," primarily states that "those who have the same level of talent and ability and the same willingness to use these gifts should have the same prospect of success regardless of their social class origin."-this is true in a utopian nation with no caste system or explicit discrimination based on race, and socioeconomic strata. But this grievously ignores underlying inequalities through the birth lottery and social circumstances. Marginalised students often face institutional biases in terms of underrepresentation in leadership roles, lack of sensitivity from administration, and severe disciplinary measures, and are often expelled.

Global perspective

Numerous studies show that marginalised groups like African American and Hispanic groups tend to score lower in standardised tests, and have lower graduation enrolment rates than their White counterparts. "What's more is this estimated gap persists across different levels of educational attainment (i.e. White households with only a primary school education have more wealth than Black households where the head has a tertiary (college degree). The wealth gap in South Africa is a persistent intergenerational constraint on Black social mobility lasting deep into the post-apartheid era" (Chelwa et al., 2024). This is often due to disproportionate disciplinary actions taken against them. This funnels the school-to-prison pipeline system channelling students into the criminal justice system and perpetuating the gap to further levels . This is fuelled by the underrepresentation of minority teachers especially in schools with minority student populations of similar racial or ethnic groups.

Indian perspective

Before delving into studying economic inequality and social mobility we must realise that India has a diverse educational landscape. For historically challenged groups education can be a tool to bridge the gap in social hierarchies and a means to escape the cycle of poverty and social inequalities achieving economic stability. The caste system is deeply entrenched in Indian society and is visibly reflected in the education system. In rural schools, Dalit students face segregation and are made to sit separately. A 2019 study by NDMJ(National Dalit Movement for Justice) showed that 30% of students face segregation in primary schools. Curricula often glorify upper-caste contributions undermining the struggles of Adivasis or Dalits . Exclusionary practices often create a sense of alienation and lead to higher dropout rates. The National Crime Records Bureau (NCRB) data on student suicides in premier institutions like IITs and AIIMS highlights the toll of systemic discrimination. Dropouts among girls are significantly high due to cultural bias, early marriage, lack of sanitation, and absence of menstrual hygiene management. In UP, a study by UNICEF shows about 23% dropout rate among adolescent girls.

In India, there are significant infrastructural differences between public and private schools in terms of class sizes, teacher-student ratio, equipment, labs etc affecting the quality of education. Urban private schools are often considered superior with nicer furnishing and smarter facilities whereas public schools often fail to provide basic amenities. This results in higher tuition fees charged in the private schools. The Annual Status of Education Report (ASER) consistently highlights gaps in rural schools compared to urban private schools in terms of

of classroom infrastructure and teacher availability. Differences in resource barriers affect a child's motivation to further higher studies or perform well in competitive education. Bias based on language of instruction is often seen in job markets favouring students from English medium over vernacular medium which disproportionately affects the self-esteem and performance of non-elite groups facing systemic exclusion. The Indian education system is not well designed for the differently abled children with special needs require infrastrastructural needs demanding a more inclusionary education system where students with or without disabilities can study together.

Student Loan Market: The private student loan market is inefficient. Banks can't secure collateral on student loans making student loans more expensive and the market also fails to account for the positive externalities of higher education. Even if low-income students gain credits they often suffer from an excessive burden of debts which negatively impacts their future earnings and this situation is exacerbated if they student fail to complete their degree.

Post-pandemic repercussions on educational inequality and digital transformation: Post-pandemic repercussions of learning loss were seen vis-a-vis the school shutdowns which aggravated educational inequities globally due to differences in technology resources and access opportunities to education. The immediate need was difficult to meet for many of those in lower-income countries or Lick. In a way to counter the impacts of school closures and to ensure students kept learning, stakeholders across national education worked swiftly to articulate remote learning through broadcast media, online classes and newspaper media. Lowly funded public schools were finding it quite difficult to adapt to remote learning because of insufficient resources. In India, 60% of rural students have no access to online classes at all, hence huge learning gaps; Azim Premji Foundation, 2021.

UNESCO estimated that, because of these compounding challenges, as many as 11 million girls may never return to school post-pandemic. Inadequate funding has been laid bare for schools attending to the needs of underserved populations; this has often implied a reduced capacity to transition to new learning environments and extend adequate support to the learners.

However, more than anything else, the reality behind COVID-19 has pushed the inequities in school funding into focus, as many schools in poor communities remain seriously underfunded to operate. While digital transformation has largely arisen during the coronavirus pandemic, the "digital divide" surfaced as the biggest challenge. Traditionally, underprivileged families are the least likely to have access to basic digital tools like computers and fast and reliable broadband service, which affects the educational opportunities that online education could offer. Such initiatives brought about by the 21st century have also lined up digital transformation as one of its paramount tools and priorities. In addition, the Fourth Industrial Revolution very adequately forced the education system to acknowledge the immediate need for transformation with changing labour market demands. In the rapidly changing world of technology, Schwab (2016) mentions that learning should not only include the investment of education in merely reading and writing numbers but should also enlighten learners about 'twenty-first-century skills', such as creativity, critical thinking skills, and digital literacy. While records and developments on the trajectory towards those are still being taken as a response by the continents, the COVID-19 pandemic continues to expose challenges where the school closure offers an already bereft learning opportunity for learners all over the world thereby worsening pre-existing inequalities (United Nations, 2020). Thus global action in favor of inclusive and equitable quality education for all as a precondition for positive economic development couldn't have been more foundational than now.

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GLOBAL TRADE

By Swastik Srivastava, BBA Business Analytics, Year I, Indian

CHALLENGES FOR DEVELOPING NATIONS

Global trade inequities represent a significant barrier to sustainable development in developing nations. Protectionist policies, agricultural subsidies, and biased export standards imposed by developed countries often create systemic barriers that limit market access for poorer economies. These barriers include trade policies that favour domestic producers, excessive tariffs, and complex export standards. Such measures reduce competitiveness for developing nations, harm local industries, and perpetuate economic dependence. Multinational businesses, combined with the power of wealthier nations in trade agreements, exacerbate these imbalances.

This paper will discuss how developing countries are presently subject to these kinds of inequalities in world trade. More importantly, it will look into how protectionist policies affect such inequalities and how multilateral trade agreements create complexity, then how fair trade can correct these systemic injustices. Solutions like subsidy cuts, capacity-building programs, and fairer trade frameworks are discussed. The research will look at case studies, policy evaluations, and global comparisons to come up with actionable strategies for creating a more equitable global trade system.

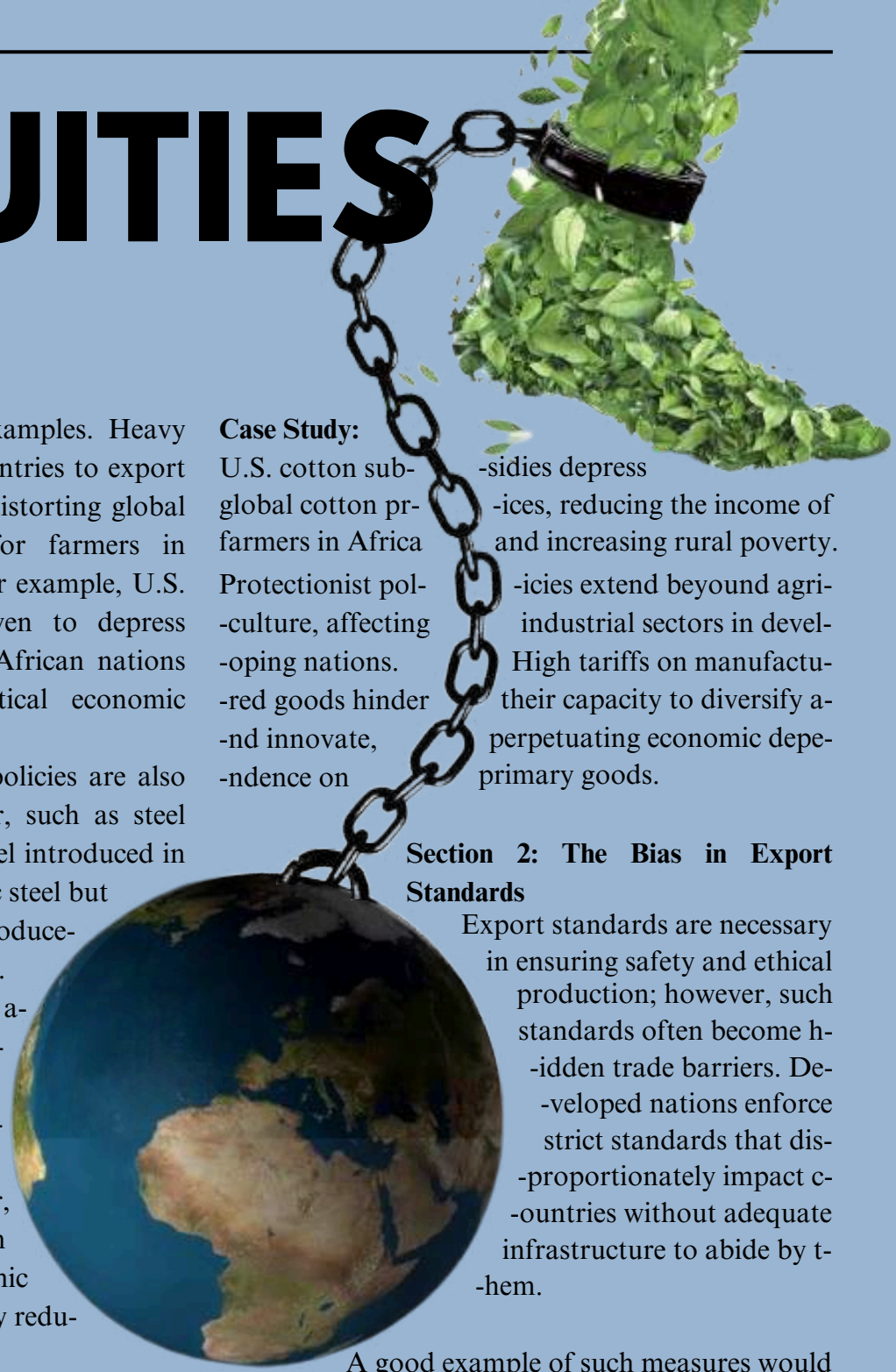
Global Trade Inequities: Challenges for Developing Nations

Global trade is widely regarded as an instrument for economic growth and development, but inequalities in the system prevent it from reaching its full potential. Developing countries often suffer from a myriad of barriers such as protectionism, biased trade standards, and lack of adequate representation in international trade agreements. These inequalities largely benefit developed countries, thereby limiting market access, stifling economic growth, and perpetuating poverty in less developed regions. The multilateral challenges developing nations face in the global trading arena are an important subject that this paper aims to explore. It looks into how these disparities manifest, their broader socio-economic impacts, and potential strategies to foster a more balanced trade environment. Addressing such disparities will push the international community toward a more inclusive and sustainable global economy.

Section 1: Protectionist Policies in Developed Nations

Developed countries often resort to protectionist measures to protect their domestic industries from international competition. These measures - such as tariffs, quotas, and subsidies, may help stabilize the local economy but raise significant barriers for exports from developing countries.

Agricultural subsidies in the European Union and



the United States are excellent examples. Heavy financial support enables these countries to export products at lower prices, thereby distorting global markets and making it hard for farmers in developing nations to compete. For example, U.S. cotton subsidies have been proven to depress global prices, especially affecting African nations where cotton farming is a critical economic activity.

Beyond agriculture, protectionist policies are also observable in the industrial sector, such as steel and textiles. The tariffs on U.S. steel introduced in 2018 increased the price of domestic steel but limited market access for foreign produce-rs, including developing economies. Such protectionism kills innovation a-nd industrial diversification in poo-er regions and deepens economic disparities. Proponents of protectio-nism argue for the preservation of jobs and national security. However, such policies can lead to a long-term drawback in terms of global economic equity and may even reverse poverty redu-ction programs across the world.

Table 1: Impact of Agricultural Subsidies on Developing Nations

Country	Crop Affected	Revenue Loss (in $ million)
Mali	Cotton	150
Burkina Faso	Cotton	120
Kenya	Maize	80

Case Study:

U.S. cotton sub-sidies depress global cotton pr-ices, reducing the income of farmers in Africa and increasing rural poverty. Protectionist pol-icies extend beyound agri-culture, affecting industrial sectors in devel-oping nations. High tariffs on manufactu-red goods hinder their capacity to diversify a-nd innovate, perpetuating economic depe-ndence on primary goods.

Section 2: The Bias in Export Standards

Export standards are necessary in ensuring safety and ethical production; however, such standards often become h-idden trade barriers. De-veloped nations enforce strict standards that dis-proportionately impact c-ountries without adequate infrastructure to abide by t-hem.

A good example of such measures would be the SPS measures enforced by the European Union, that demand strict control over pesticide application and food safety. Most developing nations have limited technological capacity and older agricultural practices making compliance extremely hard. Whole sectors like horticulture and processed foods face severely restricted access to markets.

It is not limited to agriculture. In the electronics industry, certification standards are usually high, which makes it very difficult for small producers in developing countries to attain them. Through

technical support and collaborative initiatives, programs like the WTO's Standards and Trade Development Facility (STDF) have started to tackle such issues. The progress is, however, still slow, and exclusion from the global market is still the case.

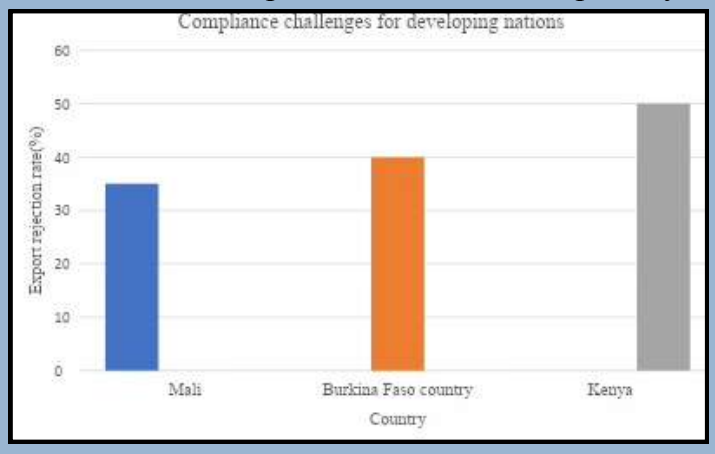
Challenges for Developing Nations

Developing nations often lack the infrastructure, technology, and expertise necessary to meet stringent export standards. Achieving compliance demands substantial investments in advanced machinery, testing facilities, and skilled personnel —resources that are frequently beyond the reach of smaller economies. For instance, to meet the standards of the European Union concerning sanitary and phytosanitary (SPS) standards, one has to precisely follow the specifications regarding pesticide use, food safety, proposals regarding animal health, etc. The countries that do not have proper agricultural monitoring systems or testing facilities of the modern age are unable to meet the requirements. Therefore, they are deprived of access to high-end markets.

Similarly, in the U.S., the FDA asks for lots of papers, lab tests, and proof that the product is made in America, for the import of food, drugs, and other goods. Countries with not much money often have trouble with these expectations because they don't have enough technical skills. Therefore, they have to send back their exports often.

Economic Implications

Limited access to developed markets has significant economic consequences. In many developing nations, agriculture and low-cost manufacturing constitute vital components of GDP and employment. When the exports of these sectors do not conform to international standards, the resulting losses include revenue loss, unemployment, and slow economic growth. Additionally, the expenses incurred in upgrading production systems to comply with these standards often discourage small producers and exporters, allowing only large corporations or multinationals to compete. The dominance of such businesses restricts local enterprises and exacerbates poverty.



Potential Solutions

International trade bodies and developed nations must come together to create cooperative frameworks to solve these issues. Technical assistance, expert knowledge, and investment in infrastructure in developing countries can lessen the gap. Reducing trade barriers includes making certification processes easier, providing time to adjust to comply, and recognizing equivalent standards where possible.

In addition, it is important to teach developing countries to match international standards. Aiding in the hearing of their voices in international forums like the World Trade Organization ensures that trade requirements will be more fairly and realistically devised.

To overcome the hidden barriers of export standards, we must ensure that trade is fair. Let all countries benefit from global trade.

Section 3: Multilateral Trade Agreements

Multilateral trade agreements, such as those negotiated by the WTO, aim to standardize trade rules, reduce barriers, and foster global economic integration. However, these agreements often favour developed nations, leaving poorer economies at a disadvantage.

Uses and Benefits

Multilateral agreements facilitate dispute resolution, promote transparency, and establish predictable trade environments. Agreements like the General Agreement on Tariffs and Trade (GATT) have significantly reduced tariffs globally,

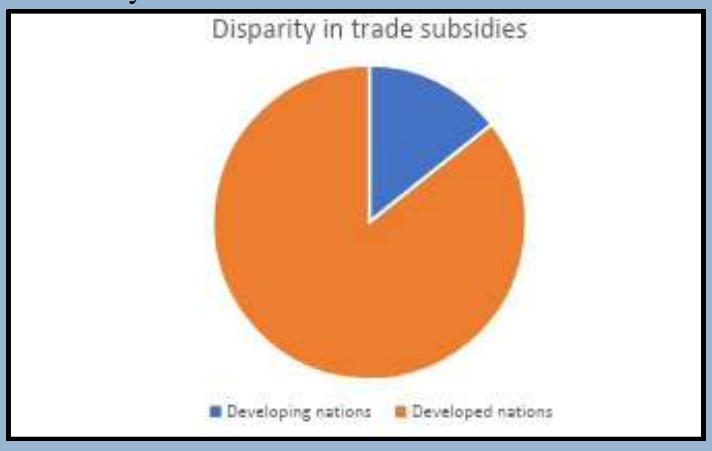
boosting trade volumes. Regional frameworks, such as the African Continental Free Trade Area (ACFTA), offer promising avenues for intra-regional trade, fostering economic growth within developing regions.

Challenges and Implications

The complexity of trade agreements poses significant barriers for developing countries. Legal intricacies and technical language often exceed their negotiation capacities. For instance, the WTO's agreement on agriculture permits extensive subsidies for developed nations while limiting similar support for poorer economies. This disparity perpetuates agricultural inequities, as seen in the case of U.S. cotton subsidies that depress global prices, affecting African cotton farmers.

Critique of Current Reforms

While organizations like the WTO have initiated reforms, such as the Aid for Trade program, these efforts often fall short of addressing systemic inequities. Simplifying trade agreement frameworks, enhancing transparency, and providing tailored technical assistance are critical to fostering inclusivity. Regional capacity-building programs and simplified negotiation procedures can empower developing nations to engage more effectively



Section 4: Trade and Labour rights

Trade and labor issues are closely intertwined, particularly in export-oriented industries. Developing countries often face significant challenges, including low wages, unsafe working conditions, and exploitative practices such as child labour.

Impact on Workers

The garment industries of Bangladesh and Cambodia illustrate the harsh realities of global trade. Workers endure long hours for wages below living standards, while lax safety regulations result in frequent accidents. For instance, the 2013 Rana Plaza collapse in Bangladesh highlighted the dire consequences of inadequate labour protections in global supply chains.

Trade agreements rarely incorporate binding labour clauses, allowing exploitation to persist. This absence undermines global efforts to improve labour conditions and perpetuates economic disparities. Data indicates that industries relying heavily on exports often prioritize cost-cutting measures over worker welfare, exacerbating exploitation.

Case Study

In Cambodia, the introduction of labour monitoring systems under the Better Factories Cambodia program showed potential improvements in working conditions. However, widespread implementation remains limited. Similarly, in Ethiopia's burgeoning garment sector, international brands often fail to enforce compliance with ethical labour practices, perpetuating poor conditions.

Section 5: The Role of Fair Trade

Fair trade initiatives aim to address systemic trade inequities by ensuring fair compensation, promoting sustainable practices, and empowering producers. These initiatives have a direct impact on improving workers' livelihoods.

Role of Technology and E-Commerce

Technology and e-commerce platforms are transforming fair trade practices. Online marketplaces like Etsy and Fairtrade-certified platforms connect producers directly with consumers, bypassing intermediaries and increasing profit margins. For example, India's Handicrafts Development Corporation leverages

e-commerce to promote traditional crafts globally, ensuring artisans receive fair compensation.

Real Stories of Fair trade Initiatives

Ethiopia's fair trade coffee program has provided farmers with stable incomes, enabling investments in education and healthcare. Similarly, Ghana's fair trade cocoa initiative has improved community infrastructure and supported sustainable farming practices. These success stories highlight the transformative potential of fair trade.

Link to Labor Rights

Fair trade programs often incorporate stringent labour standards, ensuring that workers receive fair wages and work in safe conditions. By promoting transparency and accountability, fair trade bridges the gap between ethical practices and economic development, fostering a more equitable global trade system.

(WTO | Trade and Environment - the Impact of Trade Opening on Climate Change, n.d.)

Metric	Traditional Trade	Fair Trade
Producer Income	Low	30% Higher
Market Access	Limited	Global Distribution
Environmental Impact	High	Lower

Fair trade emphasizes community development and long-term partnerships, addressing systemic injustices inherent in global trade. For instance, fair trade-certified coffee from Ethiopia provides local farmers with better prices and technical support, enabling them to compete globally.

Recommendations

It would take a mixed approach to deal with trade inequities that are witnessed in the world. In that regard, it is paramount to get developed countries to reduce agricultural subsidies so that a level playing field may be attained. Phased removal of subsidies with support for sustainable farming practices can be ensured so as not to cause too much market distortion. Simplifying the export standards with transition periods would allow developing countries to be in a position to adapt. Enhanced technical help on the part of organizations like the WTO and UNIDO towards bridging gaps in infrastructure and knowledge.

Integrating labour rights in trade agreements will bring out an ethical practice within the global supply chain. Provisions of a binding nature along with strict enforcement mechanisms shall be crucial for safeguarding the interests of the workers. Rising to a fair trade frame of work along science and technology-investment-based would empower the producers. This will be strengthened through investments in e-commerce platforms and digital tools to make access easier to markets and receive better dividends. An area more of consideration would be an expansion of Corporate Social Responsibility (CSR) endeavours, which would mean sustainable trade practices. Companies should be encouraged marginally in moral procurement and community development.

Conclusion

The inequities of global trade remain one of the most formidable barriers to developing equitable economic development. Protectionist policies, overly complex and stringent export standards, and multilateral trade agreements give rise to inequities that further marginalize developing nations. While these challenges are quite severe, their overcoming is not unattainable. Through concerted efforts to eradicate systemic issues such as farm subsidies or violations of workers' rights, the global community can ameliorate workability conditions in trade relations. Fair trade movements and technological advancements have become tremendous instruments for creating an inclusive environment. Successful cases, such as those of Ethiopia and Ghana, manifest how ethical practice and innovation can develop into agents of serious transformation. Also, regional collaborations and simplified trade agreements can provide a voice for effective participation in the global economy by developing nations.

Creating a truly equitable trade will require cooperation, strong institutional commitment, and

resolute action from all actors. Governments, international organizations, and corporations must come together to create a fairer and more sustainable system of trade. This is a solution to the economic dichotomy while creating a fairer and more inclusive world.

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THE ECONOMICS OF MARGINALISATION:
ANALYZING THE GENDER PAY GAP

By Anushka Sharma, B.A. (H) Economics, Year II, Hansraj College, University Of Delhi

Introduction

The gender wage gap illustrates the long-running unfairness of job markets globally. The difference is how much less women are paid compared to men as a percent of male wages. The issue remains an important one in discussions over the economy. Though women receive more education and find more work today, women make less money than men across every type of occupation. This paper explores how the gender wage gap keeps some people at a disadvantage why it happens, what it does, and how to fix it.

Knowing the Gender Pay Gap

What It Is and How We Measure It

We can measure the gender pay gap in a few ways:

• The Basic Pay Gap: It refers to comparing average earnings between women and men without considering factors such as; job, how long they have served, or education.

• The Adjusted Pay Gap: This considers factors that influence a persons earning and is therefore better at showing the extent to which unequal treatment lies in pay disparities.

According to new numbers, women in the United States are paid approximately 82 cents on the dollar paid to men, but that changes a lot based on who one looks at and the kind of job they do.

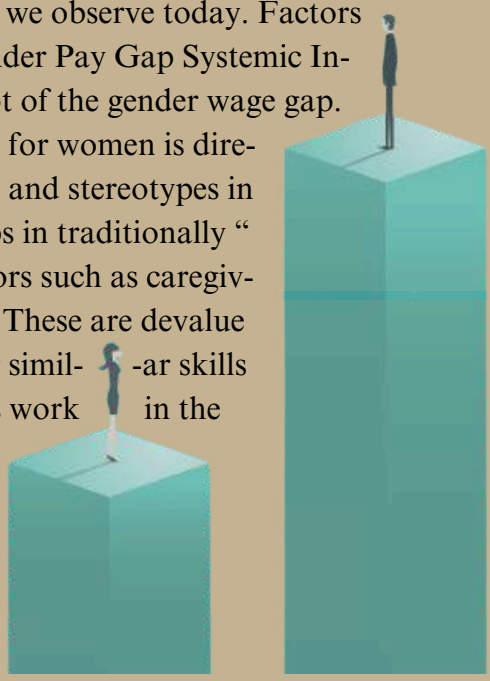
Table 1: Gender Pay Gap by Demographic Group (2023)

Demographic Group	Earnings Ratio (Women to Men)
All Women	0.82
White women	0.79
Black women	0.62
Hispanic women	0.54
Asian women	0.87

This table illustrates the disparities in earnings among women from different racial and ethnic backgrounds, highlighting how intersectionality exacerbates the gender pay gap.

Historical Context

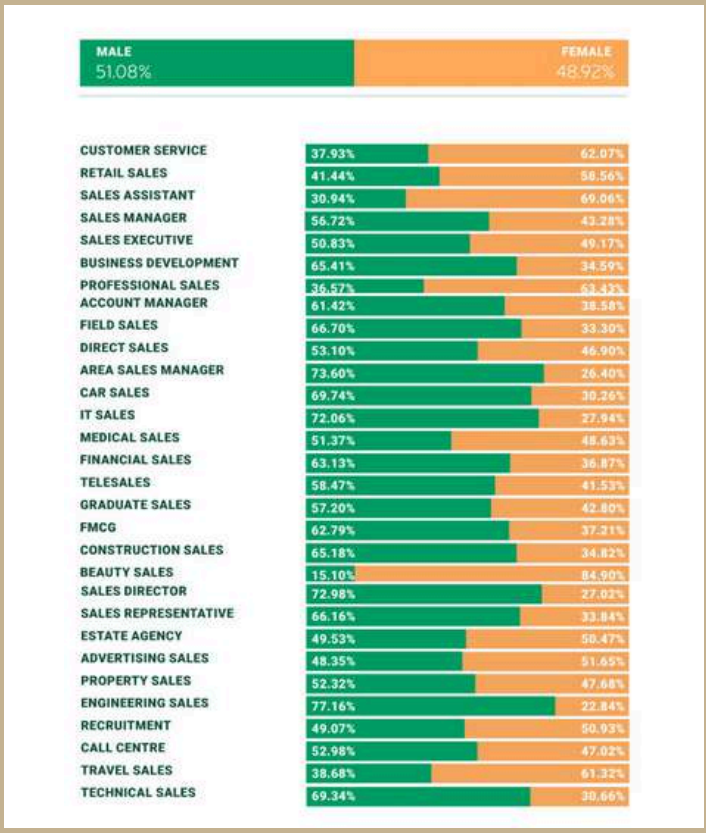
Gender wage discrimination can be explained only from the historical perspective. The past 100 years have seen women making colossal strides in education and entering the workforce. Women during the early 20th century were either confined to domestic work or low-status jobs. The feminist movements during the 1960s and 1970s brought the gender disparities in the labor market to the forefront, and legislative changes were enacted in an attempt to promote gender equality. In spite of these changes, conventional gender roles persist. Men still dominate most professions, and women still encounter obstacles to career advancement. The way things used to be explains the gender disparity in pay that we observe today. Factors Responsible for Gender Pay Gap Systemic Inequality is at the root of the gender wage gap. Occupational choice for women is directed by social norms and stereotypes in -to less well-paid jobs in traditionally " women's work" sectors such as caregiving or clerical work. These are devalue -d despite calling for simil- -ar skills and responsibility as work in the male-dominated sector. Occupational segregation is one



of the significant contributing reasons for the gender pay gap. Women are overrepresented in low-paying industries and jobs and underrepresented in high-paying fields like engineering and technology.

Graph 1: Employment Distribution by Gender Across Industries

This graph would illustrate how women are concentrated in certain industries compared to men, emphasizing occupational segregation's role in perpetuating wage disparities.



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Motherhood Penalty

The "motherhood penalty" refers to the negative impact on women's earnings associated with motherhood. Research shows that women often face discrimination when hiring or promotion decisions are made after having children, leading to reduced earnings over time.

Table 2: Impact of Motherhood on Earnings

No.of citizens	Average earning loss(%)
None	0
One	5
Two	10
Three or more	15

This table highlights how motherhood can significantly affect women's earnings potential.

Implicit Bias and Discrimination

Implicit bias is one of the factors that contribute to the gender pay gap. Stereotypes about gender roles may unconsciously make employers favor male candidates over female candidates who are equally qualified. This bias may influence hiring decisions, promotions, and salary negotiations. Research has shown that even when women negotiate for higher salaries, they may be perceived negatively compared to their male counterparts who engage in similar behaviors. This double standard further entrenches wage disparities.

Negotiation Skills Lack

Negotiation is also the most prominent element of determining the salary, although women are known to negotiate salary and ask for promotions less often than men do. Socialization generally discourages women from promoting themselves financially. In this light, a significant number of women accept low offers without negotiations at the entry point, creating income disparities that take a lifetime.

Economic Effects of Gender Pay Gap

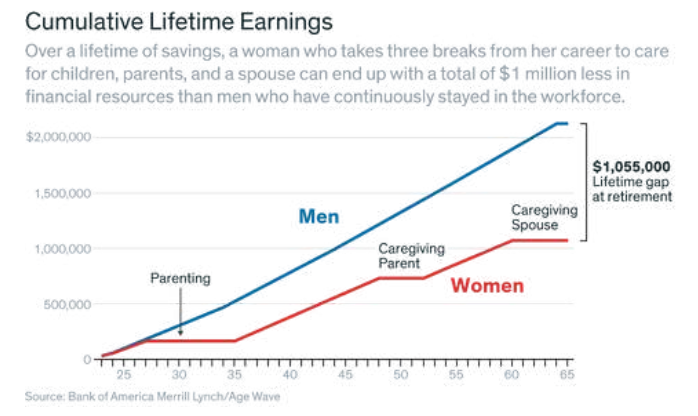
Income Inequality

The pay gap leads to wider income inequalities within the society. Lower earning levels among women will affect current personal finances, and long-term consequences on their retirement savings and pension funds.

Graph 2: Retirement Savings over Lifetime

This graph would project the level of retirement

savings that will arise for women and the men's difference based on their lifetime earnings.



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Economic Growth

It is a matter of both equity and an economic imperative to address the gender pay gap. According to studies, the closure of the gender pay gap could add substantial boosts to economic growth. For example, ActionAid estimates that if women had equal access to paid work, they could contribute an additional $9 trillion to global GDP.

Table 3: Potential Economic Gainsfrom Closing the Gender Pay Gap

Regions	Estimated GDP gain ($trillion)
Global	8
North America	2
Europe	1
Asia-Pacific	3
Middle East & North Africa	1
Sub-Saharan Africa	1

This table illustrates potential economic gains from closing the gender pay gap across different regions.

Social Implications

The economic implications of the gender pay gap go beyond individual earnings to affect families and communities. Lower incomes for women can increase the rates of poverty among single-parent households, which are often headed by women, impacting children's welfare and educational prospects. In addition, when women earn less, it restricts their capacity to invest in health care, education, and other necessary services for their families. This cycle perpetuates socioeconomic disparities across generations.

Policy Actions to Readdress the Gender Pay Gap

By Legislation

Governments may implement a range of legislative actions to address the gender pay gap:

- **Legislation of Equal Pay Act:** Enforcing legislation under the equal pay act can help reduce the wage gap by holding employers accountable.

- **Increased Transparency:** By demanding for public disclosure of pay data, companies might be forced to take action against inequalities.

- **Paid Parental Leave Policies:** A paid parental leave policy can support both parents, helping to eradicate the motherhood penalty.

Workplace Policies

Organizational policies can be introduced that promote gender equality:

- **Flexible Working Hours:** Offering flexible hours for work could ensure that employees manage their jobs and family lives simultaneously without compromise to career progress.
- **Diversity Training:** Training to remove unconscious biases from the mind may help the organizations reduce discrimination against individuals in recruitment and promotion processes.
- **Mentorship Programs:** Establishing mentorship programs can support women's career advancement by connecting them with experienced professionals who can provide guidance and advocacy.

Education and Awareness Initiatives

empower women to negotiate salaries more effectively and pursue careers in higher-paying fieldstraditionally dominated by men. Programstargeting early-aged girls, pursuing interests in STEM fields, may break down early barriers based on occupational segregation.

The Responsibility of Corporations in Closing the Gender Pay Gap

Corporations play a very important role in filling the gender pay gap through proactive steps:

- **Pay Audits:** Internal salary data is assessed regularly to identify disparities within organizations.
- **Diversity Goals:** Clear diversity targets at all levels of management create accountability.
- **Work-Life Balance:** A culture that values work-life balance attracts and retains talent from diverse backgrounds.

Conclusion

The economics of marginalization from the perspective of the gender pay gap has deeper issues that must be treated with urgency. Resolution of occupational segregation, discrimination, implicit bias, and societal norms will pave the way towards a more equal labor market. Closing the gender pay gap is not only a moral imperative but also an economic necessity that can lead to greater prosperity for individuals and society as a whole. As we move forward into an increasingly interconnected global economy, it is vital for policymakers, businesses, and communities to collaborate on strategies that promote equality across all sectors. By investing in women's empowerment through education, equitable workplace practices, and supportive policies, we can create an economy where everyone has a chance to succeed—regardless of gender.

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Northeast India's Economy: The Way Forward

By Garv Nagpal, B.A (H) Economics, Year III, Shri Ram College of Commerce, University of Delhi

Introduction

Northeast India, comprising the eight states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura, occupies a special place in India's geography, culture, and economy. The region is known for its untouched natural beauty, rich biodiversity, and diverse cultures. It has tremendous potential for economic growth but challenges such as political instability, inadequate infrastructure, and socio-economic inequalities have arrested its progress. A holistic, integrated, and sustainable approach to unlock the real economic potential of the region will be necessary. The article addresses how the region can overcome such challenges while working on its strengths.

Balancing Economic Growth and Environmental Sustainability

Northeast India is one of the worldwide biodiversity hotspots and needs to be developed in an ecologically sensitive manner. It holds unique species of plants and animals, many of which are endangered because of deforestation, infrastructure projects, and industrial expansion. Large hydropower dams and mining activities cause a form of environmental degradation where the ecosystem is disrupted and local communities displaced.

Policymakers should address sustainable development practices. Small, community-based renewable energy projects must be prioritized over large dams, which usually scar the ecosystem and displace communities. Infrastructure projects must be planned carefully, with full environmental impact assessments, and ways to counter negative potential effects.

Community-led conservation efforts can balance economic development and environmental preservation. One of the shining examples is Nagaland's Khonoma Green Village, which, by combining ecotourism with forest protection, supports livelihoods of people at the grass root. level and saves the environment. In this regard, replicating efforts in such activities would result in both environmental and long-term economic benefit for the area. This helps to engage communities at local levels, making them become part of conservations efforts hence yielding sustainable outputs..

Opportunities and Challenges under Act East Policy

The Act East Policy, enhancing India's economic and cultural linkages with Southeast Asia, holds a lot of opportunities for Northeast India. Its strategic location on the borders of China, Bhutan, Myanmar, and Bangladesh makes the region an ideal hub for trade and connectivity. Some of the major infrastructure projects in the region, such as the Kaladan Multi-Modal Transit Transport Project and the India-Myanmar-Thailand Trilateral Highway, will boost trade, tourism, and industrial activities in the region.

Despite such opportunities, many challenges prevail still. Infrastructure development in rural and remote areas is also not well done. Roads, railways, and air transport need significant improvement to handle cross-border trade. Bureaucratic delays and unskilled workers across

international borders delay the progress.

The benefits of the Act East Policy will be completely reaped only if there are investments in logistics, warehousing, and skill development. Export-oriented industrial clusters can be set up in key sectors like agro-processing and handicrafts, so that the region can tap into Southeast Asian markets. In doing so, Northeast India can transform into a thriving economic corridor.

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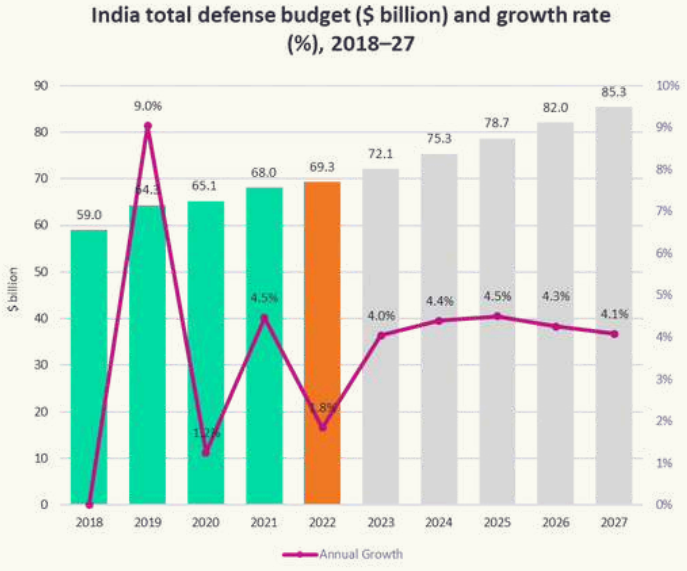
Arunachal Pradesh: Addressing China's Interest

China's territorial claims over Arunachal Pradesh and its increasing strategic interest in the Northeast pose major challenges to the development of the region. Time and again, border incursions and military tension divert resources from economic development to defense, especially in Arunachal Pradesh, where many delays in road and rail infrastructure are caused by security concerns.

These issues need an integrated approach in India. For example, the Arunachal Frontier Highway along with others must be made strong enough in terms of border infrastructure. Defence and development would gain significant mileage from the place. Educated, skilled, and empowered through livelihood opportunities will bring stability in the border area among local communities. Tourism and small businesses would ensure that vulnerability towards external threats was minimized to allow resilience to prevail over the economy of Arunachal Pradesh.



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Assam: Tea and its Impact on Tea Worker Welfare

Assam is synonymous with tea and accounts for more than half of India's tea. On the contrary, it is these workers of the tea gardens of Assam who suffer with very poor socio-economic conditions, such as low wage levels, pathetic living conditions, and lack of health and educational facilities. Chiefly, the majority of the workforce are women who also suffer extra disadvantages, such as exploitation and scarce prospects for economic development.

Tea workers' lives must be made better in every possible way. The government needs to implement the minimum wage and labor laws strongly. Plantation owners need to be motivated to invest more in better houses, health, and educational facilities for the workers and their families. Fair-trade certification can ensure proper labor practices and better wages for the workers.

Consumers can also contribute by buying fair-trade-certified tea, which will put pressure on producers to improve labor conditions. In addition, skill development programs can help tea workers diversify their sources of income, reducing their dependence on plantations.

Economic Impact of the Meitei-Kuki Conflict

The Meitei-Kuki conflict in Manipur has been totally disrupting the economy of the state. The breakdown of infrastructure, loss of means of livelihoods, and blocking of trade routes have brought the economic activities of the state to a grinding halt. Manipur's economy remains agricultural-based. The farmers, therefore, could not reach their fields. Even tourism, hitherto promising, has declined sharply.

This condition exhibits long-term side effects that post-result in migration, unemployment, and loss of investor confidence. These all need to be

mitigated by continued dialogue and peace building work. Restoration to the norm can be achieved through community-level dialogues and government-led rehabilitation programs. Revival of the economy can be facilitated with financing in terms of lowering interest loans to industries and reconstructing infrastructure. Education and employment also meet the pending demands and further stability with time can be ensured.

Small and Medium Enterprises of Northeast India

As for the economy, in terms of jobs and preserving the traditional values of the region, small and medium enterprises have a strategic place in Northeast India. Major areas include handicrafts, handlooms, food processing, and bamboo-based items that are rich in potential. However, hurdles must be encountered in this context. Those are as follows:

There is limited credit financing in SMEs since most small entrepreneurs lack collaterals or even skills to handle finance.

Poor infrastructural facilities such as unsteady electricity, bad transport, and low digital connectivity.

There are skill deficiencies that disqualify business house scales or adapt to change market requirements. Poor connectivity and poor marketing support that prevents a business reaching wider markets.

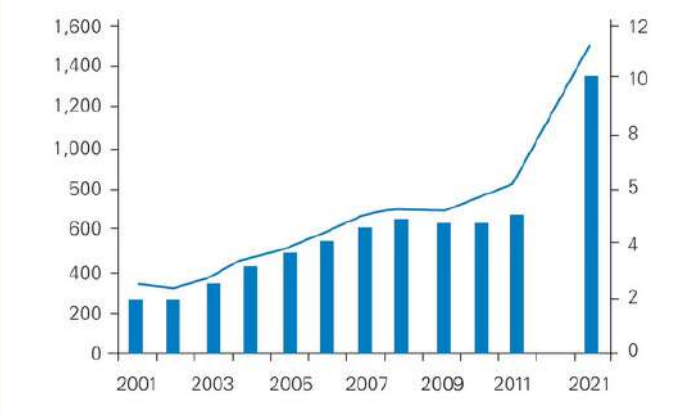
Government-guaranteed targeted credit schemes can resolve financing issues. Training programs in skill development of local industries will increase productivity and competitiveness. Digital platforms and e-commerce can connect SMEs with global markets, especially unique products like handlooms and organic foods. SMEs integration into the Act East Policy will also unlock new trade opportunities.

Unlocking the Potential of Tourism

Tourism is one of the major sectors driving the growth of Northeast India. The region has spectacular landscapes, rich tribal cultures, and vibrant festivals, which are a characteristic of the place. Meghalaya, Sikkim, and Arunachal Pradesh have already made a name for themselves as tourist.

Eco-tourism has much more potential. Responsible tourism, which respects the local culture and ecology, can be income-generating as well as heritage-conserving. Implementation of community-based tourism models in which community people have control over homestays and guided tours ensures benefits at the grassroots level. Mawlynnong village in Meghalaya, famous for its cleanliness, is an example of how economic growth can be catalyzed through eco-tourism.

This will require investments in infrastructure, like roads, airports, and accommodations, to help realize the region's tourism potential. A digital marketing campaign may raise awareness regarding attractions in the region. The travel regulations through Inner Line Permit systems may be eased.



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Conclusion

Northeast India is at the cusp of economic transformation. This can be achieved through:

- Sustainable development with growth balanced by environmental protection.
- The use of policies like the Act East Policy to position it as a gateway to Southeast Asia.
- Empowering local communities through the

redressal of socio-economic challenges and support for SMEs.

- Tourism can be promoted to open new revenue streams in this region with protected heritage.
- Determination, cooperation, and innovative solutions will make of Northeast India a paradigm of inclusive and sustainable development well contributing to the growth story of India, though the journey will not be easy, definitely worth making an effort for..

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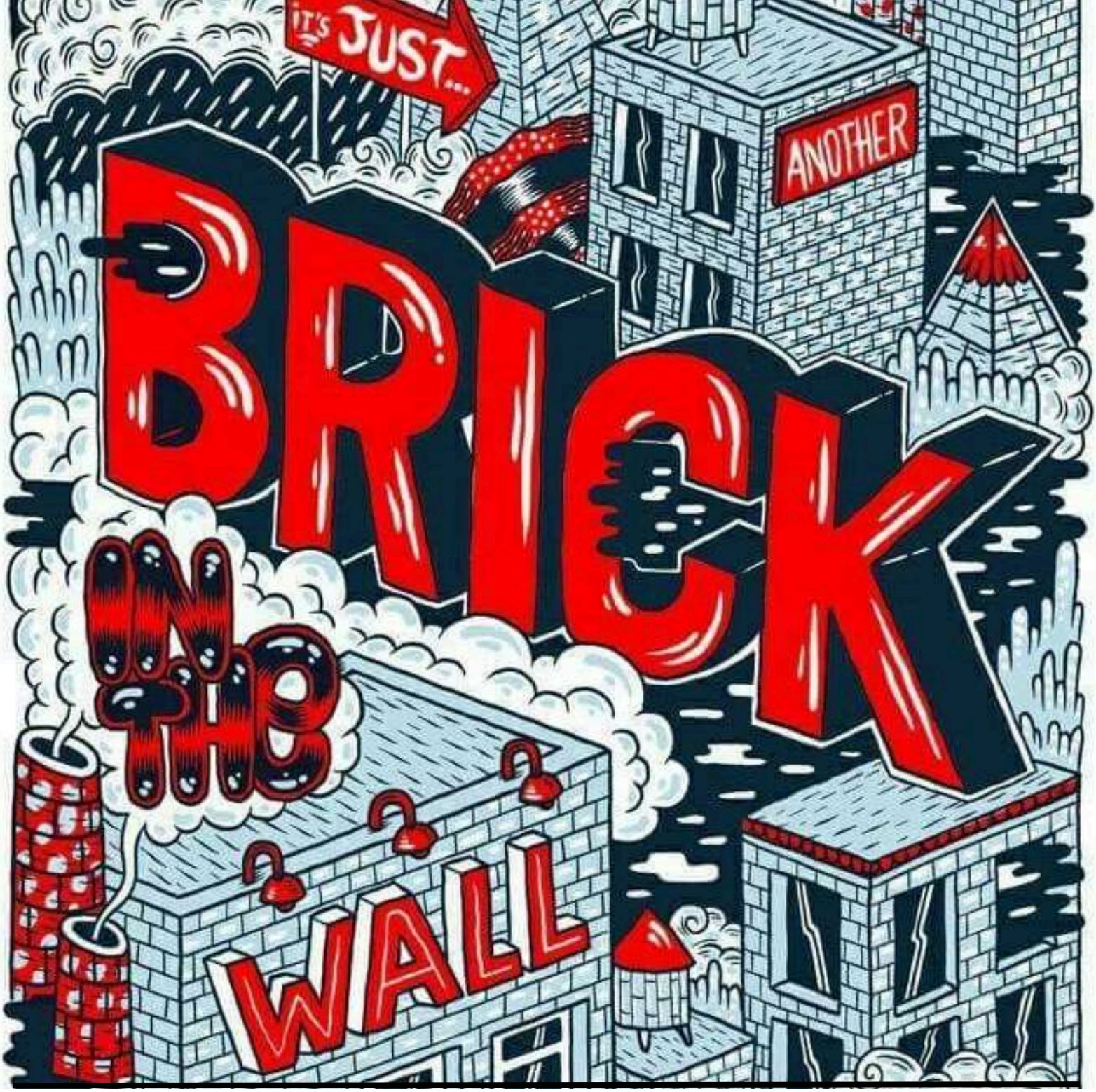
DEPARTMENTAL EVENTS

“I think about issues.
I use my economic training to devise solutions.”

-Gita Gopinath



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