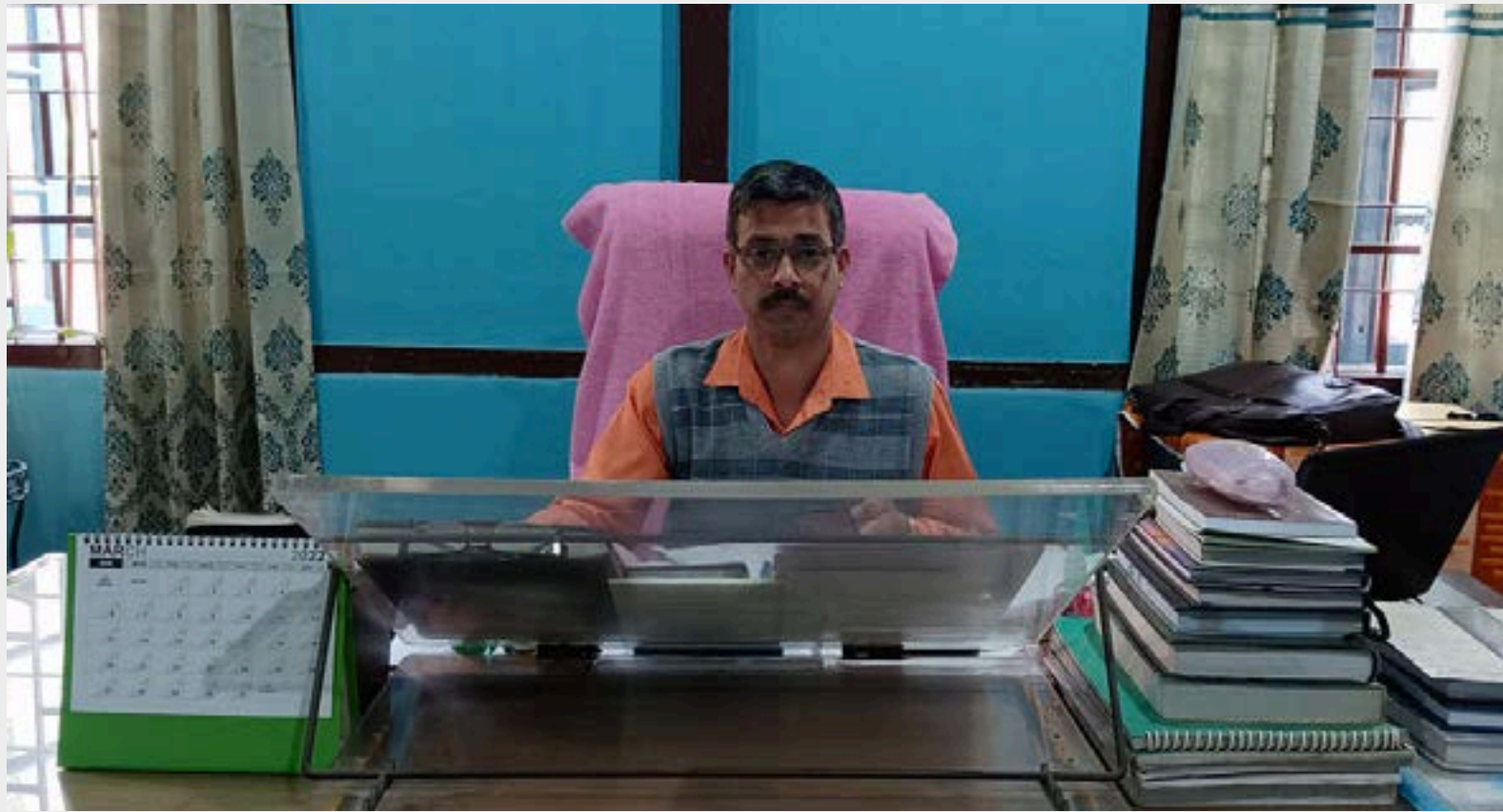


| VOL.V |

OIKONOMIKA



THE ART OF MEETING UNLIMITED WANTS WITH LIMITED RESOURCES



আৰ্যবিদ্যাপীঠ মহাবিদ্যালয় (স্বায়ত্তশাসিত) ৰ অৰ্থনীতি বিজ্ঞান বিভাগৰ ই-আলোচনী “Oikonomika”ৰ ৫ম সংস্কৰণটি প্ৰকাশৰ বাবে লোৱা উদ্যোগত মই আনন্দ অনুভৱ কৰিছোঁ। মহাবিদ্যালয় খনৰ ই- আলোচনীৰ বাটকটীয়া অৰ্থনীতি বিজ্ঞান বিভাগৰ এই মহৎ প্ৰচেষ্টাই নৱ প্ৰজন্মৰ বাবে বৌদ্ধিক কৰ্ষণ আৰু জ্ঞানৰ আদান-প্ৰদানৰ এক বলিষ্ঠ মঞ্চ ৰূপে নিৰৱচ্ছিন্ন সেৱা আগবঢ়াই যাব বুলি আশা কৰিলোঁ।

এই আলোচনীৰ মাধ্যমেৰে ছাত্ৰ-ছাত্ৰী তথা শিক্ষক-শিক্ষয়িত্ৰী বৃন্দৰ সৃষ্টি আৰু বিশ্লেষণধৰ্মী লেখাসমূহ একত্ৰিত হৈ অৰ্থনীতি বিষয়ক জ্ঞানৰ বিকাশ নিশ্চয়কৈ সাধন কৰিব বুলি মোৰ দৃঢ় বিশ্বাস। আলোচনীখনৰ প্ৰকাশৰ লগত জড়িত সকলো শিক্ষক-শিক্ষয়িত্ৰী তথা ছাত্ৰ-ছাত্ৰীক আন্তৰিক অভিনন্দন জনালোঁ। পুনঃশুভ কামনাৰে -

ড° প্ৰদীপ কুমাৰ ভট্টাচাৰ্য

অধ্যক্ষ,

আৰ্যবিদ্যাপীঠ মহাবিদ্যালয় (স্বায়ত্তশাসিত)

EDITORIAL BOARD

Dear Readers,

It gives us immense pleasure to present to you the 5th edition of Oikonomika, our cherished e-magazine that continues to grow as a platform of expression, exploration, and engagement. The Econoverse is more than just a theme—it is a journey through the complexities of markets, the simplicity of human choices, and the rhythm of societies evolving with time.

In this edition, you'll find a rich tapestry of articles, pictures, and poems contributed in both Assamese and English, reflecting the linguistic and cultural diversity we are proud of. We hope that each page offers you a fresh perspective, inspires curiosity, and invites you to reflect on the intricate connections between economics and our everyday lives.

We extend our heartfelt thanks to all the writers, artists, and supporters who have made this edition possible. Your creativity and commitment continue to make Oikonomika a meaningful and inclusive platform for all.

Happy reading!

Warm regards,
The Editorial Team
Pranabjyoti Kalita
Priyakshi P. Lahkar
Paramjit Roy



CONTENTS

1. TEACHERS PANEL'S
2. ECONOVERSE
3. POEMS
4. THOUGHTS IN WORDS
5. RESEARCH WRITINGS
6. ASSAMESE SECTION
7. PANORAMA
8. PHOTO GALLERY



It gives me immense pleasure to convey my best wishes to the students of the Department of Economics, Arya Vidyapeeth College, Guwahati for releasing the 5th edition of the department's e-magazine, Oikonomika My heartfelt congratulations to the entire team of the e-magazine. This e -magazine will reflect the creativity of the young minds and is a perfect amalgamation of creativity and innovation. It portrays the thoughts, ideas, dreams, creative writings and aspirations of young minds and I sincerely hope that this great endeavour continues in the future as well.I appreciate the coordination and efforts of the group of students involved in bringing out this issue.

Best wishes always!

Dr Mousumi Borah
Associate Professor & Head
Department of Economics
Arya Vidyapeeth College (Autonomous)
Guwahati



Feeling immense pleasure to know that students of Department of Economics of Arya Vidyapeeth College are going to publish the 5th edition of Oikonomika, an online magazine of the Department of Economics. As a part of the department, I have no words to bless and thank our extremely ingenious students for this innovative initiative through which they can unlock their potential and reveal their thinking and writing skills that will inspire many more to take steps forward. I am sure that the magazine will gift us new poets, story tellers, researchers and many more talents. All the very best wishes from the core of my heart for this venture. Waiting for this surprise as you all have already surprised us with your other excellences. Believe in God, have faith on yourselves and soar to the top. With blessings and love.

With regards,
Chhanda Biswas
(Associate Professor)
Dept. of Economics
Arya Vidyapeeth College (Autonomous)
Guwahati



It is with immense pride and joy that I congratulate the students of the Department of Economics involved with the process of the publication of the 5th edition of the Department's E-magazine, Oikonomika. This remarkable endeavor is a testament to your creativity, teamwork, and dedication. Each page reflects your passion for exploring new ideas and expressing them with authenticity and flair. In bringing together diverse talents and perspectives, you have created a platform that celebrates the power of imagination and innovation. Whether it's through your thoughtful articles, vibrant illustrations, or powerful poetry, you have shown that the world of ideas has no limits, and neither do you .

I congratulate all the members associated with this endeavor and wish the publication of the magazine a great success.

With regards,
Dr. Saurabh Pran Sharma
(Associate Professor)
Dept. of Economics
Arya Vidyapeeth College (Autonomous)
Guwahati



Dear students, my heart swells with pride and admiration for the incredible effort you have poured into creating the 5th edition of Oikonomika, an e-magazine by the Department of Economics. This publication is more than just a collection of words and images--it is a reflection of your creativity, passion, and collaborative spirit. Magazines are always reflections of enriched thoughts and a symbol of your concerted efforts to at least contribute to the society in a positive note. This e-magazine is not just a publication--it's a milestone, a collaborative masterpiece, and a reflection of your growth as thinkers and creators. It demonstrates your ability to overcome challenges, adapt to new mediums, and leave your unique mark.

Congratulations on this remarkable achievement! May this e-magazine be the first of many milestones in your journey of exploration and expression.

With regards,
Dr. Ranjan Jyoti Bezbaruah
(Assistant Professor)
Dept. of Economics
Arya Vidyapeeth College (Autonomous)
Guwahati



Oikonomika is an E-magazine which reflects the creativity of young minds of Department of Economics, Arya Vidyapeeth College. It is a wonderful platform for the students to express themselves on various socio-economic issues. This E-magazine showcases the talents and creativities inherent in the students. In digital era, E-magazine of any institution or department becomes popular as it is cost-saving, time- saving but able to reach large number of readers in the state, national and even in international level while uploaded virtually. I extend my best wishes to all those whose sincere dedication and hard work have brought this idea into reality. I hope such endeavors would continue in future enriching our knowledge.

With warm wishes and blessings.

With regards,
Shrutidhara Kashyap
(Assistant professor)
Dept. of Economics
Arya Vidyapeeth College (Autonomous)
Guwahati

EconoVerse: Worlds within Markets

In this magazine, we've brought together a diverse collection of student contributions, from thought-provoking essays to creative poems, each offering a unique perspective. But between these voices, we invite you to journey through the EconoVerse, a series of special sections that explore the fascinating worlds of economics. These thematic interludes are designed to transport you into different realms of economic thought. As you enjoy the variety of articles, look out for our "EconoVerse" features, where we take a deeper dive into intriguing economic concepts. From the micro-level decisions shaping individual markets to the global forces driving international trade, these sections offer a glimpse into the interconnected universe of economics. Let the EconoVerse guide you as a companion on this exploration, adding layers of insight and sparking your curiosity about the worlds within markets.





Microcosm - The World of Microeconomics

The Role of Supply and Demand:

Supply and demand are the forces driving our daily transactions. When supply increases, prices tend to fall, making goods more accessible. Conversely, a high demand with limited supply leads to price hikes. The balance between these two forces determines market prices, ensuring resources are allocated efficiently.

Market Structures and Competition:

Microeconomics also delves into different market structures. In a perfectly competitive market, numerous small firms sell identical products, leading to minimal price variations. On the other hand, monopolies, where one firm dominates, can dictate prices and restrict consumer choices. Understanding these structures helps us grasp how competition shapes our everyday market experiences.

In essence, the microcosm of economics reveals the intricate dance of individual choices and market dynamics. It's a world where small actions can lead to significant outcomes, making it a fascinating realm to explore.

In the world of microeconomics every small decision matters. Whether it's a local business setting prices or a consumer choosing between coffee brands, the choices made at this level form the bedrock of our economy. At its heart, microeconomics is the study of individual behavior-how households, firms, and industries interact to shape the market landscape.

Consumer Behavior and Market Demand:

Ever wondered why we gravitate towards discounts or buy certain products impulsively? It's all about understanding consumer behavior. Microeconomics explores why consumers make specific choices, factoring in their preferences, income, and available alternatives. This study helps businesses predict demand and tailor their products to meet consumer needs.

A vibrant field of wildflowers, including daisies and cosmos, is captured at sunset. The warm, golden light of the setting sun bathes the scene, creating a soft, ethereal atmosphere. The flowers are in various stages of bloom, with some in sharp focus and others blurred in the background. The word "POETRY" is prominently displayed in the center of the image in a white, serif font, contrasting with the colorful and textured background.

POETRY

GRATITUDE

ASK POESY

**WRITE ME A SONG,
LINING OUR FANCY,
WHICH GREW STRONG.**

**THANK THE EAST THAT STIRRED YOUR EASE,
THE WEST THAT CLEARED YOUR MIST,
JUST ONE DAY DID THE SUN TRAVEL
ROUND OUR WORLD AND WE ALL BLENDED.
INTO A NEVER ENDING PROMISE,
HERE, WE GRASPED FOR SOOTHING SOLACE
'T WAS BUT A DAWN IN OUR LIVES,
TO A WIDER OCEAN, HERE WE STRIVE,
FIRM TO OUR GROUND AND ROOTS.
ABSOLUTE LOVE YOU GAVE, TRULY ABSOLUTE.
SOULS SAILING, SEEKING HORIZONS TO DIVE,
WIDE YONDER PRAYING TO SURVIVE
OUR HEARTS AFLAME
THE FIRE UNTAMED
YOUR ENDEAVOUR
TREASURED FOREVER.**

ANKITA KAR, 1st sem

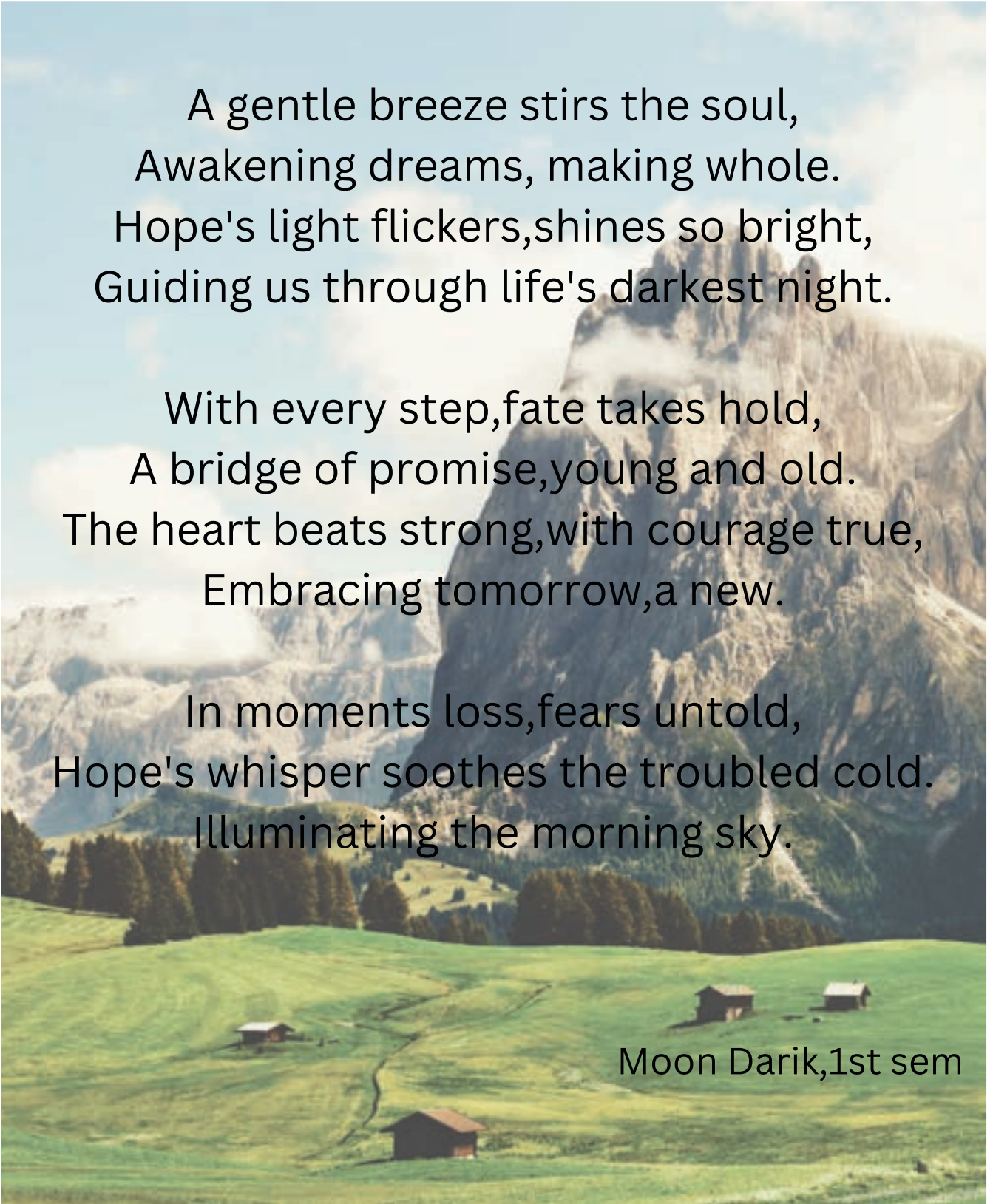
A LIGHT OF HOPE

A gentle breeze stirs the soul,
Awakening dreams, making whole.
Hope's light flickers, shines so bright,
Guiding us through life's darkest night.

With every step, fate takes hold,
A bridge of promise, young and old.
The heart beats strong, with courage true,
Embracing tomorrow, a new.

In moments loss, fears untold,
Hope's whisper soothes the troubled cold.
Illuminating the morning sky.

Moon Darik, 1st sem



The Silent Streets of Trade

In bustling markets once loud and bright
Where goods and dreams took endless flight,
A silence fell, as time stood still,
When COVID cast its shadowy chill.

The shops were closed, the shutters down
Factories quiet in every town
Laborers left with empty hands
As lockdown spread across the lands.

The stock exchange like a swinging tide
Businesses struggled to stay alive
Yet in this chaos, we saw anew
The cracks exposed, the old and true.

Digital lanes found a new voice,
E-commerce rose, a crucial choice.
But small shops, they faced the blow,
The inequality began to show.

India wept but did not break,
Resilience born of each heartache
From migrant woes to fiscal plans
A nation rebuilt with stronger hands.

Pranabjyoti Kalita , 3rd sem

Seeds of Tomorrow

In the whisper of the morning breeze
A promise hides within the trees
A future bright, yet ours to mold,
With hands that nurture, hearts that hold

We tread the earth, her gifts we reap,
Yet leave her weary, scarred, and deep
The rivers cry, the skies grow pale,
But hope still rides the ocean's sail.

Let's build a path of green embrace
Where nature's rhythm finds its place
Where growth and care walk hand in hand,
To heal the wounds upon the land

The sun that shines, the winds that sing,
Are gifts of life we must now bring
Not just for us, but those who'll rise
Beneath tomorrow's endless skies

So plant the seed and tend with grace
For every step leaves a trace
The earth, our mother, we defend
For sustainable means with no end

Manshi Haloi, 3rd sem





MACROLAND - NAVIGATING GLOBAL TRENDS

microeconomics is about individual choices, macroeconomics is about the big picture. It's the study of entire economies and the sweeping trends that influence national and global prosperity. MacroLand invites us to explore key indicators that reveal the health of economies and the policies shaping their futures .

Understanding Economic Indicators:

Indicators like GDP (Gross Domestic Product), inflation, and unemployment rates act as the pulse of an economy. When GDP grows, it signals economic expansion, while rising inflation often points to increased living costs. Governments and analysts use these metrics to assess economic health and guide policy decisions .

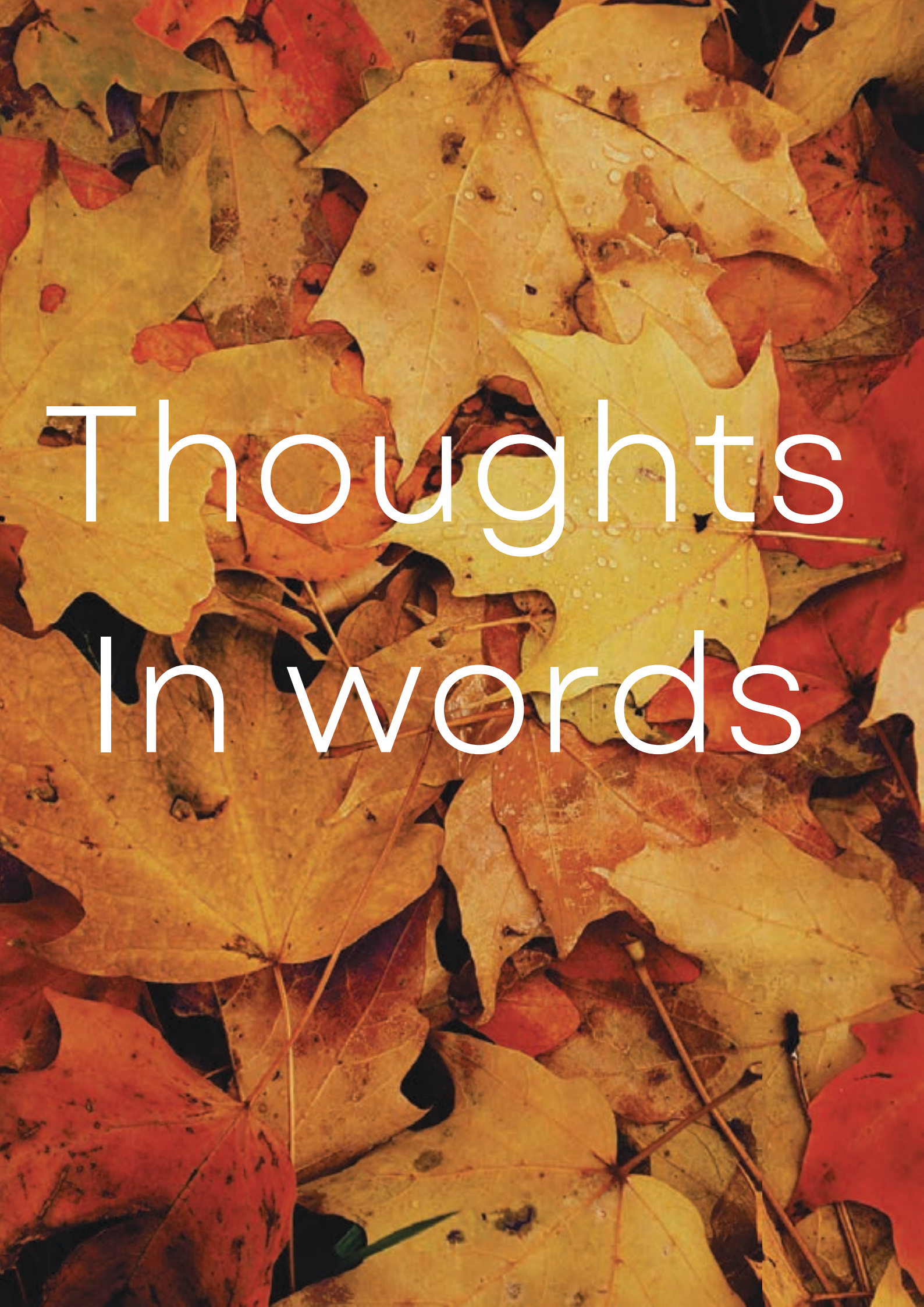
Fiscal and Monetary Policies:

In times of economic downturns, governments deploy fiscal policies- adjusting taxes and public spending to stimulate growth. Meanwhile central banks use monetary policies, like changing interest rates, to control inflation and stabilize the currency. Together, these tools help manage economic cycles, smoothing out the highs and lows .

Globalization & Economic Interdependence

Our world is interconnected like never before. A financial crisis in one country can trigger a domino effect across continents. Globalization has expanded trade, but it also means that economic shocks and policy changes can have widespread repercussions. Navigating these trends requires a macroeconomic lens, helping us see beyond local market to understand global economic dynamics.

In MacroLand, we see the economy as a whole, a living organism driven by policy decisions, global events, and economic cycles. It's a journey through the forces that shape our collective financial future



Thoughts In words



Daron Acemoglu
Massachusetts Institute of
Technology, USA



Simon Johnson
Massachusetts Institute of
Technology, USA



James A. Robinson
University of Chicago,
IL, USA

"för studier av hur institutioner formas och påverkar välstånd"

"for studies of how institutions are formed and affect prosperity"

Honoring the Pioneers: Acemoglu, Johnson, and Robinson on Institutional Roots of Wealth and Inequality

Acemoglu, Johnson, and Robinson are indeed renowned for their contributions to understanding the role of institutions in economic development and the causes of wealth disparities between nations. In their influential work, such as "The Colonial Origins of Comparative Development" (2001), they argued that differences in economic outcomes across countries are deeply rooted in historical institutions.

Their research emphasizes how institutional factors—like property rights, rule of law, and government accountability—create lasting impacts on economic growth and inequality. According to them, nations that developed inclusive institutions allowing broad participation and fair enforcement of laws tend to be wealthier. Conversely, countries with extractive institutions, often set up during colonial rule to benefit a few at the expense of the broader population, generally experienced slower economic growth and higher inequality.

Their work has profoundly shaped discussions in economics and development policy, highlighting that sustainable development often requires strengthening inclusive institutions rather than merely increasing resources or aid.



Inclusive Growth is India's biggest challenge

Introduction- The economic strength of a nation can be determined through its GDP (Gross Domestic Product), which is the total value of all final goods and services, produced within the country's border over a specific time period typically a year.

Thesis Statements- In this article, we will get to know about India's GDP growth. "India's growth is not inclusive, and we need to focus on reducing income inequality to sustain growth"

Overview- India's GDP growth has been a mixed bag with the country's economy experiencing fluctuations in recent years:

- Nominal GDP- \$2.76 trillion (2023 est)
- GDP growth rate - 3.54 % (2023-24)
- GDP per capita - \$ 2,134 (2023 est)

To put this into perspective, let's take a look at the country's economic landscape.

Sector wise contribution

India's economy is driven by three main sectors:-

1. Agriculture-18.4%
2. Industry- 28.3%
3. Services-53.3%

GDP Growth over the years

India's GDP has been impressively growing at an average rate of 6.7%, since the start of the 21st century. However, it has been slowed down in recent years due to economic uncertainty and domestic challenges like

- Inflation
- Unemployment
- Income Inequality

Some of the key driver of growth are -

1. Private Consumption
2. Government Spending
3. Investments
4. Net Exports

Reforms and Initiatives

- Make in India
- Digital India
- Goods and Services Tax
- Foreign Direct Investments (FDI)

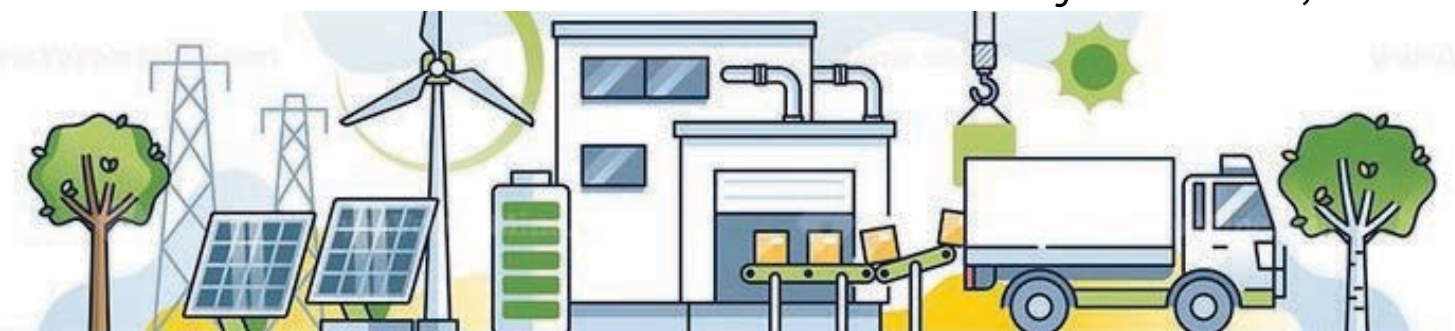
Conclusion- Now I conclude my Article on Inclusive Growth is 'India's biggest challenge' by telling that India's GDP growth story is a testament to the country's resilience, entrepreneurial spirit and strategic policy decisions. I hope you like the collaboration in shaping the article

SUPPLY CHAIN DISRUPTIONS IN THE COVID-19 ERA, IN INDIA



The COVID-19 pandemic created significant disruptions across India's supply chain, affecting nearly every sector of the economy. With the enforcement of strict lockdowns in March 2020, factories were forced to shut down, transportation came to a halt, and industries struggled to meet both domestic and international demands. India faced a substantial challenge with labor shortages, particularly as migrant workers returned to their rural homes, leaving urban factories and industrial centers understaffed. This labor crisis compounded issues within manufacturing, agriculture, and infrastructure sectors, causing extensive delays and a substantial decline in productivity. Logistics and transportation faced additional setbacks, as restrictions limited the movement of goods across state and national borders, leading to bottlenecks in ports, delayed shipments, and overall inefficiencies. Moreover, India's reliance on imports for critical raw materials became a significant vulnerability when global supply chains were disrupted. Sectors such as pharmaceuticals and electronics, which depend on imports from China, found themselves unable to access essential components, resulting in delayed production and a shortage of key products. The reliance on a globalized supply chain became a double-edged sword, highlighting the need for resilience and self-sufficiency in the face of future disruptions

Priyesh Kanoo,3rdsem



Amartya Sen: India's First Nobel Laureate in Economics and His Legacy in Welfare Economics

Amartya Sen is a renowned Indian economist and philosopher whose work has profoundly influenced the fields of welfare economics, social choice theory, and development studies. Born in 1933 in Santiniketan India, he has spent his career exploring how economies can address social inequalities, improve quality of life, and promote human freedoms. Amartya Sen was the first person from India to win the Nobel Memorial Prize in Economic Sciences. He received the prize in 1998 for his contributions to welfare economics, social choice theory, and his work on poverty and famine. His pioneering research on these issues, particularly his development of the capability approach, has had a lasting impact on economics, development studies, and policy worldwide. He has also been recognized with the Bharat Ratna, India's highest civilian award, and other global honors for his impact on economics, philosophy, and human rights.

Some key contributions and ideas from Sen's work include:

- 1. Capability Approach:** One of Sen's most influential ideas, the capability approach emphasizes assessing a person's well-being not solely on material wealth but on their "capabilities"- the real opportunities they have to live a life they value. He argues that true development should enhance people's freedom to achieve capabilities such as health, education, and participation in society. This approach shifts the focus from wealth to factors like health, education, and equality. It's a framework that has since been used in human development, social policy, and beyond. This approach further inspired the creation of the Human Development Index (HDI), used by the United Nations Development Programme (UNDP) to evaluate countries not only by economic metrics but also by quality-of-life measures, such as life expectancy, education and income.
- 2. Human Development Index (HDI):** Sen's ideas contributed significantly to the creation of the HDI, developed by the United Nations Development Programme (UNDP). The HDI is a composite measure that assesses a country's social and economic development based on indicators like life expectancy, education, and income, offering a more holistic picture of development beyond GDP.

3. Social Choice Theory: Sen made pioneering contributions to social choice theory, a field that explores collective decision-making and how societies can create fair systems to represent individual preferences. His work expanded upon Kenneth Arrow's "impossibility theorem," examining ways to incorporate social welfare and justice in collective choices. Sen's insights highlighted the challenges and ethical dimensions of creating fair, democratic systems. His work on social choice and justice laid the groundwork for alternative theories of welfare economics and influenced debates on democracy and human rights.

4. Writings on Poverty and Famine: In his landmark book;Poverty and Famines' (1981), Sen challenged the conventional view that famines are primarily due to food shortages instead,he argued that famines are often not caused by food shortages alone but by inequalities in access to food He introduced the concept of entitlement - the ability of people to access resources based on their social, economic, and legal rights.The access to food, or "entitlement," is crucial, highlighting how social and economic systems determine whether people can obtain food. His theory has influenced global food policy, shifting the focus from simply increasing food supply to addressing the systemic factors that limit people's access to food.


5. Public Reason and Democracy: Sen advocates for public debate and democratic participation as essential elements for justice and development. He believes that freedom of expression, media access, and open discourse are crucial for preventing issues like famine and improving governance. Sen believes that open debate and public reasoning are essential to democracy and social justice. He argues that true democracy requires active engagement and that freedom of expression and participation are crucial in achieving fairness and preventing injustices, such as famine or neglect of marginalized communities. His book,The Idea of Justice (2009) critiques traditional approaches to justice, proposing a more flexible and comparative approach that focuses on reducing injustice rather than defining an ideal "just society."

Amartya Sen's work has had a profound influence on global economic policy, particularly in areas related to human development, poverty alleviation, and social justice. His interdisciplinary approach has made him a major figure in sustainable development, social equity, and human welfare, influencing policymakers and institutions worldwide.His ideas continue to guide organizations like the United Nations and inform policy in areas such as education, health, and gender equality. By emphasizing human freedom, dignity, and capability, Sen's work has helped redefine what it means to achieve true economic and social development.

Bhaswati Goswami,5th sem



Finance Industry after the Global Pandemic



The COVID-19 pandemic has fundamentally transformed the finance industry, accelerating the shift toward digital solutions and reshaping consumer expectations. With lockdowns limiting physical interactions, banks and financial institutions quickly adopted digital-first models to meet customer needs. This change led to a surge in mobile banking, contactless payments, and digital wallets, as consumers increasingly preferred remote and secure ways to manage finances. Financial institutions have invested heavily in these digital services, leveraging artificial intelligence and automation to improve customer service, enhance cybersecurity, and increase operational efficiency.

In addition to digital adoption, the pandemic also fueled the rise of fintech and neo-banks, which attracted customers seeking accessible, lower-cost, and contact-free financial services. These fintech innovations have introduced new competition to traditional banking, pushing legacy institutions to modernize and offer similar seamless digital experiences. There's also a notable shift toward Environmental, Social, and Governance (ESG) investing, as the pandemic heightened awareness around sustainability. Investors are increasingly looking for companies committed to social responsibility and environmental impact, leading asset managers to integrate ESG criteria into their portfolios.

Regulatory changes and heightened cybersecurity measures have also been central to post-COVID transformations. As cyber threats became more frequent, the need for stronger digital identity protections and data security grew, prompting financial institutions to adopt more stringent cybersecurity practices. Overall, the finance industry's post-COVID landscape is more agile, customer-centric, and resilient, focused on digital innovation and a sustainable, secure approach to finance.

Mansee Das, 3rd sem





CYBER SCAMS

Cyber scams in India have evolved rapidly from the past few years, with scammers taking advantage of new digital platforms. Social media, and the growing reliance on e-commerce and digital payments. The current trends and issues related to cyber scams includes AI - driven scams where AI tools like voice cloning and deep fakes trick victims into sharing personal information or making fraudulent payments. Another popular source of cyber scam is e-commerce or fake shopping websites wherefore e-commerce websites and social media ads for counterfeit products are prevalent. The most common type of cyber scam where most of the people gets scammed is digital payment scams. India's UPI has transformed payments but has also become a target for fraud through UPI scams such as QR code fraud, fake payments fraud, etc. Multiple scams also occur through social media platforms where scammers often exploit platforms like Instagram, WhatsApp, Telegram, etc. to conduct scams from fake investment schemes to job offers to making quick money schemes, and more often scammers target senior citizens with tech support and banking scams, exploiting their limited familiarity with digital processes. Cyber scams also targets students seeking job opportunities with pre job offers, exam scams or fraudulent online courses.

Each of these topics addresses the current issues with online scams which are prevalent and are becoming common in India. Therefore, there is a growing need of awareness and digital security in an increasingly connected world.

ECONOMIC IMPACT OF TRUMP 2.0: POTENTIAL CONSEQUENCES OF A RETURN TO TRUMP'S POLICIES



The potential return of Donald Trump to the U.S. presidency in what some analysts call "Trump 2.0" could have significant economic consequences due to anticipated shifts in policy that could influence both domestic and global markets.

Trump's first term was marked by a focus on protectionist trade policies, notably the U.S.-China trade war. He introduced tariffs on billions of dollars worth of Chinese goods, aiming to reduce the trade deficit and bring manufacturing jobs back to the U.S. However, these policies also led to price increases on imported goods and caused disruptions in global supply chains. A return to similar policies might:

1. Increase Costs for Consumers and Businesses: Tariffs often lead to higher costs for imported goods, which can result in higher consumer prices and increased production costs for companies reliant on imported components.
2. Create Trade Tensions: If Trump re-engages in aggressive trade policies with China or other major economies, it could destabilize international trade relationships and affect the global economy, especially if retaliation by other countries results in further tariffs.

Trump's approach to energy policy focuses heavily on traditional energy sources like coal, oil, and natural gas. During his first term, he rolled back various environmental regulations, withdrew from the Paris Climate Agreement, and supported the fossil fuel industry. If similar policies are reintroduced, then it could have an impact on the Renewable Energy Investments. Clean energy initiatives could face challenges, affecting the growth of renewable sectors and possibly leading to job losses in these industries. It could also influence the Global Climate Commitments. If the U.S. scales back on climate initiatives, it could slow down global progress on climate goals, which could have long-term economic impacts through increased climate-related risks such as natural disasters and resource scarcity.

Trump's first administration implemented tax cuts, particularly benefiting corporations and high-income earners, which contributed to a higher budget deficit. While these cuts were intended to spur economic growth, the increased deficit can have long-term consequences. If similar fiscal policies are pursued again, then, without corresponding cuts in government spending, more tax cuts could increase the federal deficit and national debt, potentially leading to higher interest rates and reduced government spending on essential programs. Increased national debt and high deficits can fuel inflationary pressures, leading to potential impacts on the cost of living and borrowing costs.

Trump's restrictive immigration policies during his first term aimed to protect American jobs but also led to a reduction in the labor supply. A similar approach could have consequences for industries reliant on immigrant labor, such as agriculture, construction, and healthcare.

Labor Shortages in Key Sectors: Reduced immigration can exacerbate labor shortages, especially in lower-wage, labor-intensive sectors, leading to higher wages that could increase production costs.

Inflationary Impact on Wages: Restricted immigration could contribute to upward wage pressures, potentially increasing inflation if businesses pass on these costs to consumers.

Trump previously focused on repealing the Affordable Care Act (ACA) and may seek to reduce government involvement in healthcare if re-elected. Changes to healthcare policy could impact the economy in various ways:

Increase Healthcare Costs for Some Individuals: Reducing ACA provisions may lead to higher costs for low- and middle-income individuals, affecting consumer spending as more income goes toward healthcare.

Impact the Healthcare Sector: Reductions in healthcare coverage could lead to lower demand for healthcare services, potentially impacting employment and investment in the sector.

Moreover, Trump's "America First" approach emphasized U.S. interests over alliances with international

BEHAVIORAL ECONOMICS

Behavioral economics is a field that blends insights from psychology with economic theory to understand how people actually make decisions often in ways that are irrational or influenced by biases. Unlike traditional economics, which assumes people act purely rationally and with full information, behavioral economics acknowledges that cognitive biases, emotions, social factors, and heuristics significantly impact our choices. Behavioral economics has a wide range of applications in various fields where it helps design policies, products, and services that align better with human behavior. Here are some key areas where behavioral economics is applied:

1. Public Policy and Health

Nudging for Healthier Choices: Governments and health organizations use nudges nudges to promote healthier behaviors, such as positioning healthy foods at eye level in cafeterias or using graphic labels on tobacco products. **Organ Donation:** Many countries have adopted an "opt-out" system for organ donation, leveraging status quo bias. This change leads to higher participation rates because people tend to stick with the default option **Vaccination Campaigns:** Behavioral insights, like emphasizing social norms or providing immediate rewards, encourage more people to get vaccinated, especially for preventable diseases.



2. Personal Finance and Savings

Automatic Enrollment: Many companies use automatic enrollment in retirement savings plans (401 (k) or pensions) to boost participation rates, leveraging inertia and status quo bias

Savings Programs: Programs like "Save More Tomorrow" encourage people to commit to saving a portion of their future salary increases which reduces the present bias that often leads people to prioritize immediate spending

Debt Reduction Plans: Some organizations design debt repayment plans that focus on paying off smaller debts first to provide a sense of progress, known as the "debt snowball" effect, which can increase motivation.

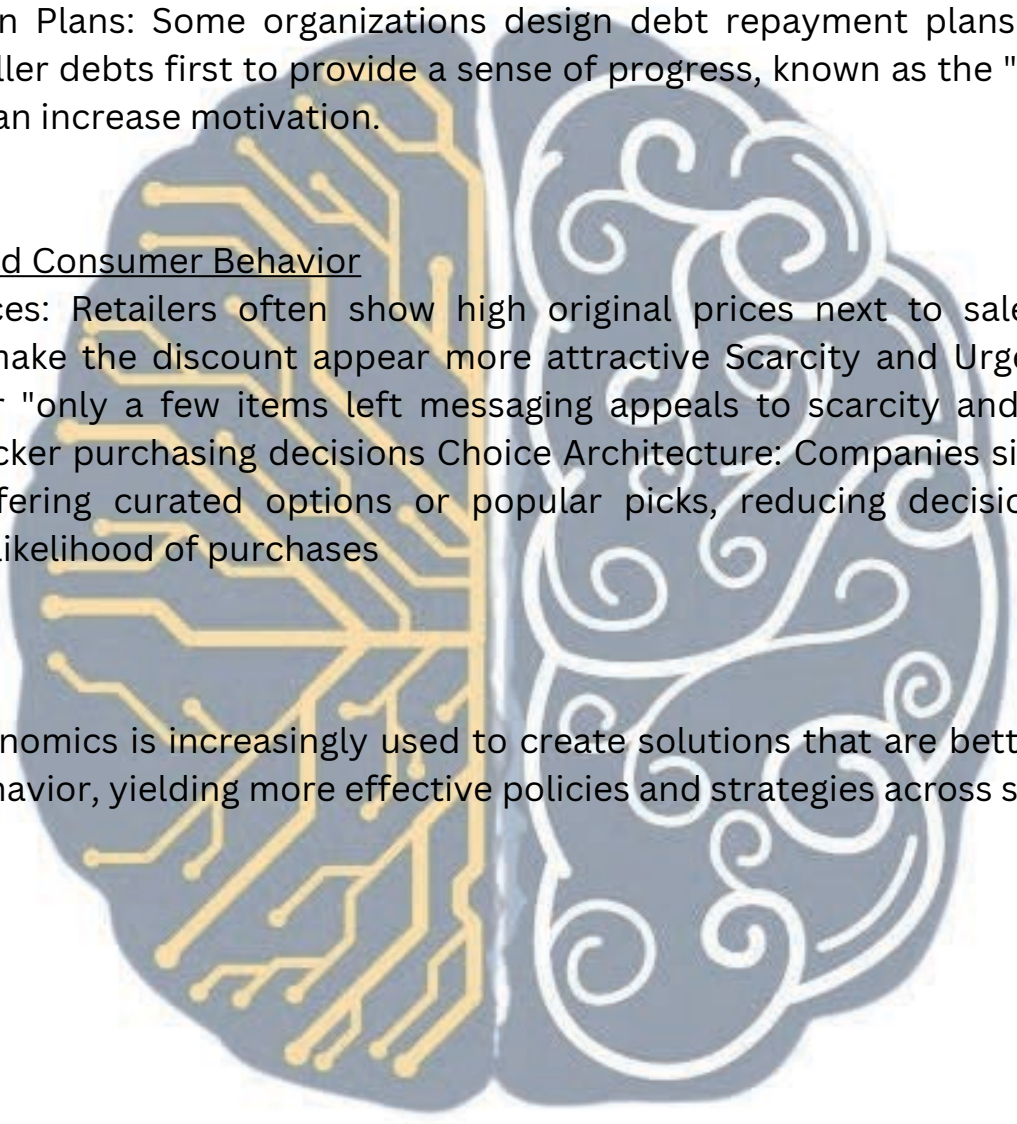
3. Marketing and Consumer Behavior

Anchoring Prices: Retailers often show high original prices next to sale prices, using anchoring to make the discount appear more attractive

Scarcity and Urgency: "Limited-time offers" or "only a few items left" messaging appeals to scarcity and loss aversion, motivating quicker purchasing decisions

Choice Architecture: Companies simplify product choices by offering curated options or popular picks, reducing decision fatigue and enhancing the likelihood of purchases

Behavioral economics is increasingly used to create solutions that are better aligned with real human behavior, yielding more effective policies and strategies across sectors.



CLEAN TECHNOLOGY: A PATHWAY TO A SUSTAINABLE FUTURE

As the global demand for energy and resources rises, clean technology, or "cleantech," has emerged as a critical player in the journey toward a sustainable and low-carbon economy. Clean technology refers to innovative processes, products, or services that reduce or eliminate negative environmental impacts, enhance resource efficiency, and provide cleaner alternatives to traditional technologies. This article explores the various aspects of clean technology, its significance, key sectors, and the challenges it faces.

The Importance of Clean Technology

Clean technology aims to tackle some of the most pressing environmental challenges we face today: climate change, pollution, resource scarcity, and biodiversity loss. Cleantech offers sustainable solutions that can help transition our economy away from fossil fuels, minimize waste, and reduce greenhouse gas emissions. As a result, it plays a vital role in mitigating climate change impacts and promoting long-term economic growth while protecting natural ecosystems.

In addition to environmental benefits, cleantech promotes energy independence, creates jobs, and enhances economic resilience. Investments in clean technology often lead to innovations that increase the efficiency of industries, lower operational costs, and offer competitive advantages. Globally, clean technology investments are rising, reflecting a growing recognition of its economic and environmental value.

Clean technology spans multiple sectors, including renewable energy, waste management, water purification, green transportation, and sustainable agriculture. Here's a closer look at some of the core areas:

1. Renewable Energy

Renewable energy is one of the fastest-growing cleantech sectors, encompassing solar, wind, hydroelectric, and geothermal power. These energy sources are essential for reducing reliance on fossil fuels and lowering greenhouse gas emissions. Recent advancements in solar panel efficiency, wind turbine design, and battery storage have made renewable energy more cost-effective and accessible than ever.

2. Energy Efficiency

Improving energy efficiency is crucial to reducing energy consumption and minimizing environmental impact. Clean technologies in this sector include LED lighting, smart meters, and energy-efficient appliances, as well as advanced materials for building insulation and construction.

KEY INSIGHTS OF THE ECONOMIC SURVEY 2023-24 FOR INDIA

1. **GDP Growth:** India's economy is anticipated to grow at 6.5-7% in FY2024-25. This growth is attributed to strong public investment, expanding private investment, and robust export performance in areas like pharmaceuticals, engineering goods, and IT services. Fiscal policies and regulatory reforms have helped sustain recovery from the COVID-19 pandemic and keep inflation largely under control, despite some inflationary pressures from high food prices.

2. **Fiscal Management and Deficit:** The fiscal deficit has reduced from 6.4% of GDP in 2022-23 to 5.6% in 2023-24, reflecting strong tax revenue and restrained expenditure. The government aims to bring the fiscal deficit down to 4.5% by 2025-26. Efforts to improve fiscal health also include a reduced debt-to-GDP ratio, driven by low currency risks and limited external debt.

3. Sectoral Developments:

Agriculture: Growth has slowed due to poor monsoons, though allied sectors like livestock and fisheries have performed better, suggesting a shift toward high-value agriculture.

Industry: The industrial sector grew by 9.5% this fiscal year, with notable growth in electronics and pharmaceuticals. However, reliance on imports in key sectors remains an area for improvement.

Services: As the largest sector (55% of GDP), services are benefiting from the rise of digital and e-commerce platforms. Challenges remain in digital skills and financing for small and medium enterprises.

4. **Infrastructure and Digitalization:** Significant investments in roads, railways, and digital infrastructure have been critical. The Survey highlights the importance of continuing digitalization across sectors to increase efficiency and economic inclusivity. Programs under "Digital India" are accelerating this shift and have expanded financial inclusion through digital payment platforms.

5. **Climate and Sustainability:** India's renewable energy sector has grown rapidly, with solar capacity reaching 82.6 GW as of April 2024. The government is committed to climate goals, aiming to reduce emission intensity and promote sustainable practices across sectors.

This survey underscores India's pathway toward becoming a developed nation by 2047, emphasizing resilience, inclusivity, and sustainable growth as the cornerstones of its economic vision.



URBAN SUSTAINABILITY AND SMART CITIES: BUILDING RESILIENT FUTURES

As the world's urban population continues to grow, cities face unprecedented challenges related to resource consumption, pollution, housing, and transportation. Urban sustainability and smart cities offer a pathway to address these issues by promoting efficient resource use, reducing environmental impact, and improving residents' quality of life.

Urban sustainability involves creating cities that support economic growth, social inclusivity, and environmental health. Sustainable cities prioritize efficient infrastructure, reduce pollution, promote green spaces, and minimize energy and resource waste. The goals of urban sustainability align with the United Nations' Sustainable Development Goals (SDGs), particularly SDG 11, which focuses on making cities inclusive, safe, resilient, and sustainable.

Key components of urban sustainability include:

1. Efficient Resource Use
2. Eco-Friendly Transportation
3. Waste Reduction and Circular Economy
4. Green Spaces and Biodiversity
5. Climate Resilience

The Role of Smart Cities in Urban Sustainability

Smart cities use technology and data to optimize urban infrastructure, resources, and services. This approach not only enhances city functionality but also supports sustainability goals. In a smart city, technology is integrated into everyday urban life, from traffic systems and waste management to energy distribution and public services.

Key Technologies in Smart Cities

1. Internet of Things (IoT)

IoT devices collect real-time data on city operations. For example, sensors in streetlights adjust lighting based on activity levels, reducing energy use. In waste management, IoT-enabled bins alert sanitation services when they need emptying, optimizing waste collection.

2. Artificial Intelligence (AI) and Big Data

AI and data analytics allow cities to make informed decisions based on data. Traffic patterns, energy usage, and air quality levels can be analyzed, helping city planners optimize infrastructure and improve services.

3. Renewable Energy and Smart Grids

Smart grids are integrated with renewable energy sources, like solar and wind, to provide cities with a reliable and eco-friendly power supply. Smart grids also allow for demand-response systems, where energy usage adjusts to peak and off-peak times, reducing strain on the grid.

4. Green Building and Energy Efficiency Technologies

Smart buildings use energy-efficient systems that reduce waste, such as automated lighting, HVAC controls, and energy-efficient materials. These buildings consume less power and contribute to a city's overall energy efficiency.





SEBI'S NEW FRAMEWORKS: BOOSTING ACCESS TO REAL ESTATE, SOCIAL IMPACT INVESTMENT, AND MARKET TRANSPARENCY

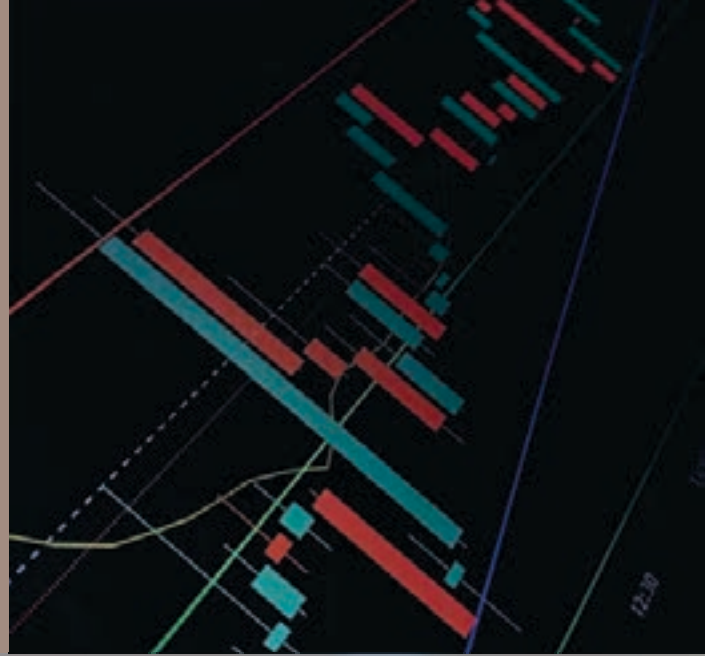
The Securities and Exchange Board of India (SEBI) is the regulatory authority for securities and capital markets in India. Established in 1988 and given statutory powers in 1992, SEBI's primary objectives are to protect investor interests, promote and regulate the securities market, and ensure market transparency. SEBI has been active in introducing new policies aimed at improving transparency and providing more investment opportunities. Recently, SEBI's board approved several measures in its November meeting, including the creation of a regulatory framework for Small and Medium Real Estate Investment Trusts (SM REITs). This framework allows smaller real estate assets (minimum value of Rs. 50 crore) to be pooled into REITs, enabling more investors to access commercial real estate opportunities that previously required a much larger minimum asset value of Rs. 500 crore for conventional REITs.

Another significant update involves SEBI's initiatives for the Social Stock Exchange (SSE), which has now expanded eligibility to more non-profit entities. SEBI has reduced the minimum issue size and application size for social bonds, allowing broader participation from retail investors. The SSE aims to fundraise for social and non-profit organizations by making them accessible on a public platform, promoting investments aligned with social impact goals.

These regulatory changes reflect SEBI's focus on easing market access, enhancing transparency, and adapting to evolving investor needs.

Paramjit Roy, 3rd sem

India's Stock Market Revolution: A New Era of Accessibility, Digital Innovation, and Investor Empowerment



India could be seen as undergoing a stock market revolution, driven by a combination of regulatory changes, rapid digitalization, rising retail participation, and a strong economic growth outlook. Following are the key elements that fuel this transformation:-

1. Increased Retail Participation

Retail investors in India have been entering the market at unprecedented rates, with the number of Demat accounts reaching record levels. This trend is largely fueled by growing financial literacy, accessibility through digital platforms, and a cultural shift towards equities as a viable long-term investment.

The COVID-19 pandemic accelerated this shift, as more investors turned to stock markets amid low interest rates on traditional savings and increased access to online trading apps.

2. Digital and Financial Inclusion

The rise of fintech and online brokerage platforms has democratized stock trading, making it accessible to a broader demographic. Digital payment systems, along with e-KYC processes, have made it easier for individuals to open trading accounts and invest. Initiatives like the Digital India campaign and robust financial inclusion policies have also increased the number of market participants from rural areas and smaller cities, contributing to market growth and diversity.

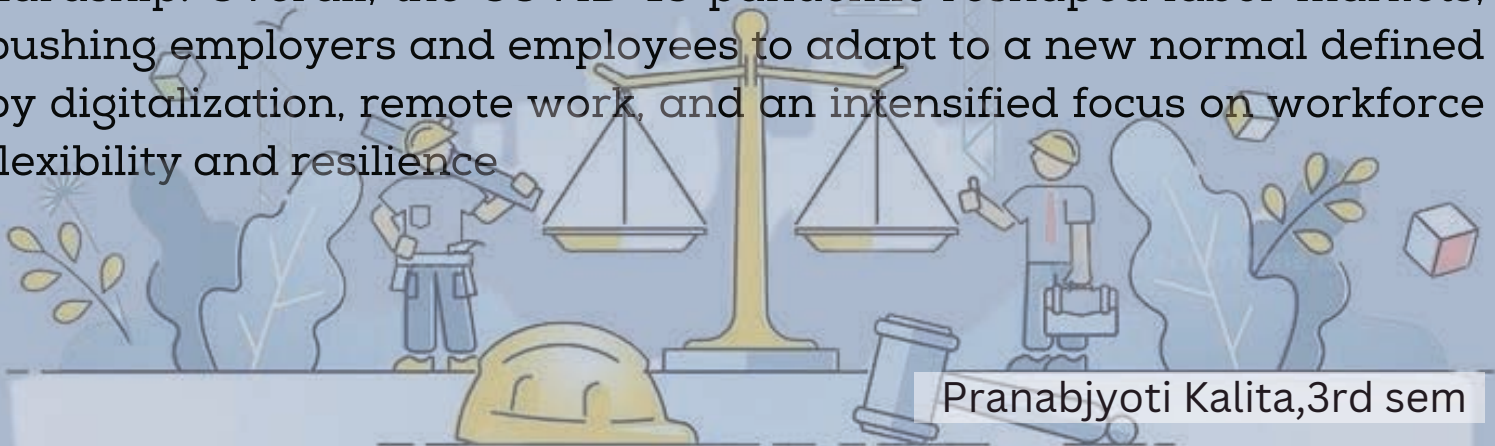
3. Regulatory Reforms by SEBI

SEBI has introduced several initiatives to modernize and secure the stock market, such as introducing frameworks for REITs, improving transparency in index providers, and regulating algorithmic trading.

The introduction of the Social Stock Exchange (SSE) and frameworks for Small and Medium REITs (SM REITs) reflects SEBI's aim to expand market accessibility and align investments with social impact and real estate sectors that were previously harder to enter for smaller investors.

CHANGES IN EMPLOYMENT AND LABOUR MARKETS DUE TO COVID-19 PANDEMIC

The COVID-19 pandemic led to a profound transformation in global employment and labor markets, marked by immediate disruptions and long-term structural shifts. Initially, the pandemic caused widespread job losses due to lockdowns and social distancing measures, particularly affecting sectors such as hospitality, tourism, retail, and transportation. Unemployment rates surged as businesses either temporarily closed or permanently shut down, leading to an 8.8% drop in global working hours in 2020, which equated to the loss of 255 million full-time jobs, according to the International Labour Organization (ILO). Beyond job losses, the pandemic accelerated the adoption of remote work, fundamentally changing how and where people work. Companies rapidly shifted to digital platforms, and many employees began working from home, a trend that has remained for numerous industries and may become a permanent feature for certain roles. At the same time, the crisis highlighted and, in some cases, widened economic inequalities, as lower-income workers and those in precarious employment were disproportionately affected. While sectors like healthcare and e-commerce experienced increased demand, low-wage and frontline workers faced greater health risks, job insecurity, and economic hardship. Overall, the COVID-19 pandemic reshaped labor markets, pushing employers and employees to adapt to a new normal defined by digitalization, remote work, and an intensified focus on workforce flexibility and resilience.



"THE GREEN ECONOMY: BALANCING GROWTH AND SUSTAINABILITY

The Green Economy is more than just a trend-it's a transformative approach that aims to balance economic growth with environmental preservation. As we face climate change and dwindling natural resources, this new economic model offers a pathway to a sustainable future

Renewable Energy Revolution:

One of the pillars of the Green Economy is the transition to renewable energy sources like solar, wind, and hydropower. These alternatives reduce our reliance on fossil fuels, cut greenhouse gas emissions, and create new job opportunities. Countries investing in renewables are not only protecting the environment but also boosting their long-term economic resilience

Carbon Markets and Emissions Trading:

To combat climate change, governments have introduced carbon markets, where companies can buy and sell carbon credits. This system incentivizes businesses to reduce their carbon emissions, as they can earn money by cutting their carbon footprint. It's an innovative way to align profit motives with environmental goals

Circular Economy and Resource Efficiency:

The Green Economy also champions the concept of a circular economy, where products are designed for reuse, repair, and recycling minimizing waste and maximizing resource efficiency, the circular economy helps reduce the strain on our planet while opening up new avenues for economic growth.

The Green Economy shows us that sustainable practices aren't just good for the planet-they're good for business too. It's a vision of an economy where progress and preservation go hand in hand





**RESEARCH
WRITINGS**



ECONOMIC SURVEY 2023-24 KEY HIGHLIGHTS

The Economic Survey of the Financial Year 2023-24 was presented by the Union Finance Minister, Nirmala Sitharaman, on 22nd July 2024, right after the President's Address. The Survey provided a comprehensive overview of the Indian economy's performance, prospects, challenges, and policy recommendations in the Previous Year. According to the Economic Survey 2023-24, inflationary pressures, driven by global issues, supply chain disruptions, and unpredictable monsoons, have been effectively managed through strategic administrative and monetary policies. Consequently, retail inflation, which averaged 6.7% in FY23, decreased to 5.4% in FY24. The report further noted that the government's timely policy interventions, combined with the Reserve Bank of India's measures to ensure price stability, successfully kept retail inflation at 5.4% in FY24, marking the lowest level since the pandemic.

Here are the Major highlights from the Economic Survey 2023-24

Resilient Economy: The Indian economy grew over 7% for the third consecutive year, driven by stable consumption and improving investment demand.

Improved Current Account Deficit: India's CAD improved to 0.7% of GDP in FY24, down from 2.0% in FY23.

Robust Forex Reserves: At the end of March 2024, India's forex reserves could cover more than 10 months of projected imports and 98% of external debt.

Stable Banking Sector: The banking sector showcased stellar performance with double-digit credit growth, low NPAs, and improved asset quality.

Core Inflation Falls: Retail inflation was maintained at 5.4%, the lowest since the pandemic, due to effective policy interventions and RBI measures.

Positive Short-Term Inflation Outlook: Inflation is expected to decline to 4.5% in FY25 and 4.1% in FY26, assuming normal monsoon and no external shocks.

Growth Strategy for New India: The focus will be on bottom-up reforms, job and skill creation, MSME development, green transition, and addressing inequality.

FDI Inflows Slow: Net FDI inflows declined from \$42 billion in FY23 to \$26.5 billion in FY24, with gross FDI inflows moderating slightly.

Growing Energy Needs: India's energy needs are projected to grow 2 to 2.5 times by 2047, with significant progress in renewable energy and emissions reduction.

Reconciling Individual Preferences and Collective Welfare: Amartya Sen's Contributions to Social Choice Theory



Nobel Laureate Amartya Sen's paper "Social Choice and Individual Values," published in the Review of Economic Studies 1970 represents a critical extension of the theoretical framework established by Kenneth Arrow in his Impossibility Theorem. This paper addresses one of the most fundamental problems in economics and political science: how to aggregate individual preferences, values, and interests into a coherent social decision. Sen's work expands the domain of welfare economics by integrating philosophical considerations of justice, fairness, and individual rights.

Kenneth Arrow's Impossibility Theorem, a cornerstone of social choice theory, states that no social welfare function can satisfy all the following reasonable criteria simultaneously:

1. **Universality (Unrestricted Domain):** The social welfare function must work for all possible individual preference rankings.
2. **Pareto Efficiency:** If every individual prefers option A over B, then society must also prefer A over B.
3. **Independence of Irrelevant Alternatives (IIA):** Social preferences between options A and B should not depend on irrelevant alternatives.
4. **Non-Dictatorship:** No single individual's preferences should unilaterally determine the social preference.

This result demonstrates the inherent difficulty of designing a decision-making system that is fair, consistent, and respects individual preferences.

Analysing the Arrow's Impossibility Theorem, Amartya Sen came up with different methods or theories to find solutions to different fundamental problems. Some of the major Contributions are listed below:-

1. Broadening the Scope of Social Choice Theory

Sen critiques the assumptions and rigidity of Arrow's conditions, arguing that real-world social choice often involves trade-offs between competing criteria. He emphasizes the need for more practical approaches that consider ethical and philosophical dimensions, such as justice and equity, which are often neglected in purely mathematical frameworks.

2. Interpersonal Comparisons of Utility

One of the major limitations of Arrow's framework is the exclusion of interpersonal comparisons of utility. Arrow assumes that individual utilities cannot be compared across people. Sen challenges this assumption, arguing that in real-world policy-making, such comparisons are inevitable and necessary. For example: Deciding how to allocate resources among individuals often requires assessing who is worse off and prioritizing them.

Without interpersonal comparisons, addressing inequality or poverty becomes impossible.

Sen proposes frameworks where interpersonal comparisons are incorporated explicitly to balance efficiency and equity.

3. The Liberal Paradox

In the same period as this paper, Sen introduced the Liberal Paradox, a groundbreaking result that shows a fundamental conflict between individual rights and collective welfare. The paradox is as follows:

In a society where individual liberties (the right to make personal decisions) are respected, certain combinations of preferences can lead to socially undesirable outcomes, violating Pareto efficiency.

For example, if two people have conflicting preferences about a decision (e.g., what book one of them should read), respecting their individual rights may prevent the society from achieving a Pareto-optimal outcome. This result highlights the tension between liberty and efficiency in designing social welfare mechanisms.

4. Partial Social Rankings

Sen suggests that relaxing some of Arrow's conditions can make social choice theory more applicable. Instead of requiring a complete and consistent ranking of all social states, he proposes partial social rankings, where societies can agree on the relative desirability of some options without resolving all conflicts.

Example: While society might not agree on the exact ranking of all income distributions, it might agree that extreme poverty is worse than moderate inequality.

5. Justice, Fairness, and Rights

Sen introduces philosophical concepts into social choice, emphasizing that:

Justice: Social choice must consider issues of fairness, not just efficiency or utility maximization.

Rights: Individual rights should have a significant role in determining social outcomes, even if it complicates achieving efficiency.

Capability: Instead of focusing solely on resources or utilities, social welfare should assess individuals' capabilities, i.e., their real freedoms to achieve well-being.

Amartya Sen's "Social Choice and Individual Values" significantly extends the scope of social choice theory by addressing its practical limitations and integrating ethical considerations. By challenging the rigid assumptions of Arrow's theorem, introducing interpersonal comparisons, and emphasizing justice and equity, Sen provides a framework that is not only theoretically robust but also deeply relevant to real-world decision-making. His contributions continue to inspire debates on how societies can balance individual freedoms with collective welfare in a fair and equitable manner.



THE CAUSAL RELATIONSHIP BETWEEN TRADE AND ECONOMIC GROWTH: EVIDENCE FROM CROSS-COUNTRY ANALYSIS

The paper "Does Trade Cause Growth?" by Jeffrey A. Frankel and David Romer (1999) investigates the relationship between international trade and economic growth. This research is a seminal contribution to the field of international economics, particularly in the debate over whether trade openness directly contributes to a country's economic growth.

Overview of the Paper

The authors explore the widely debated question: Does trade openness cause economic growth, or does economic growth lead to more trade? Previous research had suggested a correlation between higher levels of trade and economic growth, but this paper goes further to assess whether trade itself can be considered a causal factor for economic growth, rather than just being a reflection of growth.

Key Concepts and Methodology of the paper

1. Instrumental Variables Approach

Frankel and Romer argue that simply observing a positive correlation between trade and growth does not imply causality, as other factors (such as geography, institutions, or historical ties) could be driving both. To address this, the authors use an instrumental variables approach, which helps to establish causality by identifying a variable that is correlated with trade but not directly with economic growth.

Their key instrument is the geographic distance between countries. The idea is that countries that are geographically closer to each other are more likely to trade with one another, regardless of their economic policies or institutions. Using this variable, the authors are able to isolate the effect of trade on economic growth.

2. Model and Empirical Analysis

The authors use a cross-country regression model that examines the relationship between trade (measured as the share of trade in GDP) and economic growth (measured as GDP per capita). They use the geographic instrument to estimate the effect of trade on growth while controlling for other factors such as population, physical capital, and human capital.

Main Findings and Conclusion of the paper

1. Positive Causal Relationship:

The study finds a positive and significant causal effect of trade on economic growth. Countries that trade more as a percentage of GDP tend to grow faster over time. This result challenges the view that trade is simply a consequence of economic growth and provides evidence that trade openness can drive growth.

2. Geography as a Predictor of Trade:

The authors confirm that geographic proximity is an important determinant of trade flows. Countries that are geographically closer are more likely to trade with each other, and this relationship holds even when controlling for other factors. This finding suggests that trade is, in part, a function of geographic factors.

3. Policy Implications:

The results suggest that policies promoting trade openness, such as reducing tariffs and trade barriers, can help foster economic growth. The study adds empirical support to the argument that trade liberalization can be a tool for accelerating economic development.

Criticism and Limitations

1. Geographic Instrument Limitation:

While geographic distance is a strong instrument, it may not capture all factors influencing trade, such as institutional quality, political stability, or trade agreements. Additionally, the geographic instrument assumes that proximity is the only or most significant factor in trade, which may not be true in all cases.

2. Cross-Country Analysis:

The analysis uses cross-country data, which can be subject to heterogeneity, meaning that the effects of trade on growth might differ significantly across countries with different institutions, cultural backgrounds, and levels of development. The paper acknowledges this limitation but argues that the overall result still holds across diverse settings.

3. Endogeneity Issues:

Despite using an instrumental variables approach, some critics might argue that other omitted variables could still confound the relationship between trade and growth. For instance, countries that are better equipped to grow economically (e.g., due to good institutions or policies) may also be more likely to engage in trade.

Conclusion

In "Does Trade Cause Growth?", Frankel and Romer provide robust empirical evidence that trade openness does indeed have a causal effect on economic growth. By using an innovative methodology and addressing endogeneity concerns, the paper offers a compelling case for the benefits of international trade, particularly for developing countries seeking to accelerate their economic development through trade liberalization.



Assessing the Economic Impact of Climate Change on Agriculture in Developing Countries

INTRODUCTION

Agriculture is a vital sector for many developing countries, both in terms of providing livelihoods and contributing to national GDP. However, agriculture is highly sensitive to climate conditions, and climate change poses significant risks to food security, rural livelihoods, and economic stability. The impacts of climate change on agriculture in developing countries are complex and multifaceted. This research aims to assess the economic impact of climate change on agriculture in developing countries, focusing on how climate-related changes affect agricultural productivity, rural incomes, and food security.

Data Sources for conducting the research

1. Food and Agriculture Organization (FAO)

FAOSTAT Database: Provides extensive data on agricultural production, crop yields, and land use across developing nations. This database is essential for analyzing trends and assessing the impact of climate change on agricultural productivity.

Climate Change and Food Security Reports: Offer insights into how climate variability affects food production and security in developing regions. For instance, the FAO reports that climate change could reduce crop yields by up to 30% in some developing countries by 2050.

2. World Bank

Climate Change Knowledge Portal: Offers climate-related data, including temperature and precipitation projections, which are crucial for modeling agricultural impacts. The portal indicates that a 2°C increase in global temperatures could result in a 15-20% decrease in crop yields in Sub-Saharan Africa.

Agricultural Sector Risk Assessments: Provide analyses of how climate risks affect agricultural productivity and economic stability in developing countries. For example, the World Bank notes that climate-induced yield reductions could lead to a 5% decrease in GDP in agriculture-dependent economies.

3. Intergovernmental Panel on Climate Change (IPCC)

Assessment Reports: Contain comprehensive evaluations of climate change impacts, including those on agriculture. The IPCC's Fifth Assessment Report states that climate change is projected to reduce median crop yields by 0-2% per decade in the coming decades, with significant implications for food security in developing regions.

Special Reports on Climate and Land: Discuss the interplay between climate change, land use, and food security, highlighting vulnerabilities in developing countries. The reports suggest that without adaptation, global crop yields could decline by up to 10% by 2050 due to climate change.

4. National Agricultural Departments

Country-Specific Reports: Many developing countries publish data on agricultural performance and climate impacts. For instance, India's Ministry of Agriculture reports that climate variability has led to a 1.5% annual decline in wheat yields over the past decade.

Climate Adaptation Strategies: Documents outlining national plans to mitigate climate impacts on agriculture, providing context-specific data and projections. Ethiopia's Climate-Resilient Green Economy strategy aims to increase agricultural productivity by 5% annually despite climate challenges.

5. Peer-Reviewed Studies

Research Articles: Academic journals often publish studies quantifying the economic impacts of climate change on agriculture in specific developing countries or regions. A study published in *Nature* estimates that climate change could cause a 17% reduction in maize yields in Southern Africa by 2050.

Meta-Analyses: Synthesize findings from multiple studies to provide broader insights. For example, a meta-analysis in *Global Food Security* suggests that, on average, climate change may reduce staple crop yields by 8% in developing countries by mid-century.

Research Methodology

To assess the economic impact of climate change on agriculture in developing countries, the following steps outline the research methodology:

1. Data Collection and Preprocessing

Secondary data will be gathered from the sources mentioned above, focusing on agricultural production, GDP contribution of agriculture, climate data (temperature and rainfall), and socio-economic indicators such as rural income and food security.

The data will be cleaned and prepared for analysis, ensuring consistency in time periods and geographic coverage.

2. Econometric Models

Panel Data Analysis: A panel data model will be employed to analyze how climate change impacts agricultural productivity over time across different countries or regions. This model will account for both cross-sectional (across countries) and time-series (over time) data.

Time-Series Analysis: This will be used for countries with available long-term data to assess how changes in climate variables have affected agricultural productivity over several decades. The analysis will examine trends in agricultural output before and after significant climate events or gradual climate changes.

3. Impact on Food Security and Poverty

Using data on agricultural output, food prices, and poverty levels, we will explore the relationship between reduced agricultural productivity due to climate change and food insecurity in developing countries.

Key Indicators:

- a) Changes in food prices (due to decreased supply from agriculture).
- b) Poverty rates in rural areas dependent on agriculture.
- c) Levels of food insecurity as reported by organizations like FAO and the World Bank.

4. Geographic and Sectoral Variation

The impact of climate change on agriculture is likely to differ by region and sector. By analyzing data across different countries and agricultural sectors (e.g., crops, livestock, fisheries), we can examine whether some regions or types of agriculture are more vulnerable to climate impacts than others.

Regional Breakdown: Analyzing data by geographic regions (e.g., Sub-Saharan Africa, South Asia, Latin America) to understand regional differences in climate vulnerability and adaptive capacity.

Key Research Questions

1. How does climate change affect agricultural productivity in developing countries?

This will involve assessing how temperature increases, changing precipitation patterns, and extreme weather events (e.g., floods, droughts) influence the yields of major crops and livestock in different regions.

2. What are the socio-economic consequences of reduced agricultural productivity?

The analysis will focus on how climate-induced declines in agricultural output affect rural incomes, employment, food security, and poverty levels.

3. How do adaptation strategies mitigate the economic impact of climate change on agriculture?

By using data on climate-smart agriculture practices and government policies aimed at building resilience, we will assess how effective these adaptation strategies are in minimizing the economic costs of climate change.

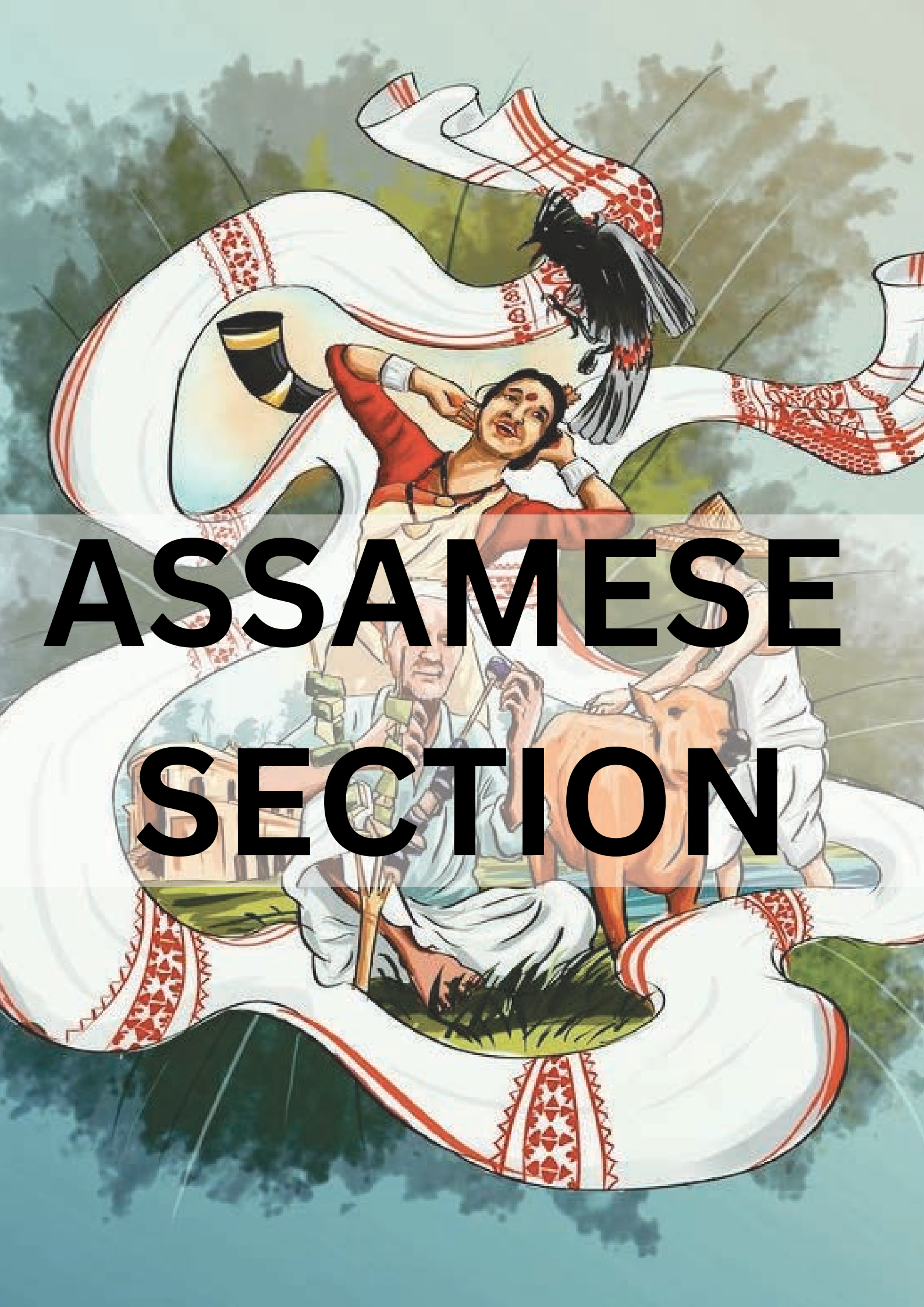
4. What are the future projections for agricultural productivity under different climate change scenarios?

Using IPCC projections, the study will estimate how agricultural productivity may evolve under different emissions scenarios, helping policymakers plan for future risks and opportunities in the agricultural sector.

Conclusion

This research aims to assess the economic impact of climate change on agriculture in developing countries using secondary data from sources like the FAO, World Bank, IPCC, and national agricultural departments. By examining the relationship between climate variables and agricultural productivity, we hope to provide valuable insights into the challenges faced by agriculture in the face of a changing climate and the policy measures needed to protect rural economies and ensure food security in the future.





ASSAMESE SECTION

প্ৰেম

হঠাতে বাছৰ খিৰিকীৰে বাহিৰলৈ উৰি থকা তেওঁৰ উৰণিখন
গভীৰ নীলা...

কি ভাবিছা হয় ঠিকেই মইও নীলাৰেই প্ৰেমিক
পিছে আজি প্ৰেম নীলাখিনিলৈ নহয়
তেওঁলৈ হে আছিল
তেওঁ..... মানে অনামিকা

পৰিচয়ৰ কোনো ঠাই নাই প্ৰেমৰ এই সাগৰখনত
আছে কেৱল মোৰ নীলাখিনি, মোৰ অনামিকা আৰু মই
.... পলকতে তেওঁ যেন মোৰ পৰা আঁতৰি গল
এজাক অচিন বতাহে তেওঁৰ উৰণিখন উৰুৱাই লৈ গল..

কিন্তু অনামিকা এতিয়াও আছে
মোৰ কল্পনাৰ মাজত
মোৰ নীলাখিনিৰ মাজত.....

ফাগুন আৰু তুমি

ফাগুনৰ প্ৰথম বৰষুণজাক
আৰু কাষত তোমাক পোৱাৰ এবুকু হেঁপাহ
শুনিছোঁ ফাগুন হেনো বৰ চঞ্চল
হেজাৰ প্ৰেমিক হেনো বই যায় ফাগুনৰ চঞ্চল বতাহত
উটি যায় হেনো প্ৰেমিক সমাজৰ কিছু ৰঙা ৰং
কত বাকু ৰয় সেইখন ৰঙা নদীৰ সোঁত

বলা এদিন জিকিম জিৰ জিৰকৈ সৰা এজাক বৰষুণত
হাতত ধৰি দীঘলীৰ পাৰত বৈ চাম
উটি ভাঁহি যোৱা প্ৰেমিক প্ৰেমিকাৰ জাঁক
হঠাৎ গৰজি উঠা বিজুলী ধেৰেকণিত
মোক বুকুৰ মাজত সোমাই লবা তুমি
আৰু মই কপি কপি তোমালৈ চাম

প্ৰতি টোপাল ফাগুনে মোৰ তোমাৰ প্ৰতি থকা ভালপোৱাত অস্থিৰতা
জগায়

প্ৰতি বা বতাহে মোক তোমাৰ সুবাসৰ আভাষ জগায়
তুমি তুমি লাগে মোৰ সন্ধানত নমা প্ৰতিটোপাল ফাগুন
জাগিও যেন উজাগৰি এই অসাম্প্ৰিকৰ ৰাতিবোৰ
কেৱল মই আৰু ফাগুন

আৰু তোমাৰ নামত সৰি পৰা আকৌ এটা ৰোমাণ্টিক সপোন ❤️

উজাগৰি

চেনেহী প্ৰীয়তমা মোৰ
প্ৰতিটো উজাগৰী ৰাতি এতিয়া তোমাৰ নামতেই চোন
বৈ যায় মোৰ বুকুয়েদি যৌৱনৰ সেই উন্মত্ত পাগলাদিয়া
তোমাৰ প্ৰতি চাওনিত
ভাঁহি আহে নতুন একোটি ঋতু
ফুলি বৈ তলসৰে ইয়াত অলেখ কেতেকী
বিয়পাই নিব খোজে তোমালৈ মোৰ ভালপোৱা বোৰ
উঁহঃ কি যে অসম্ভিকৰ
বৰ দীঘলীয়া তোমাৰ নামৰ ৰাতিবোৰ
সাৰে আছোঁ মই
সাৰে আছে বিফল কেতেকী বোৰ
আৰু সাৰে আছে মোৰ অশেষ উজাগৰি ৰাতিৰ
তুমি তুমি লগা সপোনবোৰ

DIGITAL DYNAMICS

The World of Fintech and Innovation



The financial world is being transformed by technology, and this new landscape is known as Digital Dynamics. In this dynamic realm, innovation drives change faster than ever before, altering how we save, spend, and invest money.

THE RISE OF CRYPTOCURRENCIES:

The era of digital currencies has begun. Cryptocurrencies like Bitcoin and Ethereum have emerged as new forms of decentralized money, operating independently of traditional banking systems. These digital assets use blockchain technology, a secure, transparent ledger that records transactions. With no central authority controlling them, cryptocurrencies challenge the traditional financial structure and offer new opportunities for investment and innovation.

AI AND AUTOMATION IN FINANCE:

Artificial intelligence (AI) is at the heart of the fintech revolution. From robo-advisors that help investors manage portfolios to algorithmic trading that analyzes market data in milliseconds, AI has made financial services faster, more efficient, and accessible to a broader audience. Automation is also helping banks streamline operations, reduce costs, and enhance customer experiences.

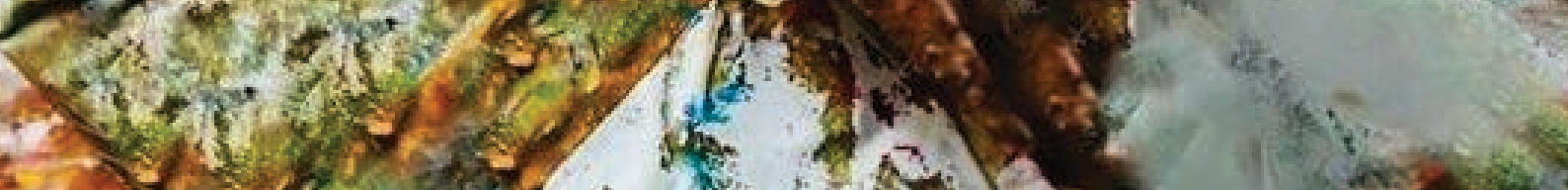
THE CASHLESS ECONOMY:

We are moving towards a cashless society where digital payments dominate. Mobile wallets, online banking, and contactless payments have become the norm, making transactions quicker and more convenient. The rise of fintech apps like PayPal, Venmo, and Google Pay has transformed how we handle money, allowing for seamless and secure digital transactions.

Digital Dynamics represents a fundamental shift in the way we understand and interact with finance. It's a world where innovation is constant, reshaping the future of finance and markets.



ART GALLERY

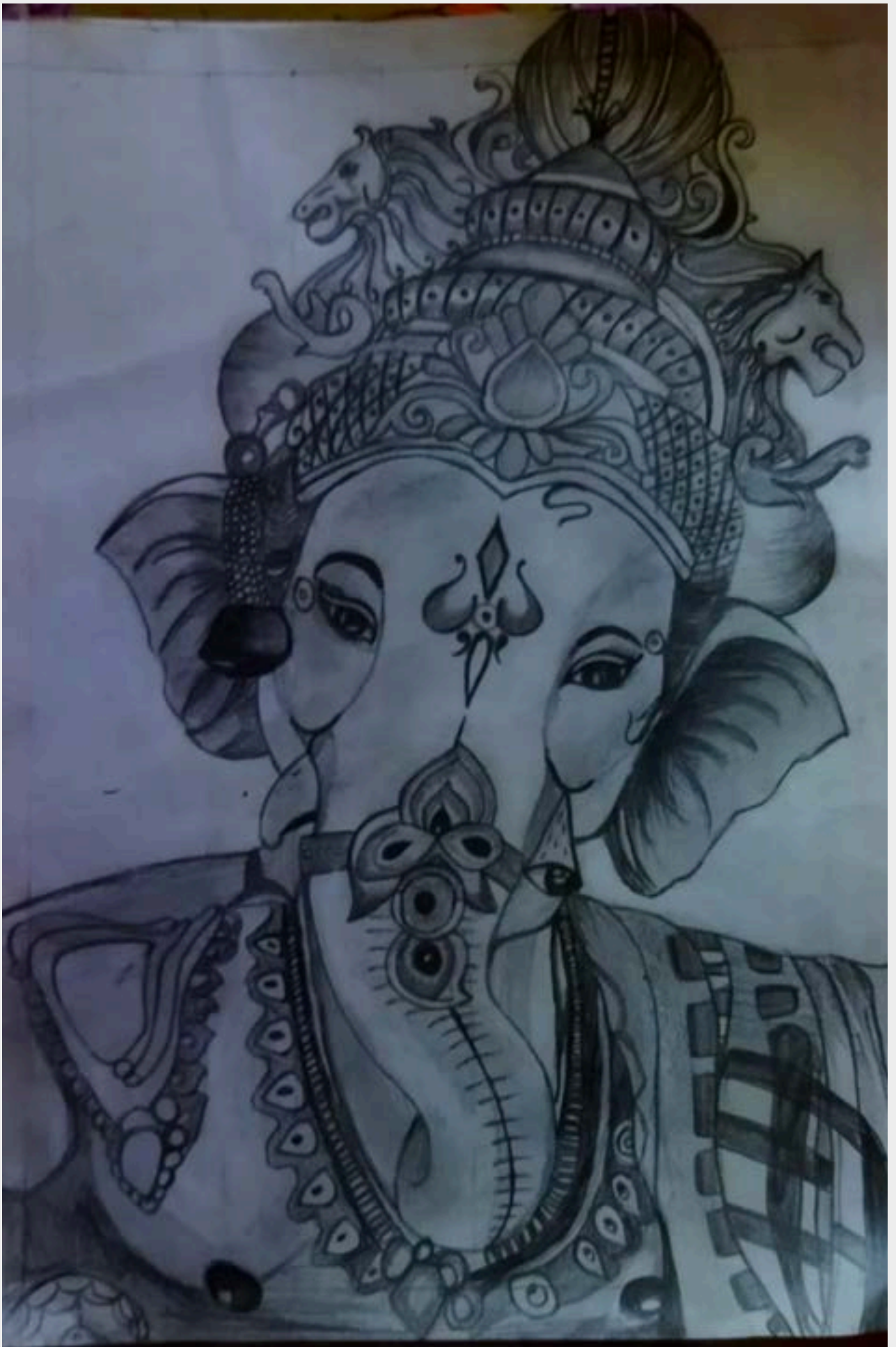




Susmita Barman , 3rdsem



Susmita Barman, 3rd sem



Rituporna Ghosh, 1st sem

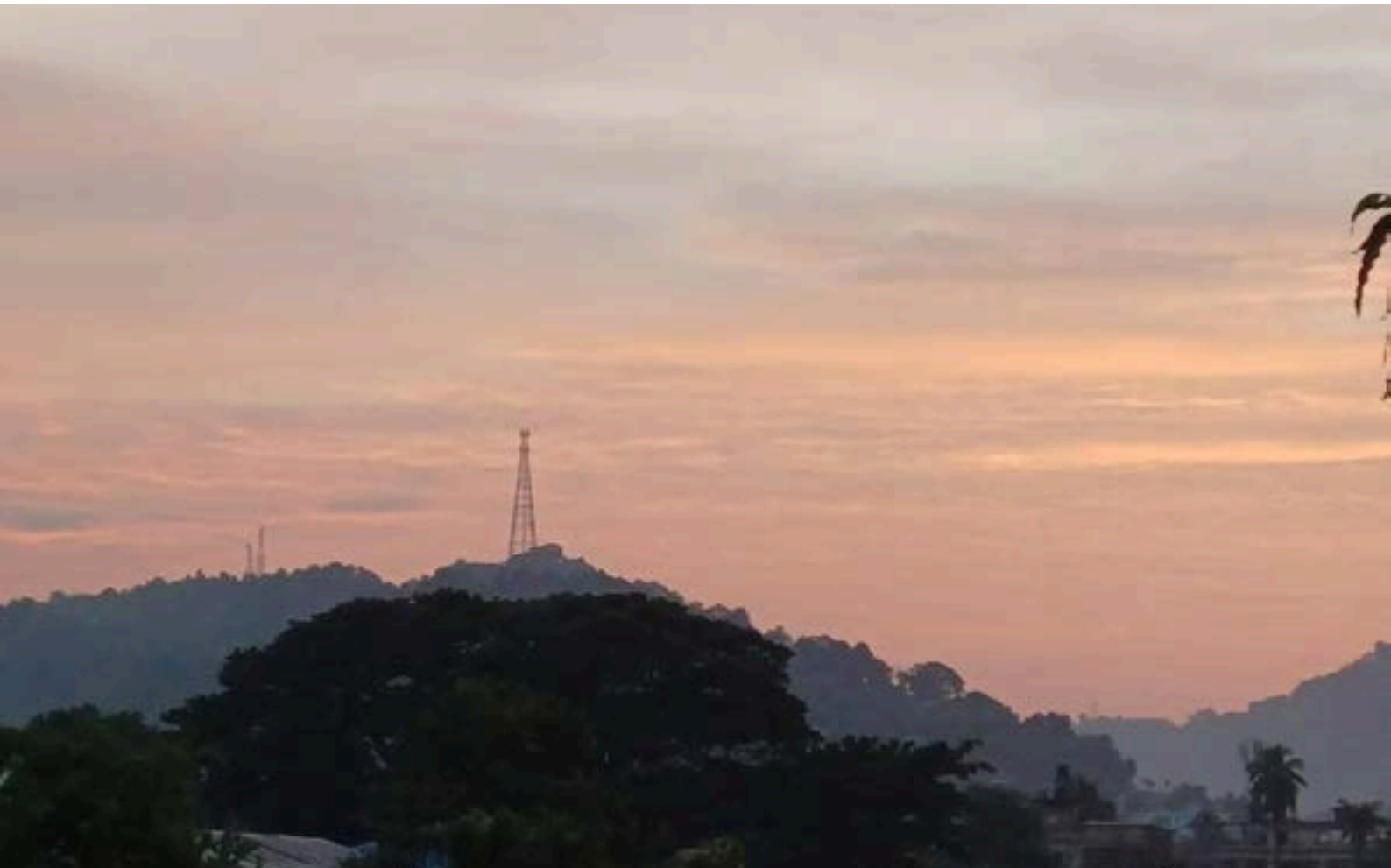


PANORAMA













PHOTO



GALLERY















Guwahati, Assam, India
5p9w+46m, Arya Nagar, Sankarpur, Birubari, Guwahati, Assam
781001, India
Lat 26.16767° Long 91.745259°
08/04/2025 01:37 PM GMT +05:30







THE END
