



3rd Edition

January - February 2022



**An effort by the Department of Economics,
Cotton University**

FORWARD

The Department of Economics takes pride to release the 3rd edition of Artha-Patra, the e-wall magazine. I congratulate the entire team behind Artha-Patra who have been enthusiastically involved, even amidst their hectic academic schedules. ArthaPatra - an initiative by the students, of the students, and for the students, has been instrumental in exploring the hidden talents and expanding the creative horizons of the budding minds.

The third edition is special in itself for two reasons. First, the idea behind releasing it on an important date. Every year since 1993, 22nd March is celebrated as World Water Day by the United Nations. This day has continued as an annual event to increase community awareness about understanding the importance of water conservation. The theme of World Water Day 2022 is 'Groundwater: Making the Invisible Visible. As the popular saying goes, "out of sight is out of mind", this year's theme is an attempt to generate awareness for sustainably managing this hidden treasure under our feet that enriches our lives. As climate change gets worse, groundwater will become more and more critical. I will appreciate it if the readers take out some of their valuable time in learning more about this day and its significance for achieving the Sustainable Development Goals (SDGs), especially SDG 6. Second, this edition highlights the achievements of the students in the Varsity Week, March 2022. The Economics family is proud to bag the prize of third best Department. A shout out at the untiring efforts of the students!

As the mentor of Artha-Patra, my message to you all dear students will be - Unleash yourselves from the shackles of societal pressure and any sort of negativity. Follow your dreams and work passionately to live them. In consonance with this year's theme of World Water Day, discover your potential and exhibit it to the world.

Best Wishes
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WORLD WATER DAY

'Groundwater: Making The Invisible Visible' is the theme of World Water Day 2022, proposed by IGRAC. It will be presented at the opening session of the 9th World Water Forum in Dakar, Senegal on 21st March 2022.

Officially the idea of World Water Day was a resolution adopted by the UN General Assembly conference on Environmental and Development in Rio De Janeiro in 1992. It was then that the United Nations General Assembly adopted a resolution stating that every year, March 22 will be marked as World Water Day starting 1993. And since 1993, this day has continued as an annual event to increase community awareness about understanding the importance of water conservation.



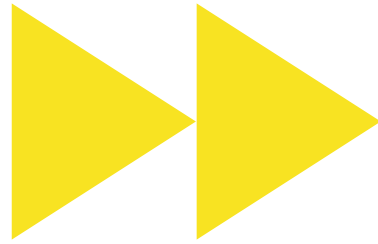
EVERY DROP
OF WATER
CAN SUSTAIN
LIFE & LIVELIHOOD

WATER!!

SAVE
WATER

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What do economists think about water?

Around the world, the importance of water management is growing with increasing risks of climate change, coupled with the expansion of population and urbanization. Contemporary stories of “water wars”- violent clashes over scarce water resources have stirred mixed perceptions among water professionals. Many believe that water shortages are probably or certainly brewing wars. This includes the UN Secretary Generals and the media. Just like the non-renewables like oil, water is perceived to be the focus of international security analyses for its status as a strategic resource, igniting political and military conflicts, especially the Middle Eastern waters. However, the water practitioners and academicians dispel the “water wars” hypothesis calling it a ‘myth’. The myth is propelled by frightening statistics of the water crisis, stressing the supply-side management of water. In 2016, UNEP claimed that by 2030 almost ‘half of the world’s population will suffer from severe water stress. In 2017, UN Secretary-General Ban Ki-moon proclaimed that by 2030 the ‘world may face 40% shortfall in water’. The World Bank has claimed that by 2050, about 1.8 billion people will be living under acute water scarcity. Water scarcity has two variants- physical (supply short of demand) and economic (lack of investment in water infrastructure to meet demand). In contrast, water professionals and academicians emphasize demand-side management of water. This constitutes improved water management practices, water governance, and water pollution conservation measures. This muddled thinking explains why despite having the mighty Brahmaputra flowing through the heart of the city, Guwahatians suffer from water scarcity and Singaporeans do not feel water-stressed, besides Singapore being one of the world’s most water-scarce countries. The answer here lies in water management practices. Similarly, the oil-rich but water-poor Middle Eastern countries have been able to successfully confront physical water scarcity through the use of advanced technologies like desalination- converting saline seawater into potable water; cloud seeding- artificial weather modification technique and other AI-powered techniques, providing a “backstop” technology for water conservation.

These are, however, feasible for wealthy societies. So, who decides who gets water, when, how & why?... These are questions that shift the whole discussion to the discourse of political ecology of water- co-constitution of water and power. Power relations are embedded in the hydrologic cycle. Water is not simply H₂O that flows upstream to downstream. Water flows increasingly in accordance with the flows of capital.

The economic conception of water is very complex. Is water an economic commodity, and does it have an economic value? Is the economic value measured by market price? The answer is highly debated between economists and their critics. First of all, the difference between economic value and market price must be clear. If the market price were to be the yardstick for measuring economic value, it would imply that only the marketed commodities can have an economic value. Goods for which market does not exist- natural environment, and public goods would have no economic value. However, this is not true. The concept of economic value is much broader than the market price, subsuming both use-value and exchange-value. Adam Smith's famous water-diamond paradox aptly clarifies this puzzle: water, the most precious gift of nature has the greatest value-in-use and little or no exchange value; diamonds, on the contrary, have the greatest exchange value but fetch little or no use -value. Water, the most useful commodity does not have a market of its own and so, it is not directly traded. The emerging concept of virtual water, however, takes into account the water embedded in the production of any commodity that is being traded, thereby, representing the "water footprints". The concept is based on the theory of comparative advantage in trade to realise a balance between water-rich and water-scarce regions. Through trading, water-scarce regions can import waterintensive products from water-rich regions, achieving an economically win-win outcome. Virtual water trade is increasingly popularized as a water conservation method.

Water is everybody's business- a sacred provision by nature and collective responsibility that is to be treated as a free gift. Economists, on the contrary, support the commodification of water just like any other economic good. In fact, one of the four Dublin principles, adopted at the 1 992 International Conference on Water and the Environment, holds that "water has an economic value in all its competing uses and should be recognized as an economic good". If so, this brings us to the next question: is water a public or a private good? The answer is again not a simple one. Water can be treated both as a public and a private good. The free-flowing waters of a river can be called a 'common pool resource' due to possession of rivalry and nonexcludability. However, the same water will become a private good (rival and excludable) if an industry manufactures the river water into bottled water. It is to be noted that the river water does not have a market of its own whereas the bottled water can be sold for a price. Water can also turn into a club good (non-rival and excludable); for instance, piped water connection against a price. Similarly, the water stored in a reservoir is a pure public good (non-rivalry and non-excludability). The complexities related to water have sustained the debate on whether it should be treated as an economic good or not, even between the economists.

Water, when provided through the public utilities is usually undersupplied and when traded in the private market leads to overpricing. This is because there is no charge for the water per se supplied through the public utilities. This results in poor operation and maintenance of the water facilities. Inefficiencies also crop up due to high losses of water during water distribution due to leakages in transmission pipes, caused by both wear and tear and deliberate actions of unscrupulous citizens. Poor reliability, accessibility, and service delivery of public water utilities are causing water poverty among the masses. The authorities look for new sources of water to meet the demand-supply mismatch, without proper management of the existing sources. Such supply-oriented measures have generated additional problems of groundwater depletion as no stringent regulations are applicable for extracting groundwater. This has exacerbated private borewell pumps and the informal, expensive private tanker market of water. The prevalence of intermittent water supply is so high that most people have normalized it and are, therefore, not motivated for a 24*7 water supply. For a 24*7 water supply system, a well-managed transmission and distribution system is a must for the availability of water on tap throughout the day at adequate pressure and quality. This means water tariffs need to be assigned that are of two types- a volumetric tariff, where water metering is applied and a flat rate, where no metering is applied. A combination of the two is called a two-part tariff, a pricing technique comprising per unit of consumption charge and fixed charge depending on the diameter of the water connection. Volumetric tariffs are again of two types uniform (single periodic fixed charge) and increasing (single periodic fixed charge plus volumetric price increasing with water use) or decreasing (single periodic fixed charge plus volumetric price decreasing with water use) block volumetric price.

It is essential to realise the economic value of water for securing the water-food-energy nexus of the global population. There is no denying the fact that climate change is for real. Effective mitigation and adaptation to climate change require increasing awareness among the people about adequate water management. The role of the authorities in framing pro-climate policies is immense. Water holds a special distinction in our fight towards climate change and thus, there is the need for a reimagining of water as a resource.

Tanushree Baruah
Assistant Professor
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The Importance of a Ground

A big patch of land with no tree or infrastructure on it is generally referred to as a ground or field. This ground, although not much recognized by people, plays a huge role in uplifting the life of a neighborhood or community. This barren piece of land brings with it the possibility of celebration of an event, a festival or some domestic function.

Nowadays, when population is rising so fast and cities are expanding, the houses and domestic backyards are congested and, in most cases, are absent. Because of this, people search for some open space to walk around, to play with their small kids, to have a walk with their dog, or even to spread a sheet and sit down on open ground. Children need space to play cricket, football, volleyball or any such sports. Those who have small houses or are living in rent can use these open grounds for events like marriage ceremonies, birthday parties or feasts. These open grounds are also a must for festivals like Bihu, Durga Puja, Kali Puja, etc. Also, during construction work nearby, people can use these fields for storing bricks, cement and other items.

But nowadays, due to increased urbanization, people are not willing to keep any open ground for the above purposes. In the absence of these grounds, a society as a whole faces many problems. The small kids and old people now do not have any place to play or walk, marriage ceremonies and feasts are mostly handled by halls which charge a large amount of money which was otherwise null or at a negligible rent. Festivals like Bihu or Durga puja are either not celebrated, and if they are celebrated, then it is on the road, hampering the passers-by. If we start to count, then we will get a long list of how these grounds are important and how the absence of these grounds is hampering the society.

As a student of economics, I personally feel that the biggest reason for people not holding a big piece of land as an open field is due to the low productivity. Although all are willing to use a ground, no one is willing to pay its rent. Thus, owners choose to make housing or a shopping complex in such land instead of keeping it as an open ground. In such a case, I feel the government needs to step in. The government can create some social committees and allot them some grounds, along with proper funding. These committees can charge a minimum rent from people who use the grounds and can, thus, maintain the ground.

A ground can help the society in many ways. So, people should understand the value of these grounds. Although creation of a ground is very difficult, maintaining and protecting it is not. Such grounds will only exist if the society has an attachment to it and if the people willingly care for and utilize these grounds. Only then, these grounds will continue to serve us and uplift our lives.

WOMEN IN ECONOMICS

Sweta Singhal
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Every year, 8th March marks what we know as International Women's Day. This day is celebrated globally with a lot of enthusiasm to celebrate women and all that they stand for while also propagating the idea of gender equality and full participation of women in all spheres.

However, have we ever, as students of economics, cared enough to know about the women who have left their impressions on the subject? Further, the fact that women are actually under-represented and are hardly found as substantial authorities in economics reflect the bias that exists even today in this male-dominated subject and profession.

So, today, let us familiarize ourselves with a few female economists who have been or are connected to the subject, fully or to some extent.



MARY PALEY MARSHALL

Shown here:
Mary Paley Marshall

We have all heard of Alfred Marshall, the noted economist. But how many of us know about his wife, Mary Paley Marshall? Mary Marshall was one of the first women to take the Tripos Examination, which is an undergraduate level examination, at Cambridge University. However, she was excluded from receiving a degree, simply because she was a woman. She went on to be a lecturer in Economics at Newnham College, a women's college under Cambridge, in 1875 and later on, became engaged to Alfred Marshall. Mary and Alfred Marshall, together, went on to write the book, "The Economics on Industry" which was published in 1879. However, Alfred Marshall ended up disliking the

book because of which it eventually went out of print. It is also believed that Mary Marshall might have done some amount of work in Alfred Marshall's theoretical work, "Principles of Economics", but only Alfred Marshall has been cited as the author. Mary Marshall was also held in high regard by John Maynard Keynes who considered her an intellectual and thinker, as significant as her husband. She continued teaching till 1916 and after the death of Alfred Marshall in 1924, she became honorary librarian at the Marshall Library of Economics at Cambridge. She worked there for nearly twenty years, gradually retiring before her death on 19 March, 1944 .



ANNA KOUTSOYIANNIS

Shown here:
Anna Koutsoyiannis

7 Anna Koutsoyiannis was a Greek-born British micro-economist. She was also a renowned scholar and author. She was awarded a PhD by and took her first teaching job at the University of Manchester in the early 1960s. From 1962 to 1968 the author taught in Greece at the University of Thessaloniki, and the Graduate School of Business Studies, Athens, and was Senior Project Director at the Centre of Planning and Economic Research, Athens. She also joined the Department of Economics at Waterloo as a visiting professor in 1974 where she received the "Distinguished Teacher Award"

in 1978. Professor Koutsoyiannis has made substantial contributions to the subject of economics, publishing research monographs and papers in several fields of that discipline. She has written two outstanding textbooks "Theory of Econometrics" and "Modern Microeconomics" which have been adopted at many of the best universities around the world.



ELINOR OSTROM

Shown here:
Elinor Ostrom

Elinor Ostrom was the first woman to win the Nobel Prize in Economics. She was awarded the Nobel Prize in Economics for her "analysis of economic governance, especially the commons" in 2009. She is recognized as a distinguished American political economist and her work is associated with the New Institutional Economics and the resurgence of political economy. Ostrom is probably best known for revisiting the so-called "tragedy of the commons" - a theory proposed by biologist Garrett Hardin. A possible alternative to the tragedy of the commons (shared needs) was described in Elinor Ostrom's book

Governing the Commons: The Evolution of Institutions for Collective Action". In contrast to the prevailing rational-economic predictions of the tragedy of the commons, she showed cases where humans were not trapped and helpless amid diminishing supplies.



GITA GOPINATH

Shown here:
Gita Gopinath

9 Gita Gopinath is an Indian-American economist. She is the First Deputy Managing Director of the International Monetary Fund (IMF) since January 2022. She was also the first female chief economist in the history of International Monetary Fund, serving under that position from 2019 to 2022. Along with that, she has had a two decade long career as an academic. At the economics department of Harvard University, she was the John Zwaanstra Professor of International Studies and Economics. As part of her many significant initiatives, she co-authored the “Pandemic Paper” on how to

end the COVID-19 pandemic that set globally endorsed targets for vaccinating the world. This work led to the creation of the Multilateral Task Force made up of the leadership of the IMF, World Bank, WTO, and WHO to help end the pandemic and the establishment of a working group with vaccine manufacturers to identify trade barriers, supply bottlenecks, and accelerate delivery of vaccines to low- and lower-middle income countries. Gita Gopinath was also named amongst the “25 most influential women of the year”, in 2021, by the Financial Times. She was named one of the “top 25 economists under 45” by the International Monetary Fund in 2014.

GENDER BUDGETING

With the growing need for gender equality in all spheres of society, gender budgeting is turning into a substantial tool for ensuring gender equality that the benefits of development can be availed by women just as much as men in order to overcome gender disparity.

The preparation of budgets or analysis of budgets from a gender perspective has been termed as Gender Budgeting. It is also referred to as gender-sensitive budgeting and it does not entail dividing budgets for women. The aims of gender budgeting include dealing with budgetary gender inequality issues, including gender hierarchies and the discrepancies between the salaries of men and women. Gender budgeting can be specified as a gender status policy and a class-based policy. As a “gender status policy”, it is able to do away with power hierarchies that have granted privileges to men and have devalued the contributions made by women. As a “class-based policy”, it visualizes the sexual division of labor and exposes the consequent economic and social marginalization that have been imposed on women. Gender budgeting exposes such inequalities. It sets the stage for the equalization of the status of women with the help of the advancement of resources and civic rights in order to facilitate better access to services that have been funded by governments.

Gender-Budgeting in India : Recent Perspective

India's economy has been returning to growth since the last few months, with a substantial decrease in the rate of COVID-19 cases and deaths. The recovery is going to gather pace with improvement in consumer spending. The budget for 2021-22 is expected to act as an impetus for recovery for the vulnerable communities; especially women, given the pandemic's negative impact on their lives and livelihood. As accounted through multiple sources, women have suffered from high levels of job losses, the disproportionate workload of unpaid care work and in some cases, a greater incidence of domestic violence, during the pandemic. The Gender Budget 2021-22, which has been presented as part of the Union Budget, has provided opportunities to focus on addressing some of the issues faced by women, which have been further aggravated by the pandemic.



India presented its 16th Gender Budget since 2005-06 to feature schemes as well as spending for benefiting women and for reducing gender inequality. Overall, the gender budget has gone up in absolute numbers to INR 1,53,326.28 crores (2021-22 actuals) which is approximately 4.3% of the total budget, from 2020 - 21 budget estimates. The Gender Budget has two parts:

- (1) Part A - Spending for 100% women-specific programmes
- (2) Part B - Spending on programmes where at least 30% is for women.

Some of the allocations under Part A of the gender budget have been on previously announced schemes such as Nirbhaya Fund, Saksham Anganwadi and Poshan 2.0, Samagra Shiksha, etc. However, the major concentration of the budget was also to make allocations for reducing the impact of the pandemic that has worsened the conditions for women. For this, measures for the allocation of assisting women to work in all categories as well as in the night-shifts, with protection, is a major step in bridging the gap that has been created by the pandemic. Women working across sectors like IT, ITeS, manufacturing and retailing will benefit from this allocation as the country opens up.

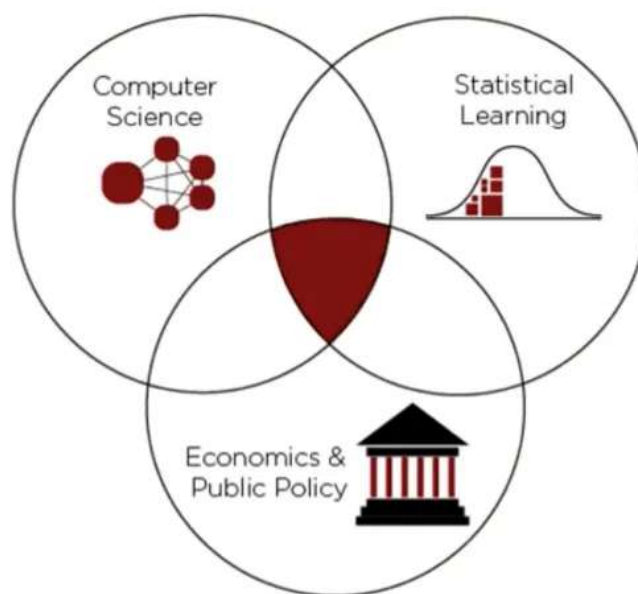
Beyond the gender budget, the textile/apparel industry, which employs ~1.5 million, of which about 60% are women, was one of the worst hit industries during the pandemic, given the lack of operations and demand. This industry has now received a stimulus with the announcement of seven "Mega Textile Parks". This is expected to help women who have lost their jobs during the pandemic and it will also revive their incomes. Further, investments have been announced for the promotion of gig and platform workers which will also go on to benefit women since they are an important part of the informal workforce in India.

Thus, the gender budget and some of the allocations beyond it are expected to assist women to recover and grow with the help of the generation of economic opportunities for them. Also, the gender budget in India continues to evolve along with the learnings and recommendations year-on-year, as a fiscal tool to bridge the gender divide.

Ashim Nath
Batch of 2016 - 19
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DATA SCIENCE AND ECONOMICS

Throughout history, economics as a discipline has brought about many changes in the lives of people around the globe. It is a branch of social science that deals with production, distribution and consumption of goods and services. Over several decades, economics, as a discipline, has evolved itself and a greater emphasis has been put towards empirical work. Economists make use of newly available large-scale government data or private sector data, that are often obtained through collaborations with private firms, giving rise to new opportunities and challenges. With the emerging field of “data science”



that combines, statistics, mathematics, probability, economics, programming, machine learning, etc., it is helping to create economic models with greater precision and accuracy. Data science is a vast field with wide scope of applications in other fields of research. From health sector to banking corporations, data science is being used to create and evaluate models, which is helping to transform their management very efficiently. Data science plays a key role in many companies as they are using data science and associated technologies to make the environment completely digital.

With the advent of “big data”, various economic projects and other tasks are being done with greater accuracy of economic models, thus allowing policy makers, companies, etc. to put more stress to collate and analyze data from various concerned sources to achieve better results. Big data carries with it the opportunity to change business model design and decisionmaking with emerging power of data analysis.

Industries are using new kind of strategies to attract customers based on their income and purchasing behaviour. Using RFM (Recency, Frequency and Monetary) method through clustering algorithms for customer segmentation is super useful in understanding the responsiveness of the customers and for segmentation driven database marketing. Some examples of interesting new big data sources that are very useful for economic forecasting and now-casting are: credit/debit card transactions, retail consumer scanner price data, traffic sensors, satellite images, real-time news, and social media data. Scanner price data and card transactions provide information about consumers, which, in turn, offers the possibility of better understanding the actual behaviour of macro aggregates such as GDP or inflation.

Satellite images and traffic sensors are being used to monitor commercial vehicles, ships, and factory tracks, making them potential candidate data to now-cast industrial production. Real-time news and social media can be employed to proxy the mood of economic and financial agents and can be considered as a measure of perception of the actual state of the economy and this can be usually done with the help of Natural Language Processing (NLP).

With all that said, there are also some important challenges that needs to be addressed. The most important one is developing methods for researchers to access and explore data in ways that respect privacy and confidentiality concerns. This is one of the major issues in working with both government data and private firm data. Other challenges include developing the appropriate data management and programming capabilities, as well as designing creative approaches to summarize, describe, and analyze huge and relatively unstructured datasets. Despite these challenges, the next few upcoming decades are likely to be a very exciting phase for economic research.

Dhiman Baruah
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Evolution of Digital Payments in the Post-Demonetisation Era



From the time of the barter system to the age of digital payments, it has been a long journey. The barter system consisted of the exchange of goods for other goods. As economies developed, people began to use money as the medium of exchange. Money began to be used to buy and sell goods. Thus, a single transaction under the barter system was split into two under monetary economy.

Today, it is the age of digitalisation. The purpose of digitalisation is to enable automation, increase data quality and collect and structure all data so that we can apply advanced technologies. The effect of digitalisation can be felt in every sphere, be it education, health, finance, etc.

The traditional system of monetary exchange has undergone fundamental changes due to digital revolution. Though digitalisation of monetary system started far back, yet, it gained momentum only after the demonetisation of ₹500 and ₹1000 currency notes on 8th November 2016. As a result of demonetisation, people started shifting towards cashless transactions. There was a huge surge in the usage of digital modes of transaction. Demonetisation, thus, led to the rapid evolution of digital payments.

The first step towards moving to the cashless mode was the introduction of credit and debit cards. Although credit and debit cards were introduced more than three decades ago, their adoption and use is still slow.

The cash economy in India was largely disrupted as a result of demonetisation. Thus, there has been a rapid growth of cashless payment options in the recent years. Some of them are NetBanking, UPI, mobile wallets, etc. Mobile wallets like Paytm, Google Pay, Phone Pay, Mobikwik, etc. have become the forerunners of the digital payments industry. These modes of cashless payment have penetrated even in small businesses which have largely helped them during the pandemic period.

Though digital payments seem advantageous in many fields, yet they are not free from drawbacks. The use of digital payment systems call for the need of internet connectivity which is still a myth in remote rural areas. Internet connectivity is not satisfactory in urban areas too. Moreover, there are cyber security threats. There is always a fear of leakage of passwords and other personal information as well as bank account details.

The Government of India has undertaken many schemes to promote the use of digital payment platforms among the people. Bharat Interface for Money (BHIM) is an Aadhaar based mobile payment application launched by the Government of India to promote cashless payments. Recently, the Reserve Bank of India (RBI) has issued a framework for allowing offline payments up to ₹200 per transaction subject to an overall limit of ₹.2000. This has been seen as a boost to promote cashless transactions even in areas without internet connectivity.

According to government reports, India has witnessed a five fold growth in digital payments from Rs.1004 crores in 2016-17 to more than Rs.5500 crores in 2020-21. Though there has been a huge expansion in the usage of digital payment systems in the country, still a large volume of transactions are made in cash. We can, however, expect that digital payments will experience a great rise in the years to come.

Abhilash Goswami
UG 1st Semester
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Born on 3rd November, 1933 Bengal, British India, Amartya Sen is an Indian Economist who has made several key contributions to the research on fundamental problems in Welfare Economics. His contributions range from axiomatic theory of social choice, over definitions of welfare and poverty indexes, to empirical studies of famine. They are tied closely together by a general interest in distributional issues and a particular interest in the most impoverished members of society.


Sen's family was from Wari and Manikganj, Dhaka. It was Rabindranath Tagore who gave Amartya Sen his name. Sen did his school education from Patha Bhavana, Shantiniketan. In 1951, he went to Presidency College,

Calcutta, where he earned a B.A. in economics with First in the First Class, with a minor in Mathematics, as a graduating student of the University of Calcutta. In 1953 he moved to Trinity College, Cambridge, where he earned a second B.A. in economics in 1955 with a First Class, topping the list as well. While Sen was officially a PhD student at Cambridge (though he had finished his research in 1955–56), he was offered the position of First-Professor and First-Head of the Economics Department of the newly created Jadavpur University in Calcutta. He is still the youngest chairman to have headed the Department of Economics. He served in that position, starting the new Economics Department, from 1956 to 1958.

Welfare economics seeks to evaluate economic policies in terms of their effects on the wellbeing of the community. Sen, devoted his career to such issues. Sen has emphasized that what creates welfare is not goods as such, but the activity for which they are acquired. According to this view, income is significant because of the opportunities it creates. But the actual opportunities - or capabilities, as Sen calls them - also depend on a number of other factors, such as health; these factors should also be considered when measuring welfare. Sen's work in the field of development economics has had considerable influence in the formulation of the "Human Development Report", published by the United Nations Development Programme. This annual publication that ranks countries on a variety of economic and social indicators owes much to the contributions by Sen among other social choice theorists in the area of economic measurement of poverty and inequality.

Moreover, Sen made immense contribution regarding study of Poverty & Famine and its root causes. Sen devised methods of measuring poverty that yielded useful information for improving economic conditions for the poor. In 1981, Sen published Poverty and Famines: An Essay on Entitlement and Deprivation (1981), a book in which he argued that famine occurs not only from a lack of food, but from inequalities built into mechanisms for distributing food. Sen's interest in famine stemmed from personal experiences, as a nine year-old boy, he witnessed the Bengal famine of 1943.

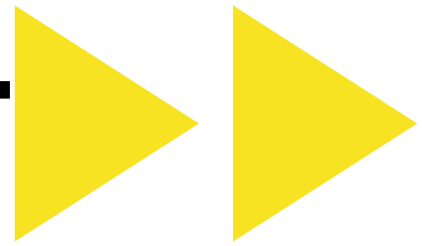
Amartya Sen has made a number of noteworthy contributions to central fields of economic science and opened up new fields of study for subsequent generations of researchers. By combining tools from economics and philosophy, he has restored an ethical dimension to the discussion of vital economic problems.



**THE SVERIGES
RIKSBANK PRIZE IN
ECONOMIC SCIENCES IN
MEMORY OF
ALFRED NOBEL**

Bhabarnav Das
UG 3rd Semester
Department of Economics
Cotton University

DEPARTMENTAL ACTIVITIES



FEATURES

1. Panel discussion on Union Budget 2022-23	17
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Panel Discussion on Union Budget 2022-23

**Organised by-
Department of Economics, Cotton University**

**Date: February 11, 2022 Time: 11:00 AM
Venue- Room No. 311, MCB Building**

**Speaker- Professor Joydeep Baruah, (KKHSOU)
Dr. Amiya Kumar Sharma, (Executive Director, RGVN)**

**Moderator: Dr. Gautam Mazumdar (Associate
Professor, Dept.of Economics, Cotton University)**

The discussion on the Union Budget of 2022-23 was attended by 60 students as well as faculty members of Cotton University. The discussion was hosted by Prof. Tanushree Baruah, Assistant Professor, Department of Economics with a welcome note and introduction of Dr. Gautam Mazumdar, Associate Professor, Department of Economics, Professor Joydeep Baruah, KKHSOU and Dr. Amiya Kumar Sarma, Executive Director, RGVN.

The discussion on Union Budget was an informal session. All of them enthusiastically presented an overview of the budget and there was an open questions session for the speakers.

Gautam Mazumdar, the moderator, described the budget as pragmatic and growth oriented, which gives rise to capital expenditure and increases purchasing power, which will ultimately increase consumption expenditure. He mentioned that a k-shaped recovery in the economy is taking place.

The moderator proceeded the discussion with the speakers and they gave their responses to the questions asked by the moderator and the audience.

Professor Joydeep Baruah's Response to the Budget

Professor Joydeep has mixed views about the budget. According to him, this budget lays the foundation and gives a blueprint for steering the economy to Amrit Kaal From India@75 to India@100. However, the budget seems to be ignoring some fundamental macroeconomic issues. Although growth is predicted to be 9.2%, but revenue expenditure is much low (4%). It is being observed that the total factor productivity of working population is increasing but wages are not increasing accordingly.

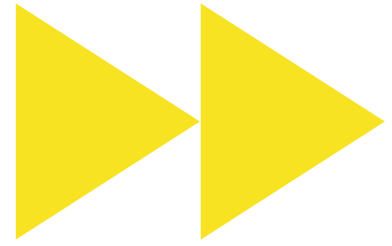
Professor Joydeep was much concerned about the inequality prevailing in the society which is characterized by demand depressing forces. He mentioned that because of poverty and unemployment, India is struggling. He concluded his discussion with the fact that this budget is more growth oriented but does not talk about distribution.

Dr. Amiya Kumar Sarma's Response to the Budget

Dr. Amiya Kumar Sarma expects that the budget will tackle the problems of farmers and the lower sections of the society. There is much emphasis on the digitalization of the economy. He also raised his concerns about poverty, inflation and unemployment. According to him, the increase in capital expenditure (7.5 lakh crore) will lead to a long run growth in the economy and it will address the issues of unemployment and poverty to some extent.

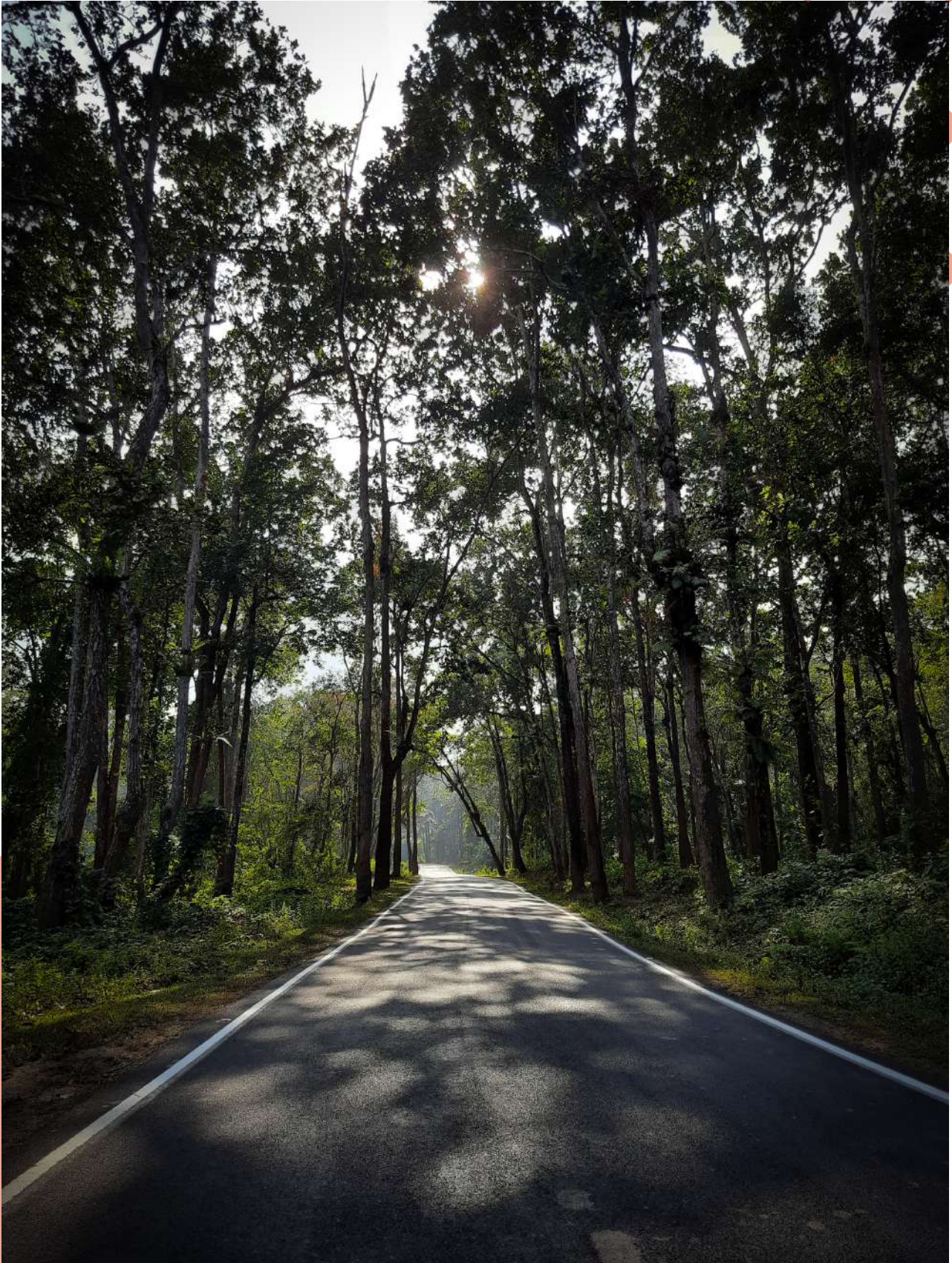
The session ended with a vote of thanks by Professor Tanushree Baruah, Assistant Professor, Department of Economics, Cotton University.

PHOTO STORY



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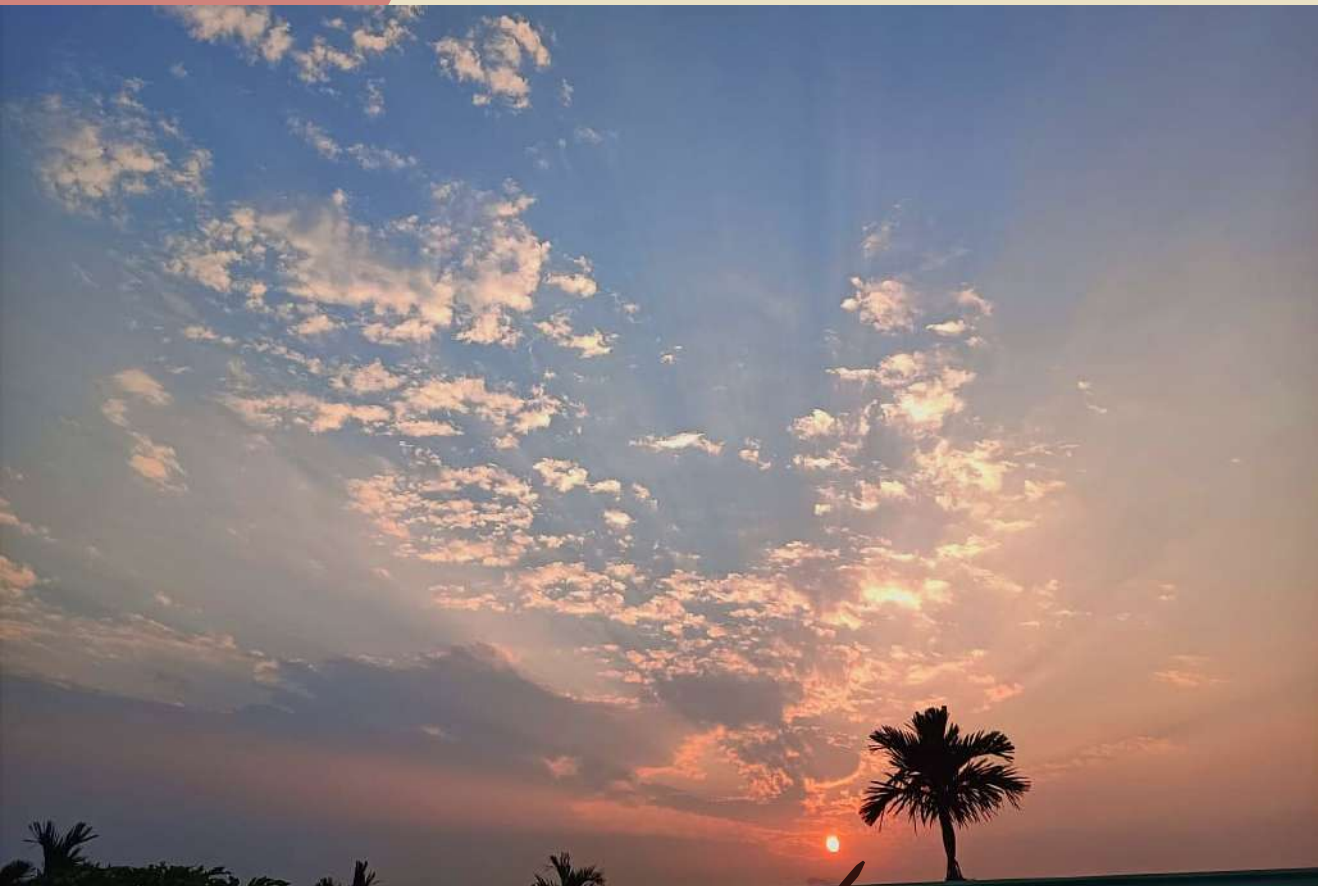
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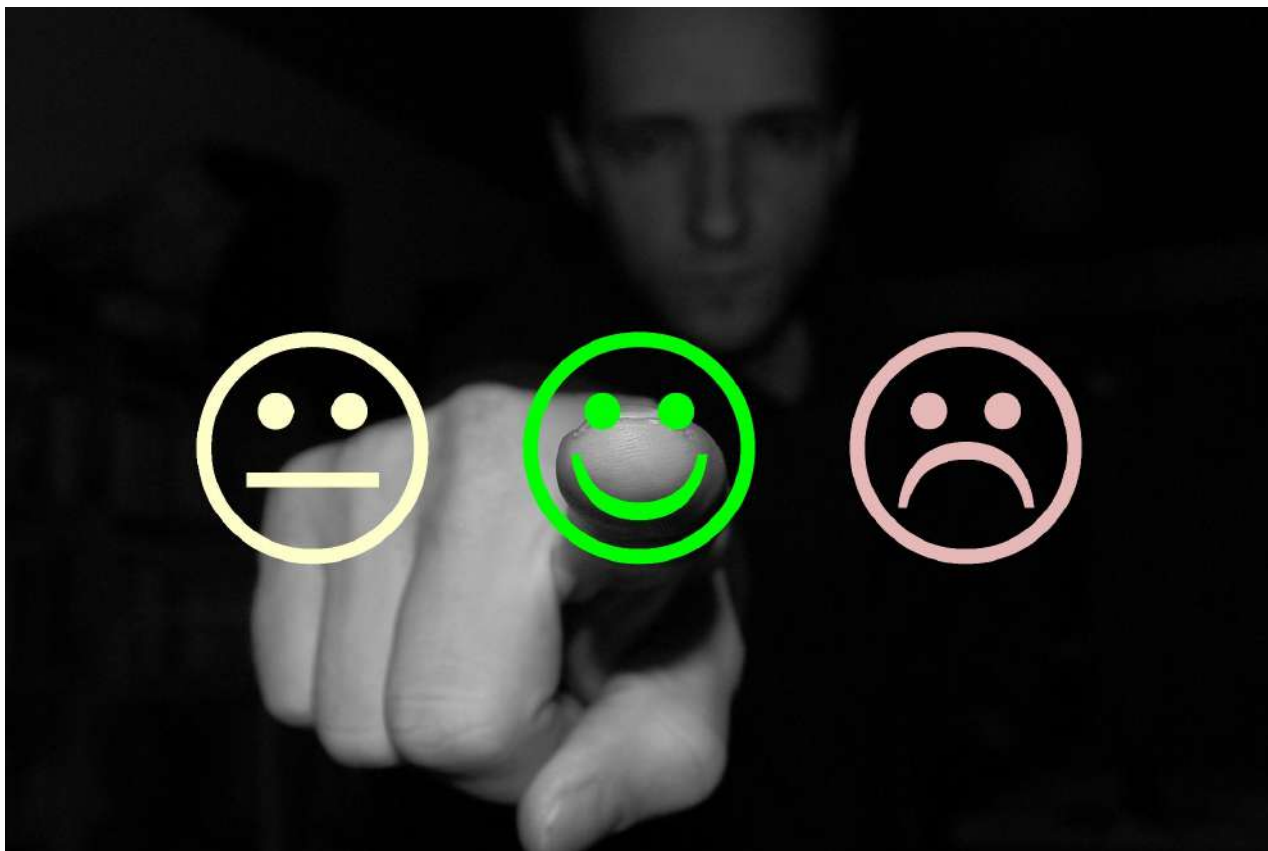
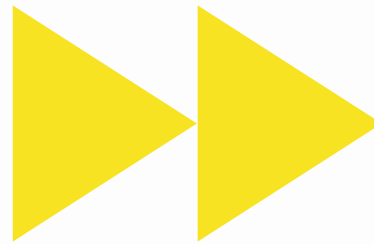


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REVIEWS



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The Martian

Language: English

Director: Ridley Scott

Writer: Drew Goddard

“The Martian” is a faithful adaptation of Andy Weir’s 2011 bestselling novel. With an incredibly fascinating survival story of a man, “The Martian” offers a rigorously futuristic outer-space thrill ride. Despite being a sci-fi, this film incorporates the ideas relating to the rudimentary skill of life: survival. Mark Watney, the lead role played by Matt Damon, is an astronaut who



Mark Watney, the lead role played by Matt Damon, is an astronaut who is left stranded on Mars after a fierce storm hit the spot. Mark and his crew of Ares III were on a 31 sol expedition to Mars. Presuming Mark to be dead after the storm, the crew led by Commander Lewis, heads back to Hermes, the Spacecraft. Now one can picture the frame of mind of a man who has been stranded all alone on a distant, hostile planet. However, relying on his resourcefulness, Mark soon figures out his only chance at survival. The first thing he decides to do is to contact NASA and update them that he is alive. Even if he could communicate with NASA, he has to survive the duration that would be required to reach him, which is about next 500- 550 sols (Mars days), i.e., 565 Earth days. So, he decides to grow potatoes on Mars, inside a lab using bio-wastes. Coincidentally, Mark happens to be a botanist who believes that the one who grows crop somewhere, has officially

colonized that place. So, technically, he has colonized Mars. Finally, after the tireless work of NASA back on Earth, Mark is rescued in Ares IV, by his crew members and they reach Earth after 793 earth days.

Surprisingly funny, thrilling and engaging, “The Martian” imparts the power of hope and perseverance in the film. By trying out all the survival tactics, Mark never gave up during the most hopeless time and at his most hopeless situation. He kept himself sane and entertained by listening to the disco song collections that Commander Lewis had. Devoid of human attachment, Mark started a video diary which recorded all his survival ideas throughout his stay on Mars.

Mark could have never made it back home if he didn’t have this overwhelming hunger to survive. The film is a tale of Mark’s extreme optimism, perseverance and courage. The film brought to light the significance of hope in life, faith in oneself and resoluteness. One must never undervalue oneself and one’s thought process. Rather, one should believe and wait for wonders to occur.

Matt Damon plays a commendable role as Mark Watney, who keeps the viewers fascinated throughout the film. All the supporting actors gave their finest performances across the film. Ridley Scott, the director definitely deserves applaud for such an exceptional movie.

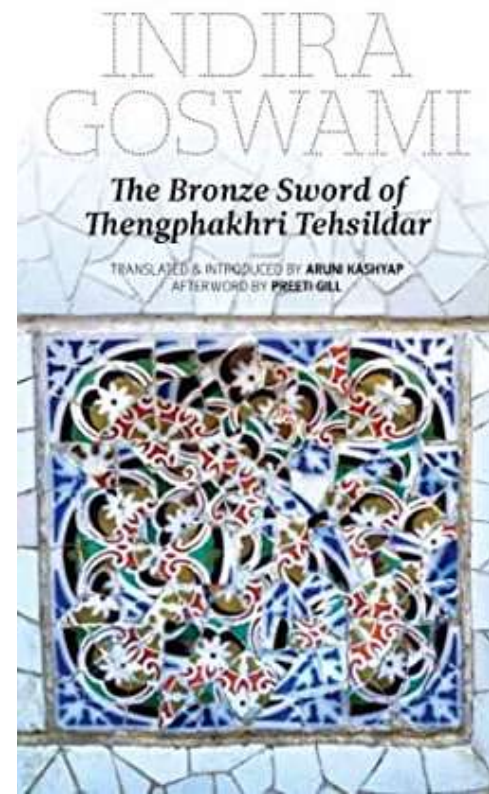
“Everything is going to go south and you’re going to say, “This is it”, “This is how I end”. Now, you can either accept that or you can get to work. That’s all it is.” ~ Mark Watney



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The Bronze Sword of Thengpakhri Tehsildar Author: Mamoni Raisom Goswami

Indira Goswami (14 November 1942 - 29 November 2011), popularly known by her pen name Mamoni Raisom Goswami, was an Assamese writer, poet, professor, scholar and editor. She was awarded with the Sahitya Akademi Award (1983), the Jnanpith Award (2000) and Principal Prince Claus Laureate (2008). She was a prominent writer of newfangled Indian literature and many of her works have been translated into English from her native Assamese which include *The Moth Eaten Howdah of the Tusker*, *Pages Stained with Blood* and *The Man from Chinnamasta*. *The Bronze Sword of Thengpakhri Tehsildar* has also been translated into English by Aruni Kashyap.



The novel is based on the forgotten legendary heroine, Thengpakhri, who ostensibly worked as a Tehsildar during British regime in Assam. The enthralling character of Thengpakhri was a Bodo tribal woman from Assam who was working with the British Officers, shoulder-to-shoulder, as a tax collector. The intriguing image of a lionhearted woman riding a horse, wearing a hat with long, shiny black hair had been set forth in the novel. Thengpakhri galloping across the plains of Bijni Kingdom in lower Assam to revenue circles was too fascinating as at that time, educated Indians, social reformers and the British government were trying to fight misogynistic practices such as sati, child marriage and the purdahsystem and incentivize widow-remarriage. Goswami had always vigorously supported women's causes which is visible in her works and therefore, there is no doubt that Thengpakhri was a figure of inspiration and awe for her. However, the dejected truth is that, until Goswami wrote about her, most people in Assam had not even heard of this extraordinary woman.

Assam had heard of Mula Gabhoru, Phuleswaree Kunwori, Kanaklata Barua but Thengpakhri remained only among memories of some old people, in folk songs, in folk tales that were told and retold. Hence, Goswami's choice to furbish the life of this heroine from historical as well as oral sources may be recognised as a significant intervention into the socio-political life of Assam.

The novel unfolds only three years of Thengpakhri's life from the year 1857 to 1859. When she appears in the first chapter, she is already a loyal British servant. But in the next few years, the surrounding circumstances compel her to change her role to that of an anti-colonial rebel. Goswami's book is engrossed not in the dramatic consequences of her choice, but in this complex,

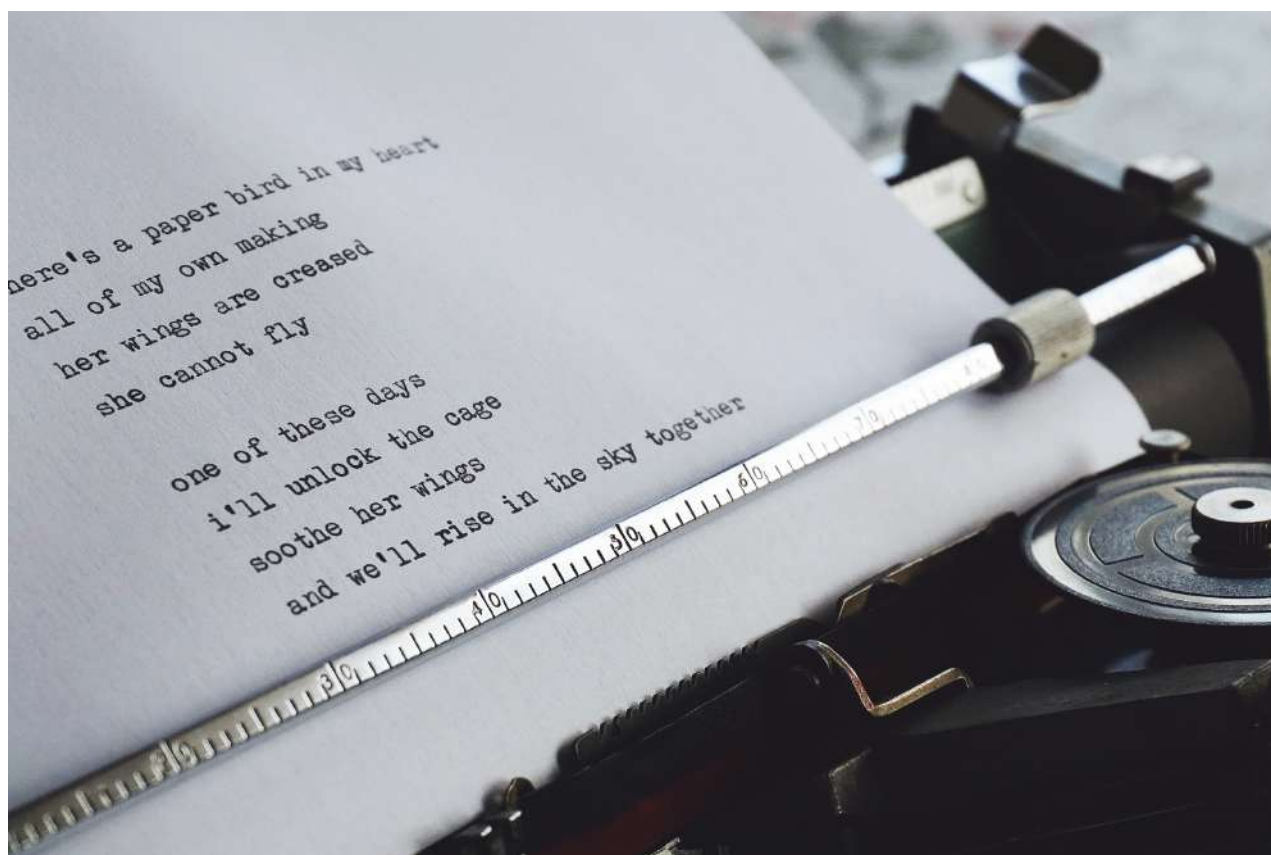
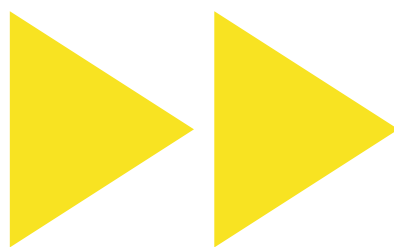
slow transformation. Goswami pens her as a rarely speaking introvert. We only see her in actions. Unlike her previous novels, where the thoughts of characters are very closely portrayed, Goswami took up the formidable task of showing complex emotions of her character only through her actions with very little dialogues to help her.

In 2007, Goswami had visited Bijni where Thengpakhri had lived and worked until her death in 1879 or 1895 (disputed date). Bodo scholars had arranged a symposium to help Goswami at the Bodosa Bhawan, in the presence of a few influential persons in the town. She met an old man there who claimed to have met Thengpakhri. He told Goswami that she used to come to his village, Bogeedara, from her village, Khamoriguri, with a British officer known as 'Naken Sahib'. 'Naken' is an unfamiliar British name, but so are several names mentioned in the novel. Goswami had moored her book on historical research, yet she had to rely mostly on memory and nuncupative evidences.

Though the novel was published as a book in December 2009, it was serialised in the prestigious literary and cultural fortnightly 'Prantik'. While the novel was published in 'Prantik', Assam's media witnessed robust discussion and debates on historical accuracies of Thengpakhri. Indira Goswami laments in her 'Prostavana' that both ancient and modern history writings in Assam have maintained a silence about small kingdoms such as Bijni Kingdom, Kamata Kingdom, Kachari Kingdom of middle and lower Assam regions. These kingdoms had fascinating dramatic history and intriguing royal families. So to speak, Goswami's creative endeavour inaugurates not just the life of a forgotten heroine, but also rejuvenates interest in a previously underrepresented region of Assam's history.

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RIME



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শিপা

পৰিৱৰ্তন!

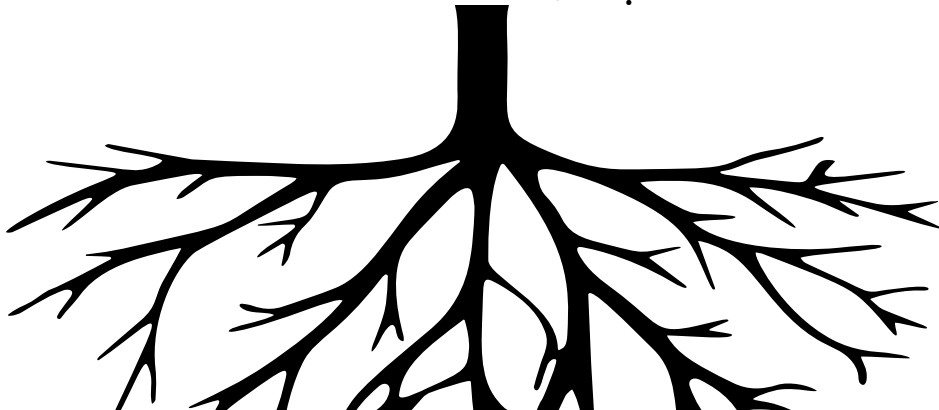
সময়ৰ মেৰপাকত পৰি
সপোনৰ বশৱৰ্তী হৈ
আঁকোৱালি লৈছো পৰিবৰ্তনক।
কিন্তু
পাইছোনে বাক নিজক বিচাৰি?

পৰিৱৰ্তনৰ আৰুঁ কাপোৰ মেৰিয়াই
সভ্যতাৰ মুখা পিন্ধি
আগুৱাই গৈছো আমিবোৰ,
কেৱল আগুৱাই গৈছো।

কিন্তু পাৰিছোনে
পুৰণিৰ হাতত ধৰি নতুনক আকোঁৱালিব?
পাৰিছো জানো
নতুনক পুৰণি লগত পৰিচয় কৰাই দিব?
হয়তো নাই পৰা,
হেৰুৱাই পেলাইছো নিজৰ অস্তিত্ব,
পাহৰি পেলাইছো
এইয়া যেন অস্তিত্ব হেৰুৱাৰ যুঁজ নহয়
নিজৰ পৰিচয় গঢ়াৰ যুঁজ।

জ্ঞান থাকিও

অজ্ঞানীৰ বেশ পিন্ধো আমি,
আগুৱাই যাওঁ সকলো আওকাণ কৰি,
পাৰিম নে কেতিয়াবা শিপা খামোচি আকাশ চুব?
পাৰিম নে কেতিয়াবা অস্তিত্ব ৰাখি
ভিৰত নিজৰ পৰিচয় গঢ়িব?



B A R S

Constantly shaping ourselves for them
Privacy is something we lost long back
Constantly conscious of them judging us
The world through their eyes;
Smiles with an intention, they being the reason.
Are we trapped?

Watching the waves washing the stains I had,
Losing myself to the bars of today, life baited.
From the moments we create, to the emotions we
share,
The memories we plan, to the help we extend.
They reside in everything.
Are we trapped?

Trying to fit in the container;
Eroding values, roots forgone,
We no longer our own.
Yes, we are trapped.

Abhishree Bhattacharyya
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रंग लाल

(1)

माथे पर सजी तेरी बिंदी,
श्रृंगार है तेरे रूप का,
जो हर महीने बेह जाता है,
बेह जाने दे वह लहू,
ये श्रृंगार है तेरे जिस्म का।



(3)

दर्द से जूझ रहा तेरा तन बदन,
साथ हूँ मैं तेरे,
तेरे लिए जागू मैं दिन - रात
क्योंकि थामली तेरा हाथ मैंने,
मैं कोई तेरा आशिक़ नहीं,
हर वह मर्द है,
जो आस - पास है तेरे।

(2)

बूँद बूँद रक्त के,
तेरे शरीर से बेह रही है,
फिर भी तू डटके खरी है,
अपवित्र नहीं,
गंगा से भी शुद्ध है तू,
अछूत जो तुझे केहलाए,
वह सच नहीं,
देवी की मूरत है तू।

Mrinal Saha
B.A. 2017 - 2020 Batch
Department of Economics
Cotton University

A Road Called Life

A road called life, laid on the lands of mortal,
Short as lifespan, long as lifetime.

Cursed by time, ending in a dead end,
Without restart or respawn, but only with moving on.

A road not straight, as fantasised, linear lines.

A road not flattened, like those curves of perfect elasticity.

Oh, but a road with many turns and many bents, confusing as mazes.

Coming with new signs and new hazards, uncertainties in surplus.

Oh, but a road laid with pebbles and stones,

It moves uphill, sometimes falling off to an ebb, like curves of the cycle of trade.

Some speed breakers slowing the pace, giving moments to introspect.

Sometimes, it passes through times blithe.

The radiant flare in sky, illuminating the path.

Ebullient spirit fills you with vigour,

Oh but calm and walk under a shed, beware of sunburns.

Sometimes, the azure over the road become grey and gloomy,

The rains make the road slippery.

Taking each step with care, fearful of breaking my bones.

The road filled with potholes, the puddles mirroring ruminations.

Times of autumn come, the road takes a tired and withered turn,

Trees barren, foliage shed.

Heart in fear, mind speculating failure,

Hesitation in lending capitals of courage.

Sometimes, hardships become companions in your solo journey.

The road get touch of frost, icy and dicey ,

The fog engulfed the ways, mist of pessimism blinded me.


Into uncertainty, with asymmetric information, I walked on.

With a heart fearful of hazards, a mind depressed with failure.

But O as they say "If winter comes can spring be far away".

Assuming an improvement succeeding depression, a hope towards prosperity.

Time passes, and I walked further.

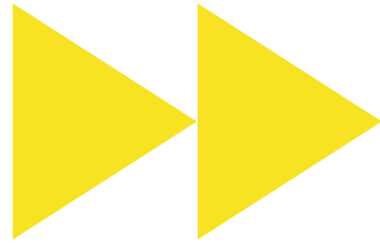


Spring shall arrive, defrosting my road.
The woods shall rejuvenate, road will pass through meadows.
My heart will yearn the transient moment to stay,
Mind reminiscing of years of yore.
But, cursed by time I have to move on,
“Miles to go before I sleep”.
Thus choice I made, in this game of risks,
Thus steps I walked, in this road called life,
Many lanes turned down, heart burned with debt of opportunity costs,
Mind filled with nostalgia, sobs, sniffles and smiles.
Many trade offs I made, choice of present and future, choices inter-temporal.
Praying to the Invisible hand, the forces to align me to path of optimum.
And I moved on this road called life.

*Pritam Banik
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*Picture Credit
Bhabarnav Das
UG 4th Semester
Department of Economics
Cotton University*

PALETTE

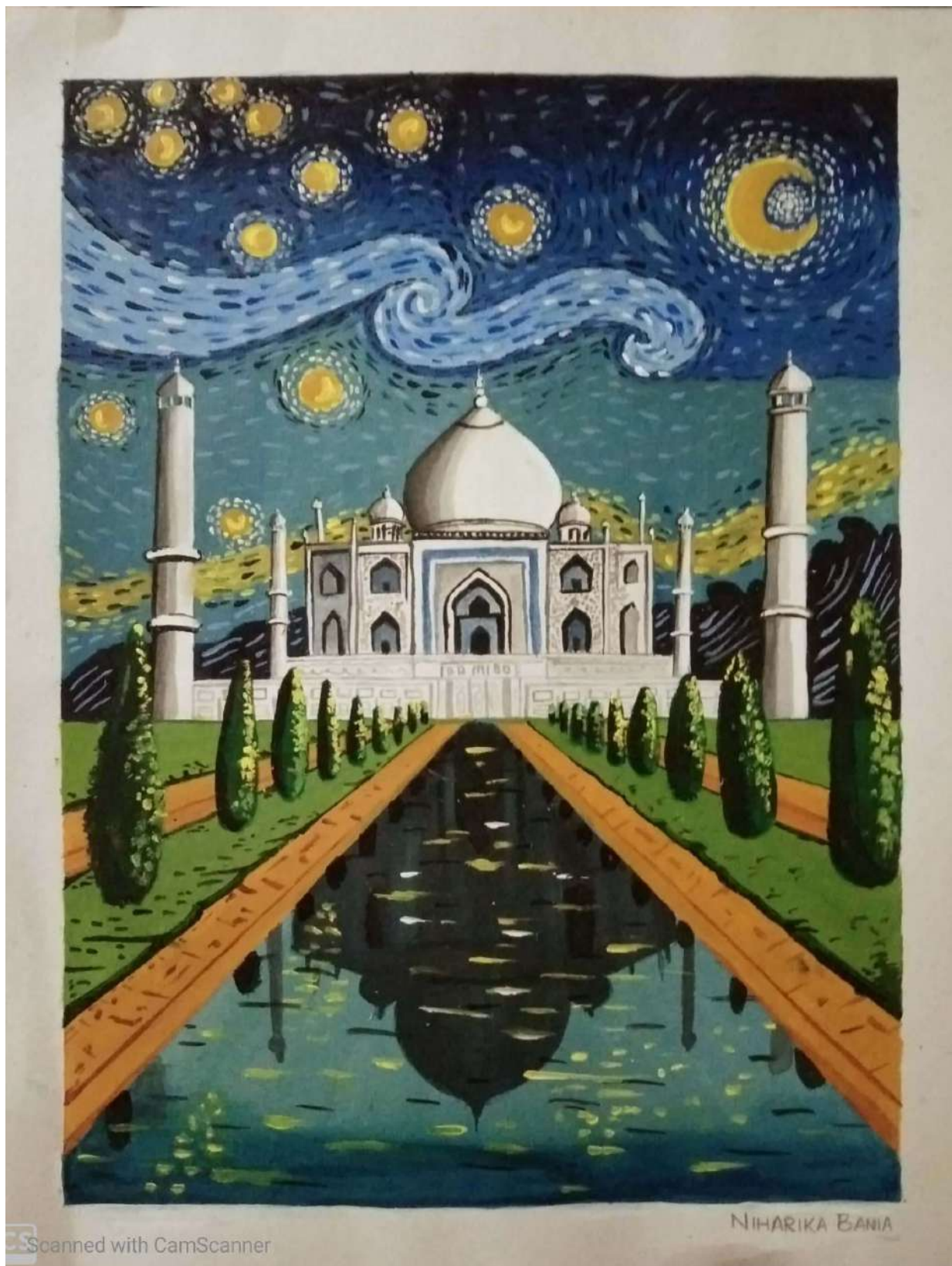


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Richita Basumatary
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Scanned with CamScanner

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Prakash Jyoti Deka
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Himanka Jyoti Nath
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Meher Randhawa
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NEWS

The World in a Headline

- **Kochi becomes first Indian city with water metro project.**
- **National Health Mission launches project “Niramay” in Assam.**
- **Khadi and Village Industries Commission rolls out innovative “Mobile Honey Processing Van”.**
- **Airtel Payments Bank gets scheduled bank status from Reserve Bank of India.**
- **Ministry of Housing and Urban Affairs launched Smart cities and Academia Towards Action & Research (SAAR) program.**
- **World Braille Day is observed every year on 4th January.**
- **Odisha topped in GST collection in 2021, records 43 per cent growth rate.**
- **V. K. Tripathi appointed as Chairman and CEO of Railway Board.**
- **Axis Bank partners with MinkasuPay for seamless net banking experience.**
- **HDFC Bank adjudged as “Best Private Bank in India”.**

COTTON UNIVERSITY
VARSIY WEEK 2022-23
MEDAL TALLY
(DEPARTMENT OF ECONOMICS)



EVENT	POSITION
Kho - kho (Boys)	First
Basketball (Girls)	Second
Kabaddi (Boys)	Second
Basketball (Boys)	Third
Football (Boys)	Third
Volleyball (Boys)	Third



GLIMPSES FROM

**COTTON
UNIVERSITY
VARSITY
WEEK**

2022 - 23



**THE ECONOMICS FAMILY IS PROUD TO BAG THE PRIZE OF
THIRD BEST DEPARTMENT.**





The various prizes won by the Department in Varsity Week 2022 - 23



Above: Basketball (Boys) Team
Below: Volleyball (Boys) Team





Above: Kho - kho (Boys) Team
Below: Football (Boys) Team





Above: Basketball (Girls) Team

Below: Kabaddi (Boys) Team





CULTURAL RALLY



CULTURAL RALLY



CULTURAL RALLY

