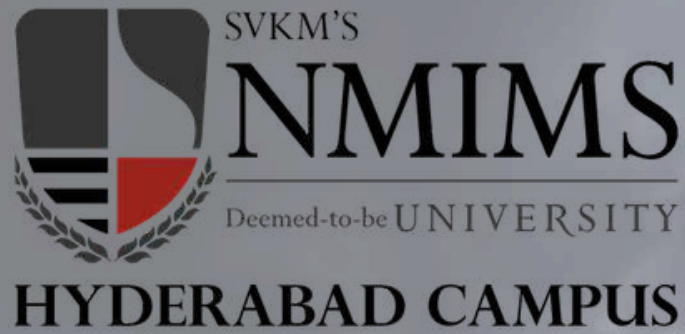




ABHYUDAYA

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PARADOX SERIES-PART 1: Truths that, paradoxically, are not the only truths!!

- Dr. Srividya Raghavan



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As curious researchers, academics must put on the act of “knowing” - knowing “truths” that can guide the next generation. Truth be told (pun intended), Socrates hit the nail on the head hard when he apparently said “The only true wisdom is knowing you know nothing” and Einstein echoed that thought when he said, “The more I learn, the more I realise how much I do not know.” Even more eloquently, Neil Bohr, who identified the foundational structure of matter, has famously said – “The opposite of a correct statement is a false statement. But the opposite of a profound truth may well be another profound truth.”

Distinction between Paradox and closer concepts

CONCEPT	BASIC MEANING	MANAGEMENT IMPLICATION
Paradox	Contradictory, interdependent, persistent elements	Calls for ongoing engagement with tension (Cunha & Putnam, 2019)
Trade-off	Alternatives that may require choosing or sacrificing, but resolvable	Not every tension is best framed as – a choice has to be made (Berti & Cunha, 2022)
Dialectics	Oppositions shaped through movement and conflict	Highlights change, power, and contestation – there is temporal progression and potential for resolution (Berti & Cunha, 2022)
Simple conflict	Disagreement without durable interdependence	Does not necessarily qualify as paradox (Schad et al., 2016)

We spend our entire lives trying to understand the best way to navigate life and we believe that if we knew how the truth about how the world worked, we could perhaps manage our lives better. However, we barely pay attention to paradoxes that we must navigate.

This series of articles aims to delve into paradoxes as a management relevant metatheory. In this article I introduce the concept of paradox theory. In the subsequent articles, the focus would be on paradox theories uncovered in other disciplines, such as logic or psychology, that informs management discipline.

The central idea

“Persistent Contradiction between interdependent elements” is the common definition accepted in management literature (Schad et al., 2016; Cunha & Putnam, 2019). These three main elements – persistence, contradiction and interdependence - distinguish paradox as a phenomenon from basic disagreements, dilemmas and trade-offs (Schad et al., 2016; Berti & Cunha, 2022; Smith & Tracey, 2016).

When viewed separately, paradoxical elements may appear logical, but when they appear simultaneously, they sound absurd. This is why people involved in the context experience them as tension or stress rather than as a routine choice problem. Understanding of such contexts draws quite directly from earlier philosophical and psychological knowledge (Schad et al., 2016).

Application of Paradox theory

Simple decision-making dilemmas for organisations have been defined and discussed quite extensively and solutions have been sought in management and organisational research. Paradox, however, presents a problem that is apparently unsolvable. Spanning across disciplines, Paradox has developed into a meta-theory that helps explain tensions across governance, leadership, and organizational change (Schad et al., 2016). For example, in ambidexterity research, a paradox lens has shifted debate from separating exploration and exploitation toward approaches that seek integration and synergy (Schad et al., 2016). Paradox theory has also been applied leadership, where more effective executives display greater behavioral complexity by enacting multiple, competing roles rather than a single consistent style (Denison et al., 1995). The same literature interestingly argues that paradox is not only organizational-level theory. The focus can be directed to individual level as well. Individual actors and their interactions often form the micro foundations of larger paradoxes, and hence researchers have tried to connect firm-level tensions to individual cognition and team processes (Waldman et al., 2019).

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For example, consider that a paradox mindset helps some individuals convert resource scarcity into stronger job performance and innovation (Miron-Spektor et al., 2017).

Other areas where Paradox research which has applied significantly in the recent areas are in strategy and organisational studies (Cunha & Putnam, 2019). However, there is still opportunity to develop individual-level and dynamic aspects of paradox (Schad et al., 2016; Waldman et al., 2019). Acceptance and Balance - the two most suggested responses to paradox has been debated to be too narrow and allows for further exploration of the subject (Berti & Cunha, 2022).

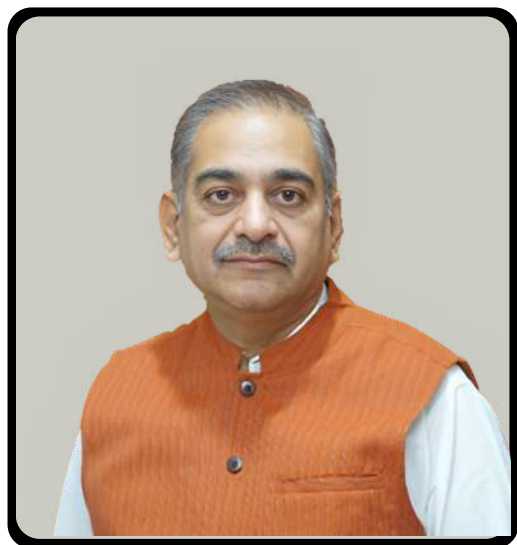
The academic literature treats paradox as a rather wide lens to understand organizational tensions. It also cautions us that the idea/concept becomes less useful if it is defined too loosely or reduced to an automated default response (Schad et al., 2016; Berti & Cunha, 2022; Cunha & Putnam, 2019). Policy makers and management decision makers must pay attention to their existence in various contexts. Highlighting and understanding them forms the central focus of this series of articles.

Hope to see you here again for more on paradoxes.

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Technological Advances and application of technology in the area of finance lead to emergence of a new industry known as FinTech Industry, Schueffel (2016) reviewed scholarly papers defining the FinTech and concluded that “Fintech is a new financial industry that applies technology to improve financial activities”.

FinTech enables the process and digitises assessment to accomplish eco-friendly, green, societal, and governance risks and opportunities along with economic performance and achieve the objective of wealth maximisation for the shareholders.

The primary objective of being sustainable is to protect the environment, that should include the facets of decreasing carbon emissions, for the overall physical and digital infrastructure, mobilise funds using green finance, and take care of the climate risk by properly assessing for the same (Macchiavello & Siri, 2022).

Sustainability without societal dimension is not an acceptable solution for any stakeholder for the wealth maximisation of a firm and its shareholders.

The firm’s responsibility towards society should include the elements of inclusive finance, impartial and translucent algorithms, data privacy, and user safety (Mahajan, 2025). Robust Compliance, being ethical in decision making with empathy towards the users, and being transparent to the stakeholders of the firm should be clearly embedded in the governance of the firm.

The primary purpose of the idea should be to:

- To properly leverage the technology like Artificial Intelligence, Machine Learning, Blockchain, Internet of Things, etc. in the process of integrating with ESG objectives into daily decisions including that of green finance and also to make transparent reporting to the stakeholders (Criste et al., 2026).
- Democratise the business models and Fintech for the purpose of under-served and financially excluded earlier, MSMEs and particularly the budding entrepreneurs to attain the long term sustainable growth.
- Encourage and stimulate strong and ethical governance, which can contribute to the reduction in the greenwashing and enable truly transparent governing body. For the purpose of the same, the governing body should improve data quality and embed with ethical standards into design of the overall policy and utilisation of the Fintech.

The boards and governance are directed by the business environment and regulations towards embedding FinTech for ESG. The belief that Fintech can push growth with inclusive society and growth with sustainability through goals of ESG should drive the leaders to adapt and utilise in the interest of stakeholders and design financial products, data infrastructure, and operations of business including governance. And not forget about building transparency and compliance into the systems with security (Jamel & Zhang, 2024).

Element	Role of Fintech	Risk Reflections	Opportunities
Environmental	Leveraging Fintech programs to set requirements to control Co2 discharge, funding using green bonds, etc., and analysing ecological risk.	Quality and Quantity of Data, Model that is Created, rebound results utility penetration.	Creation of dashboards - ESG, stress tests, Funding using Green Bonds, etc.
Social	Inclusive Finance for the financially excluded, Scale Economics towards lower costs, extension of utility for inclusiveness	Privacy of Data, Excessive borrowings by users, and Security from various parties.	Fair Policies, Responsible AI, and secured design framework.
Governance	Transparent ESG reporting, real-time risk monitoring, compliance automation.	Greenwashing, lack of interoperability, regulatory arbitrage.	Standardised ESG taxonomies, third-party verification, board-level ESG oversight.

It is the willingness of the board which enables ESG embedded into the systems of operations, reporting transparency, design and development of products and processes, but the business environment too is

forcing the boards adapt to the ESG policies to sustain themselves in the business. FinTech is becoming part and parcel of most of the vital business aspects and driving performance of the firm.

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As Gen Z has entered the global workforce market with its unique value proposition, it is imperative to redefine and reshape certain fundamental organizational policies. Gen Z are seeking purpose in their careers, prioritizing mental health, and choosing flexibility over hierarchy (Deloitte, 2024). The State of the Global Workplace report 2026 finds that global employee engagement fell to 20% in 2025, its lowest level since 2020, costing the world economy an estimated \$10 trillion in lost productivity. In such scenario, it's very apt to revisit employee engagement.

Employees are the vital source of competitive advantages for an organization (Abbas et al., 2021) and, therefore, employee engagement is considered as a sizzling research area (Lee and Ok, 2016). The concept of engagement was first defined by Kahn (1990) as a means to be physically and psychologically present or active while performing organisational role. It consists of using oneself cognitively, physically and emotionally while executing work roles. Engagement can occur by aligning individual goals with organizational goals which increases employees' involvement and brings benefits for the organization (Rasool et al., 2021). Employee engagement linked with performance, productivity, retention and motivation. We will be discussing the factors those

need to be considered for employee engagement in the organizations considering Gen Z employees.

Purpose-Driven Work

Impact of outcome encompasses the purpose of work. It has become one of the strongest drivers for engaging Gen Z at work place. Value alignment is the conner stone of purpose driven work. The organizations have to pursue the high valued societal preferences in order to achieve the desired end. The impact on planet (environment), people (health, happiness) and profit needs to be focused upon while pursuing the goals. Sustainability is no more a choice for the organizations with the Gen Z employees. Transparency in decision making to understand the purpose of future course action and accountability emerged as primary concerns. Organizations valuing these parameters and constantly communicating to all the stakeholders will be striving.

Continuous Learning and Career Development

Gen Z is no more viewing lifelong employment in a fixed domain over a long period of time. They are upskilling themselves on a continuous basis. In order to satisfy this need, organizations are required to provide learning avenues encompassing formal and informal, online and offline, AI and non-AI embedded opportunities to employees. Organizations may need to invest on formal training set ups, organizational learning process, AI, agentic AI besides the traditional learning and development set ups.

According to LinkedIn's Workplace Learning Report (2024), opportunities for learning remain among the strongest predictors of employee retention and engagement. Workplace Learning Report (2025) indicates that only 36% of organizations fall into the career development champions category with robust programs that yield business results. There are many organizations which need to consider the continuous learning facilities

Well-being

Mental health is the second most cited societal concern by Gen Zs (second only to cost of living) as per the Deloitte Global 2025 Gen Z and Millennial Survey. The top workplace stress drivers are long working hours (48% of Gen Zs), followed by not being recognized/rewarded adequately (for 48%) and toxic workplace cultures (44%). Keeping this fact in view, organizations need to promote healthy work culture. Employee wellness programs and mindfulness may require to be revisited. Healthy work environment becomes imperative.

Inclusive Leadership and Psychological Safety

One of the recent Monster surveys, 83% of Gen Z candidates said that a company's commitment to diversity and inclusion is important when choosing an employer. McKinsey report "Delivering through diversity" highlights the performance and diversity

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linkage. Thus, it becomes crucial to look into inclusivity at the workplace. At workplace the different point of views of employees needs to be valued and analysed and accepted. In order to elicit the ideas, the work environment has to ensure psychological safety. A collaborative environment is the key to develop inclusive leadership in organizations.

Technology-Enabled Employee Experience

The digital natives (Gen Z) have fire within themselves for technological innovation. To capitalize on this, the organizations can't shy away with AI. Integration AI has become indispensable to foster pace and data driven decision making.

These transformations are essentials for the organizations to compete in the global business arena as there will be an upsurge in the Gen Z workforce.

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Introduction

The world today is changing at a rate faster than before. Artificial Intelligence (AI) is said to be one of the most powerful technologies that are shaping the way organizations compete, decide, and create value for customers (Brönnert et al., 2023). At the same time, firms face stiff competition in close to every industry. In such a space, it is not sufficient to compete on price or provide slightly more products to achieve long-term success. This is where the idea of a blue ocean strategy becomes pertinent (Awladthani et al., 2023). Blue Ocean Strategy introduced by W. Chan Kim and Renée Mauborgne, urges firms to leave "red oceans," which are the saturated and mostly competitive areas of society (Errico et al., 2021). Instead, firms are encouraged to create entirely new market spaces, called "blue oceans." This is done through firms' innovation to create unique value for customers. In the Age of AI, it has taken on even greater importance because the emergence of AI has opened up new possibilities for organizations to create new products, enhance services and develop new business models (Mohamed & Abegaz, 2026).

Comprehending Blue Ocean Strategy

Competing against other companies in business world normally makes companies to increase their market

share with lower prices, better quality or through aggressive marketing. These strategies may be beneficial for a while, but they often result in cutthroat competition and lower profits in the long run (Chandrasekaran & T. P., 2025). Rather than compete with existing business in the market, companies must focus on finding customer need gaps or create new demand altogether. This is how one can make competition irrelevant by providing something unique that customers will value (McKinley et al., 2017).

The strategic approach adopts the value innovation which is one step ahead than efficiency frontier which stipulates that firms ought to simultaneously enhance customer value. The simultaneous pursuit of low cost and differentiation lays the foundation of blue ocean but firms should attempt to create a new market space by reconstructing the value curve.

The use of artificial intelligence

AI is impacting all industries and businesses, including healthcare, education, finance, manufacturing, retail, and transport. AI allows machines to analyze large amounts of data, identify patterns, predict outcomes, and perform repetitive tasks. Organizations can comprehend their customers better and devise fresh solutions because of them (Wei et al., 2016). Within the framework of the Blue Ocean Strategy, technology such as AI enables discovering an unexplored market. Business can understand how customers are satisfied with their products or services and where they have unmet needs. They can further personalize them in ways that businesses could leverage maximum profit. Instead of data collection through conventional market research, organizations can leverage AI-powered analytics to uncover hidden opportunities and emerging trends (Chen et al., 2022). Companies and institutions from various sectors are using AI's predictive capabilities to enhance customer experience. For example, streaming platforms like Netflix use AI to recommend personalized content for customers, ensuring a unique customer experience. Riding companies such as Uber have also redefined

urban transportation through the use of digital platforms and artificial intelligence instead of cab services.

The use of AI to create business value

AI drives value innovation, which is arguably its strongest asset for existing and upcoming firms. AI improves customer satisfaction and enhances operational efficiency for companies, cutting down on monotonous jobs, better choice making and providing individualized experience are the distinguished outcomes (Aqmala et al., 2025).

Businesses are also able to create completely new products with AI techniques. AI-driven virtual assistants, intelligent medical equipment, self-driving cars, along with better financial advisory services, represents examples of products that have been newly created rather than competing in already existing markets (Chahal & Vohra, 2026).

This provides another example of learning platforms powered by artificial intelligence which are able to adjust learnings based on speed and performance. Learners get more value out of this while empowering institutions with new ways of delivering quality education (Amjad et al., 2024).

Difficulties to Implement the Blue Ocean Strategy Utilizing AI.

Despite there being many opportunities for Artificial Intelligence, it is not easy to implement Blue Ocean Strategy. Creating AI-powered solutions is usually a costly affair, requiring advanced tech, professionals, and data. These investments may present challenges for small organizations. The ethical utilization of artificial intelligence may pose another problem. It is the responsibility of the business to make AI transparent and fair. Data privacy has become a matter of concern as organizations collect and process numerous customer data. Moreover, technological innovation is rapidly imitated. To create a blue ocean through AI, companies will need to invest heavily in research and development to retain their advantage.

Opportunities Ahead

The potential usage of blue ocean strategy seems promising in AI future. New technologies such as digital twins, predictive analytics, generative AI, robotics, and autonomous systems are creating possibilities for a new class of industries and business models.

Healthcare organizations are preparing for personalized treatment options with AI. Manufacturing companies can build smart factories with production systems of self-monitoring. Artificial intelligence technology can enable personalized investment advice for financial institutions. Educational institutions can develop adaptive learning systems which facilitate student outcomes (AI-Tarifi et al., 2024).

Organizations blending creativity and responsible AI adoption are more likely to find new market spaces and establish sustainable competitive advantages.

Conclusion

Blue Ocean Strategy is still relevant today, however, Artificial Intelligence is now generating greater opportunities. With the help of artificial intelligence (AI), organizations can uncover unarticulated customer needs, boost operational efficiencies and create game-changing new products and services which create completely new markets. With the help of AI, businesses can recreate customer experience and create new demand instead of competing in saturated industries.

However, one cannot merely adopt AI and succeed. Businesses should prioritize progressive thinking, ethical conduct, continuous learning, and sustainable value creation. Firms that successfully combine AI with Blue Ocean Strategy will be more likely to achieve sustainable growth and maintain their competitive edge in the fast-evolving digital economy. As AI becomes more advanced, companies that are creative will be able to harness greater opportunities to sail into new blue oceans and avoid overcrowded red oceans.

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Introduction

The primary objective of this article is to interpret in depth and practice the philosophies of the most important and eminent quality management gurus in relation to different stages in a manufacturing process. Though the philosophies of renowned quality experts like Walter A. Shewhart, Joseph M. Juran, W. Edwards Deming, Kaoru Ishikawa, Armand V. Feigenbaum, Shigeo Shingo and Philip B. Crosby

have played a very important role in the evolution of quality management, the philosophies have been discussed independently and therefore it becomes very difficult for students, researchers, academicians and professionals in industries to understand how these philosophies help in achieving Total Quality Management (TQM) (Famiyeh et al., 2018). Through this article, the practicality of different philosophies of quality management is demonstrated in terms of stages of manufacturing process. In this article, manufacturing process involved includes design of the product, drawings, approval of the design, purchasing of raw material, manufacturing of the product, inspection at each stage, assembling of the product, testing of the assembled product, packing of the product and dispatch of the product. Interpretation of each philosophy is done in light of stage where they make maximum contribution. By interpreting these philosophies within a single manufacturing framework, the article enables readers to understand the complementary nature of these quality concepts and their collective contribution to Total Quality Management. Table 1 demonstrates the application of quality concepts at various stages of manufacturing processes.

			Walter Andrew Shewhart	Joseph Moses Juran	Kaoru Ishikawa	W Edwards Deming	Armand Vallin Feigenbaum	Shigeo Shingo	Philip B. Crosby				
1	Customer Requirement		-	Quality Planning	Cause and effect analysis	Quality Circle	Plan-Do-Check-Act Cycle	Total quality control	Poka-Yoke (Material Focus)	(DIRFT-DIRECT) Zero defects (HR Focus)			
2	Design										Plan	Design the quality standards	
3	Drawing/ Prototyping			Do									Appraise conformance to the standards
4	Raw Material Procurement										Check		
5	MRP/HRP/PP												
6	Manufacture		SPC	SQC							Act when standards are exceeded		
7	Stage Testing		Quality Control									Pride in workmanship	
8	Final Assembly												
9	Final Testing												
10	Defect	Yes											
		No											
11	Final Product		Quality Improve ment										

This article provides the readers the opportunity to get the complementary aspects of the philosophies and the contributions of each to Total Quality Management in one single manufacturing framework. Among other significant observations made in the study, it is evident that traditional quality management philosophies focus much on the manufacturing activities and do not put more consideration to the processes that happen after the products have been manufactured (Naini et al., 2022). The findings from the study show that although the quality gurus give extensive coverage to quality during the process of design, manufacturing, inspection and production, there is no much attention put on the process of packaging, transportation, distribution and the services after the sales. This article highlights service quality as an important addition to the traditional TQM philosophy. It notes that technology is important in achieving quality during the processes of design and manufacture but once the product reaches the consumer, technology cannot assure customer satisfaction at this point (Pakdil, 2020). At this point, organizational commitment, behavior of employees, responsiveness, empathy, reliability and communication skills become the main factors of quality (Fisher & Nair, 2009). Based on this realization, the study proposes a five-step service

quality model of Assurance, Empathy, Reliability, Responsiveness and Tangibles.

These five elements are aimed at increasing the level of customer satisfaction, enhancing the effectiveness of service delivery, improving organizational responsiveness, and creating a good customer experience all through the product lifecycle (Heydari et al., 2016). The proposed model takes the concept of Total Quality Management to another level through integration of service quality into organizational excellence. The overall theme of the article is presented in the title of the article, "When Technology Ends, Art Begins." The title represents the idea that technology is very successful in promoting manufacturing excellence through process control, automation, inspection, and prevention of defects. However, once the manufacturing activities are done, and the product is available to the consumer, the maintenance of quality depends on people rather than technology. Excellent service demands interpersonal skills, empathy, organizational culture, responsiveness, and customer satisfaction (Zonnenshain & Kenett, 2020). Hence, it can be concluded that Total Quality Management cannot be achieved unless the quality is maintained all through the product lifecycle starting from conception until after-sales service.

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Introduction:

Over the past ten years, technological disruption, workforce expectations, and growing pressure to address environmental and social responsibilities have all contributed to the volatile and uncertain times in which organizations operate. The organization's short-term objectives were the main focus of traditional talent management techniques, which lacked the strategic thinking necessary to withstand environmental uncertainties. Rather, companies are being forced to reconsider how they draw in, nurture, and keep talent in ways that are ethical, resilient, and consistent with long-term value creation. This shift has brought sustainable talent management to the forefront as a crucial determinant of future organizational success. Recent studies, such as Deloitte's Human Capital Trends and the 2026 LinkedIn Talent Report, suggest that "talent velocity"—the capacity to swiftly recognize, develop, and utilize skills—is now the key differentiator between companies that excel and those that don't. Despite the fact that 89% of organizations express concern about skills agility, only a small percentage have successfully moved from fixed job titles to flexible, skills-based systems.

Sustainable talent management goes beyond traditional HR procedures. It places a strong emphasis on developing a workforce that is not only highly competent and productive but also flexible, motivated, and engaged. By incorporating social justice, environmental stewardship, and economic viability into the employee lifecycle, Organizations are redefining talent strategies to meet the demands of a changing global landscape, from integrating sustainability into recruitment and employer branding to promoting ongoing learning, well-being, and inclusive workplaces.

Therefore, the ability of organizations to create talent systems that can endure uncertainty while encouraging innovation and responsible growth is essential to future-proofing them. This entails developing a culture that values both performance and purpose, utilizing technology responsibly, and coordinating talent management procedures with more general sustainability objectives. Sustainable talent management becomes a strategic necessity as businesses deal with issues like digital transformation, climate change, and changing stakeholder expectations. This approach not only strengthens organizational resilience but also helps create a more equitable and sustainable workplace in the future.

Review of literature

Recent scientific findings and meta-analysis data of 42 quantitative studies established a clear link between sustainable HR practices and organization's performance on sustainable green performance (Naderi et al., 2022). By evaluating scientific findings from 2005 to 2020, the authors identify five core pillars of GHRM—recruitment, training, performance appraisal, rewards, and teamwork—that most effectively drive eco-friendly outcomes. The study culminates in an integrated model illustrating how these specific personnel strategies directly enhance an institution's environmental performance, thereby reducing ecological damage while fostering a competitive advantage. Ultimately, the text serves as a

strategic guide for managers to transition toward sustainable development by aligning human behaviour with environmental conservation goals. In a study conducted by Indiparambil (2019), that there is a shift from basic administrative functions to Strategic HRM and, ultimately, to the emerging paradigm of Sustainable Human Resource Management. The author argues that modern organizations must move beyond short-term profitability to adopt a humanistic approach that treats employees as essential assets rather than mere tools for exploitation. By integrating social, environmental, and economic goals, Sustainable HRM fosters long-term success through practices like work-life balance, transparent communication, and employee well-being. In a systematic review of literature Mihir and Padroo (2025) investigate as to how modern organizations can achieve long-term organizational sustainability by effectively integrating internal human resources strategies. The authors analyse recent literature to map the journey from talent management—which involves finding, nurturing, and keeping skilled employees—to the critical process of succession planning for future leadership.

Sustainable talent management practices across various organization:

Sustainable talent management practices are the need of the hour for future proofing the organization so that organizational systems are resilient, adaptable and aligned with long term business and societal goals. It is not about only managing people its about preparing talent for uncertainty, disruption and continuous change.

1. Build skills- based talent architecture- organizations and talent managers have started shifting from job-based hiring to skills-based hiring because organizations are in a state of rapid changes where roles change continuously but skills remain transferable which requires managers to enable quick redeployment during disruption.

2. Continuous learning and reskilling ecosystem: the latest talent management strategy focusses on continuous learning and updating of skills which are more relevant from the business perspective. Most of the organization are focussing on digital skills like AI and Analytics), human skills like adaptability and emotional intelligence which is of paramount importance because future jobs are constantly evolving and over a period these skills reduce redundancy risk. There is a shift from organizing a training program for executives to creating a learning culture for imbibing the continuous learning approaches and moreover ownership from the employees regarding their own continuous improvement processes.
3. Integrating technology with responsible AI. AI has been significantly used for talent Analytics, workforce planning, creating learning modules for the organization; however responsible usage of AI is the need of the hour. talent managers should make ethical use of AI, so that they are not clouded by only dashboards and data they should responsibly use it for bias free recruitment systems, performance management and understanding the human capability more than what the data show cases.
4. Prioritize Employee wellbeing and Human Sustainability: Retention is the key in today's scenario. Most of the talent managers face the brunt of talented employees leaving the organization, not because of more work but they leave the organization for mental health, flexible work and work-life integrated policies. It matters to every organization, because there is dearth of talent in the organization; and more so it leads to burnout which reduces productivity and wellbeing of long-term productivity and performance. Future organizations have to treat employees as assets rather than only resources to produce something.
5. Embed diversity, equity and inclusion: talent managers focus on inclusive hiring practices so that it brings diversity into the table to encourage

better ideas onto the table and it is a proven fact that diverse teams are more innovative and it strengthens the employer brand. The talent manager needs to focus not only on inclusive hiring practices but also leadership diversity goals like giving fair chances to people of different sects.

6. Align talent strategy with ESG goals of the organization: Integrating sustainability to KPIs, leadership development and encouraging employee participation in sustainability initiatives is the need of the hour to make long term impact by the organization. It matters significantly, because it attracts investors and stakeholders equally as they treat the organization to be ESG accountable and it also attracts purpose driven talent into the organization who respect organization's goals.

7. Design flexible and sustainable work models: designing flexible and sustainable work models reduces costs and carbon footprints of the organization. What it means is developing hybrid work systems, Gig and project-based roles and outcome-based performance of the talent of the organization. This in turn improves not only the brand image of the organization but also improves employee satisfaction.

8. Use of predictive workforce analytics: predictive analytics helps HR to become proactive in future thus addressing issues like talent shortages, skill gaps and to do scenario planning for future organizational needs. It helps in strategic decision making. Agility ensures survival in uncertainty.

9. Strengthen employer branding with purpose: it matters to every organization where they have to attract the Gen Z and the millennials as well. Furthermore, it increases retention rate of the employees from the above-mentioned generation. What the organization or rather talent manager needs to do is communicate effectively, taking sustainability initiatives and this helps in crafting a better employee value proposition.

10. Creating talent mobility systems: it matters to every organization because it retains talent and reduces hiring costs and creating better career pathing. Managers now focus on internal job postings, creating lateral career paths which can take cross functional projects into account. This helps in building resilient talent pipelines which ensures continuous flow of people through succession planning.

Conclusion:

Future-proofing talent management is no longer a choice but a strategic imperative. Organizations that successfully balance performance, people, and planet create a resilient ecosystem where business outcomes are achieved without compromising employee well-being or environmental responsibility. By aligning talent strategies with sustainable practices, investing in continuous learning and growth, and fostering a culture of purpose, organizations can build a workforce that is agile, engaged, and future-ready. Ultimately, those who integrate these three dimensions seamlessly will not only adapt to change but will define the future of work, emerging as leaders in an increasingly complex and conscious world.

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Introduction

The world of financial reporting has gone through drastic change in last decade. The stakeholders are demanding transparency of corporate actions in response to climate change, social sensitivity and governance issues which by and large traditional financial reporting was lacking. Although conventional financial reports majorly focus on financial aspects, they often fail to spot non-financial pieces of performance—such as environmental influence, social accountability, and long-lasting value creation—that are now vital to in what way businesses are valued by investors (Dumay et al., 2016; Nicolò et al., 2023).

To cater this growing demand, integrated reporting (IR) has evolved as more inclusive holistic and forward-looking approach of reporting. IR combines financial as well non-financial reports into a comprehensive description of state of affairs of business. It helps stakeholders of information to understand in a better manner how firms create value for them through focusing on reporting various forms of capital, including financial, human, intellectual, social, and natural capitals (Camilleri, 2018; Pigatto et al., 2023). This shift of restraining reporting exclusively to financial performance has received

wider appreciation from investors, valuation appraisers and is fuelled by regulatory authorities as well.

Integrated reporting not only focuses on comprehensive reporting but on interlinking various of firms financial and non-financial aspects of reporting and making the numbers meaningful backed by stories. Targets, performance, accountability and sustainability goals are linked together and is often referred as “integrated thinking.” In divergence to traditional financial reporting, IR aims to mitigate information asymmetry, not by just supplementary information, but through simplifying, prioritizing, and focusing on long-term outlook (Nicolò et al., 2023).

The global reporting framework has also made advancements towards achieving the goal of reporting comprehensively. The important developments global level towards this includes – International Integrated Reporting Council (IIRC) and Sustainability Accounting Standards Board (SASB) – in 2021 together designed the Value Reporting Foundation to design Framework for Integrated Reporting. In addition to this, there has been the formation of the International Sustainability Standards Board (ISSB), under the IFRS foundation. This reflects the strenuous efforts towards achieving a single, trusted source for sustainability disclosures globally (Singhal & Goel, 2025).

A growing focus of recent research highlights the benefits of IR and determinants are corporate level. The results of empirically tested research support that IR leads to more thorough reporting on sustainability issues and provides a more composite picture of strategy and performance of organizations. Also, IR is associated with increased transparency and improved sustainability performance (Vitolla et al., 2019; Appiagyei & Donkor, 2024). Information provided by integrated reports are vital inputs of decision making for investors and other stakeholders as they provide them with information about how

companies manage risks and opportunities they face. However, the implementation and quality of integrated reporting lack uniformity and standardisation. In absence of the standardisation and common framework dissimilarities exist across firms, prejudiced by variances in organizational characteristics, institutional contexts, and, importantly, corporate governance structures (Girella et al., 2022; Permatasari & Tjahjadi, 2024). This makes it imperative for readers to focus on the critical role of governance in shaping reporting practices.

Corporate governance systems and practices are promise for credible and reliable integrated reporting. The alignment of management's and stakeholders' goals and incentives that can be achieved through such systems will narrow down the information asymmetry.

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Moreover, the features of the board, including its independence, diversity, and oversight capability, become very important to improve the disclosure. Finally, audit committee and well-developed ownership structure will improve internal controls and reporting process.

Integrated reporting, as one of the innovative forms of corporate disclosure, goes beyond the mere change of the format of reporting because it implies changes in approaches towards business and its management. Its effectiveness depends on the effectiveness of corporate governance system. In times of sustainability problems and high expectations from corporations, integrated reporting becomes the essential part of corporate communication.

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Agriculture is a sector that is highly affected by global developments in a world that is becoming increasingly connected. International conflicts can have a widespread impact in a country as populous as India, where agriculture provides livelihoods for almost 50% of the population. Economic impacts of wars and geopolitical tensions are felt rapidly across borders and impact input costs, production decisions, and food security.

The first way in which international wars create impacts on Indian agriculture is by influencing the price of fertilizers. Phosphatic fertilizer and potassic fertilizer supplies are highly dependent upon imports in India. The Food and Agriculture Organization (FAO) reports that fertilizer prices have been rising dramatically around the world as a result of the disruption of global markets during times of conflict, like the Russia–Ukraine War. Potash and other raw materials are heavily exported from Russia and Belarus, and their disruptions have drastically narrowed global markets. Moreover, the price of natural gas is closely tied to the price of nitrogenous fertilizers, like urea. According to World Bank (2022), geopolitical conflicts tend to cause energy price shocks, increasing fertilizer production costs around the world. This means that India will have to pay

more for imports and have more fiscal strain. Farmers are supplied a high degree of fertilizer subsidy to protect these farmers. The fertilizer subsidy bill in India increased significantly after the fertilizer prices rose in the world in 2021-22, according to data from the Ministry of Chemicals and Fertilizers. Subsidies protect farmers from price fluctuations, but they are a huge burden on public finances and restrict funds available for other priorities.

Energy prices are a further important way of transmission. In India agriculture is closely linked with irrigation and mechanization which relies on energy. Conflicts in the world can lead to movements in oil prices and thus to a rise in the price of diesel and electricity generation (International Monetary Fund (2022)). Agricultural support systems in India are also affected by the sustainability as farmers do receive electricity at a subsidized rate, but the electricity costs are on the hike and puts pressure on the finances of power utilities as well as on the farmers. The international trade flows are also impacted by the worldwide conflicts. India is one of the top exporters of commodities such as rice and wheat. When international insecurity exists, however, it is possible for countries to limit exportation for countries' own supply-making purposes. The World Trade Organization says these measures can exacerbate price volatility in the world. This tension between food security and market stability in the foreign markets was seen in India when the government had imposed export ban on wheat in 2022 to reduce the domestic inflation. This does not only affect fertilizers, but also other value chain components like agrochemicals and parts of machinery. Global supply chain disruptions also increase uncertainty and production costs during conflicts, leading to farmers' decisions under imperfect information (FAO 2022).

One of the many unsuspected side effects is concern regarding environmental sustainability. Increased input costs can either lead to a decrease in fertilizer application (impact yields) or increase reliance on

subsidized inputs. In India, the latter has been more dominant, leading to an imbalance in fertilizer utilization. The NITI Aayog report has pointed out that over-application of nitrogen has contributed to soil degradation and higher emissions of greenhouse gases, creating sustainability issues in the long-term. The exchange rates and inflation rates are also affected by the worldwide conflicts. A falling currency makes imports more expensive, and food inflation can lead to reaction from the policy makers in the form of export restrictions or growing food subsidies. The Reserve Bank of India has highlighted the manner in which a global commodity price shock is passed on as a global inflation shock and ultimately to domestic inflation, such as food inflation.

With these various effects, it is imperative to build agricultural resilience in India. We need to take steps to reduce the dependency on imported fertilizers with bio-fertilizers and improved nutrient use efficiency. Similarly, the scale of renewable energy projects such as solar irrigation can help ease global energy shocks.

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Diversification also is a way to resilience. Embracing water and input efficient technologies like millets while seeking climate resilience, is a step towards environmental sustainability, as well as towards economic sustainability. External shocks can be further mitigated by strengthening the domestic supply chains and having strategic stocks of critical inputs. Lastly, policy shifts should shift from price support and encourage sustainable practices. Reducing the subsidy focus can help to achieve more sustainable productivity and investments in agricultural research and improved extension services can also help to do this.

To sum up, the global conflicts are not a confined geopolitical concern which is only superficially related to Indian agriculture. They impact inputs, fiscal policy, trade flows, and the environment. Resilience needs a proactive strategy and this needs to be both economically efficient and sustainable. Only then Indian agriculture can ensure its growth in the new and volatile scenario of the world.

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Today, over 125 million Indians speak English—making India the second-largest English-speaking country in the world. The British introduced English in the Subcontinent with their very arrival. Since then, English has coexisted with Indian languages. It has mostly been used as a bridge language that facilitated smooth communication across a myriad of regional dialects, linguistic registers at personal and societal levels. It is a significant professional linguistic skill, such as the proficient use of LSRW in English.

Gradually yet steadily, English became the language of the Indian elite. It successfully established itself as a significant means of maintaining the social status quo. It quietly furthered T.B. Macaulay's proposition of "a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals and in intellect" from his famous Minutes on Indian education presented in 1835. With a measured yet steady pace, English became the language of government administration, social advancement, soft skills and personality development, education, the workplace, the press, entertainment, and so on. Certain technical terms are used to identify non-native English speakers, i.e., those born in countries where English was not their first language. They are often called ESL (English as a Second Language)

and/or EFL (English as a Foreign Language) speakers. We, Indians, are called non-native English speakers.

English has also established its base as a key soft skill. It has become a professional necessity and a passport to better career opportunities nationally and globally. Learning soft skills is a continuous and essential process for professional success. A linguist, Seidlofer (2004), defines English as a Lingua Franca, a medium of communication between speakers of different first languages. English has earned its spot as a vital professional skill, especially for students enrolled in various vocational, diploma, and degree courses. It became a tool for them to further ambitious aspirations for a rich global career beyond geographical boundaries. These aspirants are gradually shaped at home and steadily reach the classrooms. Mandatory language or soft skill courses, such as communication skills and professional development, play a key role in shaping their readiness for global opportunities.

Various national educational policies have reinforced this trajectory over the decades. The Indian government has been promoting English through various educational policies as strongly recommended by eminent leaders over the decades, such as Mahatma Gandhi, Dr S. Radhakrishnan, and Savitri Bai Phule, to mention a few. Dr B. R. Ambedkar said, "English is the milk of a lioness. Only those who drink it will roar." Consistent efforts have been made to strengthen our education system by creating policies that provide students with global exposure. The goal has been to prepare a future-ready, upskilled workforce ready to grab worldwide opportunities. Further, specific attention through policies was also paid to include ICT (Information and Communication Technology) and multimedia tools in classrooms. From the National Education Policy, 1986, to the Digital India Programme 2015 and the National Education Policy 2020, till the VBSA 2025 Bill, our policies have progressively expanded the role of ICT- from basic computer

literacy to a digital and blended teaching-learning ecosystem. These successive reforms integrated technology into classrooms to fulfil twofold aims: first, strengthening technical skillset and communication skills, secondly, preparing students for global careers. However, despite consistent policy-level efforts over the past decades, a significant gap persists in the effective, outcome-based implementation of policies at the grassroots level in India. Various studies at the national and international levels have shown that integrating multimedia technology into classrooms, especially language classrooms, enriches learning, motivation, engagement, and language acquisition, as well as cognitive skills, ultimately leading to effective learning outcomes, particularly for ESL learners.

Across Indian classrooms today, students learn subjects such as science, mathematics, biology, and social sciences in English-medium instruction for a full day in school, then return home, where they speak a different language. This seeming duality, apparently a simple transition to all of us, reflects India's linguistic reality. The irony is so inherent that we do not pay any attention to it and forget to identify a gap. Additionally, many parents use scattered English words with their children indoors and outdoors to showcase their linguistic status quo. Yet the irony is that their children struggle to get a grip on English as a language of daily communication. Children do not have a natural environment to practice communicative English and become comfortable with it. While parents take pride in flaunting that their kin and kith attend English-medium schools, the reality is that children begin to measure their success only by linguistic fluency, which may or may not reflect knowledge. This half-baked knowledge of all the

languages ultimately affects a child's self-confidence and articulation. Adding to the paradox, despite being apparently trained in English-medium instruction during formal education, students miserably fail at practising the language at work. Many studies show that students are unable to use English at the LSW (Listening, Speaking, and Writing) levels with proficiency. It also costs them good professional opportunities.

Thereby, despite decades of consistent efforts by the government and society at large, the existing gap between policy and its grassroots level application raises urgent questions: are educators receiving regular, required upskilling training at all levels? Are these training programmes effective and uniform across the institutions, both government and private? Are there uniform criteria to be an educator trainer? Is the learner's feedback received regularly when measuring the impact of the educator training programmes? Are policymakers attuned to the social and economic diversity of the learners? Have we measured the impact of the educational policies so far and used those experiences in the new policies? To begin introspection with these questions, I believe, we will lead with the intent to make an impact, because without answers to these questions, educational technological upgradation risks becoming a promise rather than a tool.

In a nutshell, from classroom to boardroom, English is omnipresent. It has established itself as a tool for connecting, innovating, excelling, and aspiring. However, in my opinion, the world's largest democracy, India, has a long way to go to slowly yet steadily reduce the gap to receive measurable outcomes.

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Atypicality Pays off only for Masculine Brands: How Brand Gender Shapes Consumer Responses to Atypical Origin Stories.

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30th March 2026

Not all brands have a conventional origin story. While a typical brand origin story focuses on stable, coherent and expected narrative following a familiar arc: vision, innovation and growth, an atypical brand origin story highlights the rebellious, serendipitous or creative origins of the brand which subvert expectations. Atypical origin stories, i.e., those that deviate from the conventional 'humble beginnings' or 'innovation from necessity' templates make brands appear creative, daring, or rebellious. For masculine brands, such narratives reinforce identity-consistent signals of independence and nonconformity. For feminine brands, however, atypicality may create incongruence with expectations of relational harmony and reliability. Our guiding question is therefore: When does an atypical origin story strengthen brand attitudes and when does it not? How does the brand's gender interact with atypical origin stories? Using a series of experimental studies we examine the impact of atypical origin stories on gendered brands and brands based on functionality and luxury connotations.

Ethical AI in tourism analytics: is machine unlearning the missing puzzle?

- Dr. Dileep Kumar Singh

28th February 2026

This research proposes Machine Unlearning (MU) as a technical counterpart to legal data-erasure rights. It explores its relevance for tourism analytics, where sensitive traveller data and transnational laws make privacy a critical issue. Focussing on its conceptual contribution, it aims to (a) simplify MU approaches and demonstrate their applicability in tourism, (b) identify regulatory gaps that leave data traces inside trained models even after deletion, and (c) illustrate, via a controlled simulation, how removing a user through MU can change the recommendation outputs. The key contribution is positioning MU as a bridge between legal erasure rights and hidden data retention in tourism AI pipelines. The letter further identifies implications for tourism analytics including accountable recommender design and cross-jurisdictional data governance. It concludes by outlining the practical implications of MU and future directions for cross-border implementation, governance innovation, trust building, and research in the data-driven tourism sector. The study is conceptual in nature and is complemented by a small, non-generalisable illustrative simulation.



Empowering Rural Artisans: A Path to Sustainable Fashion in India

- Prof. Anup Raj
24th Dec 2025

The fashion industry faces pressing challenges regarding sustainability, prompting a shift towards models prioritizing ethical production, environmental stewardship, and social responsibility. In this context, empowering rural artisans emerges as a promising avenue for sustainable fashion, particularly in India's culturally rich landscape. This paper explores the intersection of empowering rural artisans and sustainable fashion in India, examining opportunities, challenges, and implications through interdisciplinary perspectives. Through case studies, literature review, and methodological framework, key themes are analyzed, including traditional craftsmanship, socio-economic dynamics, environmental implications, technology, innovation, and policy implications. Findings reveal the transformative potential of empowering rural artisans, emphasizing cultural preservation, economic empowerment, and environmental sustainability. The discussion underscores the need for collaborative efforts involving policymakers, practitioners, scholars, and consumers to harness this potential and build a more inclusive, resilient, and sustainable fashion industry in India and beyond. The paper contributes to ongoing scholarly debates and practical interventions aimed at advancing sustainable development goals within the fashion industry.



Writing the Sacred from within in Richard Burton's A Personal Narrative of a Pilgrimage to El-Medinah and Meccah

- Prof. Raeesa Begam Usmani
14th November 2025

The West has shown the utmost curiosity for the Middle East's culture, tradition, society, and the Hajj pilgrimage. This region was considered the least explored on the world map until the nineteenth century. Over the decades, a handful of adventurers and explorers have undertaken various perilous journeys to find answers and satisfy the inquisitiveness of a larger, knowledge-thirsty populace. Travel writing, Hajj pilgrimage travel writing, can still not be considered an established area of study. This paper aims to highlight the pilgrimage travelogues of the nineteenth century by drawing scholarly attention to the genre of Hajj pilgrimage travel writing, its significance, and the need for more academic attention. The paper critically analyses Sir Richard Burton's travelogue *A Personal Narrative of a Pilgrimage to El-Medinah and Meccah* (1855), which recounts his journey to the cities of Mecca and Medina and the Hajj pilgrimage from the nineteenth century. He undertook the Hajj pilgrimage in disguise as a Muslim pilgrim, a journey fraught with numerous challenges and dangers. The paper primarily critically analyses the motivations of this so-called pilgrim from the West, his reflections on the Oriental society, culture, religious sites, and life in the Middle East, along with the challenges he faced during this perilous journey. It also critically examines how he attempted to reconcile his Englishness with an adopted Muslim guise or identity and its impact on the narration and description in the travelogue.



Does a Falling Agricultural Share in GDP Affect Environmental Outcomes in the Long Run? An Ecological Deficit–Based Robust Analysis

Prof. Shadman Zafar

14th November 2025

A considerable vacuum in the literature exists regarding empirical evaluations of the link between agricultural growth and environmental concerns in India. Although several studies address this problem, they often present a narrow view by focusing on carbon emissions. The main contribution of this work is the use of the ecological deficit as a broad indicator, which had previously not been investigated in the Indian agricultural setting to assess environmental repercussions. Such an approach allows for a more in-depth comparison with greenhouse gas emissions and provides a more nuanced view of agricultural development's sustainability. By utilizing annual data from 1990 to 2019 and the Autoregressive Distributed Lag model, the findings show that agricultural development has a negative impact on environmental outcomes, implying that a declining share of agricultural GDP is harmful to environmental well-being. These results underline the agriculture sector's vital role in reducing environmental deterioration, as well as the importance of improving India's performance in the Environmental Performance Index 2022. To realize the sector's carbon sequestration potential and improve environmental performance, it is critical to promote sustainable agriculture methods such as organic farming, micro-irrigation, and renewable energy production.



Mitigating Emissions in India: An Asymmetric Perspective on Fossil Fuel Use

- Dr. Shadman Zafar

11th October 2025

As one of the world's fastest-growing economies, India's energy demand is predominantly met by fossil fuels, which significantly contribute to greenhouse gas emissions. The purpose of this study is to investigate the asymmetric relationship between fossil fuel consumption (disaggregated into coal, oil and natural gas) and carbon emissions in India. This study uses the nonlinear autoregressive distributed lag (NARDL) methodology, as proposed by Shin et al. (2014), to capture the asymmetric impacts of positive and negative shocks in fossil fuel consumption on carbon emissions. This advanced econometric approach allows for the exploration of non-linearities in the energy-emissions nexus. The results reveal a significant asymmetric impact of fossil fuel consumption on carbon emissions. Negative shocks (reductions in fossil fuel use) have a more pronounced effect on emissions mitigation than positive shocks (increases in usage). Among the energy sources, oil consumption exhibits the highest emission intensity during negative shocks, underscoring its critical role in emissions dynamics. The findings suggest the urgent need for policymakers and industry leaders to prioritise reductions in fossil fuel consumption, particularly oil, to achieve meaningful emissions mitigation. Investments in cleaner energy alternatives and the adoption of mitigation-oriented energy portfolios are essential to align with India's net-zero emissions goal by 2070. This study contributes to the existing literature by examining the non-linear and asymmetric relationship between fossil fuel consumption and carbon emissions in India, a perspective that has been largely overlooked in prior studies. The results provide actionable insights for policymakers to design effective strategies for sustainable energy transitions.

Evaluating the Emission Impacts of Agricultural Subsidies Policy in India

Prof. Shadman Zafar

14th November 2025

This paper examines the complex relationship between agricultural input subsidies and environmental sustainability in India. It specifically looks at how fertiliser, power, and irrigation subsidies affect the environment and compares how much they contribute to greenhouse gas (GHG) emissions from farming activities. The study utilises an Autoregressive Distributed Lag (ARDL) model within a time-series framework, examining data from 1981 to 2020. The model delineates both the short-term and long-term interactions between input subsidies and greenhouse gas emissions, thereby quantifying the degree to which subsidised inputs exacerbate environmental externalities. The results show that subsidies for fertiliser and power greatly raise emissions, with the power subsidy having the most intense emissions. The irrigation subsidy, on the other hand, has no effect on emissions. These results show that different parts of the subsidy have different effects on the environment. They also show the This study extends the subsidy–productivity framework by empirically linking input subsidies to greenhouse gas emissions, thereby illustrating a rebound effect akin to the Jevons Paradox in Indian agriculture.

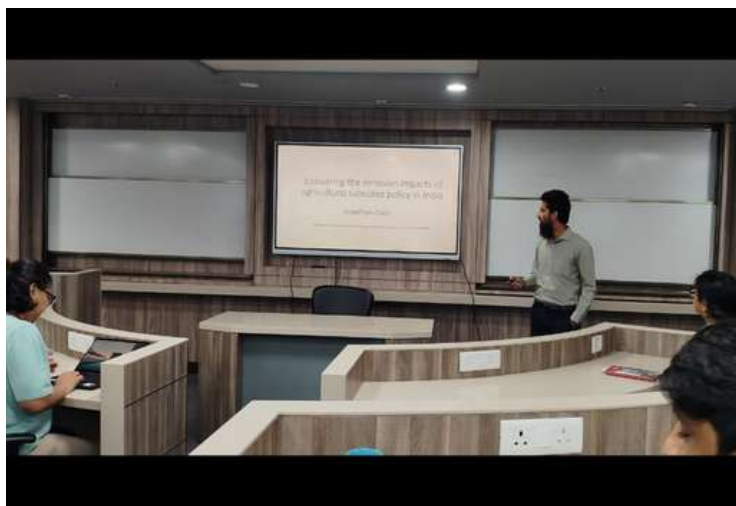
It highlights the need to incorporate environmental dimensions into existing theories that have traditionally focused only on yield enhancement and farmer welfare. The findings underscore the need to redesign subsidy programs by gradually shifting away from inorganic fertilizer subsidies towards cash transfers that incentivize organic and low-carbon alternatives. Policymakers should integrate agri-environmental schemes, promote renewable energy use in farming, and provide farmer training on climate-smart practices to align agricultural productivity goals with long-term sustainability. This research provides original insights by measuring the varying emission intensities of agricultural input subsidies in India. The study provides a comprehensive framework by combining empirical evidence with policy implications, facilitating the formulation of environmentally sustainable agricultural policies that mitigate emissions while maintaining productivity.

Rethinking Rice and Wheat: Millet Alternatives

- Dr. Shadman Zafar

14th November 2025

Despite environmental and nutritional benefits, millets face significant challenges in profitability and productivity compared to rice and wheat. Promoting millets on a large scale without addressing these gaps could undermine farmers' incomes and jeopardize national food security.



Agriculture and the rising ecological footprint in India

- Dr. Shadman Zafar

28th February 2026

India's ecological footprint has been rising alarmingly, posing a serious challenge to its sustainability goals. Despite agriculture's potential to act as a carbon sink, the sector has increasingly become a source of environmental degradation due to energy-intensive and unsustainable practices. This paradox forms the core problem that this study addresses: Why is the agricultural sector in India, despite its scale and importance, unable to mitigate emissions and instead contributing to worsening ecological outcomes? Using annual data from 1965 to 2022, the study employs a Non-Linear Autoregressive Distributed Lag (NARDL) model to examine the asymmetric effects of agricultural value added on ecological footprint, along with the roles of energy consumption, trade openness, and urbanization. Findings show a strong asymmetry: 1% increase in agricultural value added aggravates ecological footprint by 1.20%, whereas the same decline reduces ecological footprint by only 0.58%. It reveals that positive shocks in agricultural value added have a disproportionately larger adverse impact on the ecological footprint than the negative shocks. The findings provide evidence-based support for transformative agricultural policies that decouple economic growth from environmental harm emphasizing the need for a transition toward sustainable agricultural practices in India.

For policymakers, these insights offer a roadmap to redesign agricultural subsidies, incentives, and regulations that promote climate-smart techniques, renewable energy adoption, and efficient resource management across India's diverse agricultural landscape. By quantifying the asymmetric relationship between agricultural value added and ecological footprint, this research provides crucial benchmarks for India's climate commitments and sustainable development goals.

Cognitive Overload and Governance Failures in Managerial Dashboards: A Qualitative Study of How Data Misleads Managerial Judgment.

- Prof. Sasmita Misra

25th July 2026

This study investigates the cognitive, behavioral, and governance-related barriers that limit the effective use of dashboards and Business Intelligence (BI) tools in managerial decision-making. It examines how reliance on data visualization can create an illusion of objectivity and distort executive judgment. A qualitative phenomenological approach was adopted using key informant methodology. Data were collected through 10 semi-structured interviews with senior professionals across HR, procurement, technology, and operations and analyzed using inductive thematic analysis.

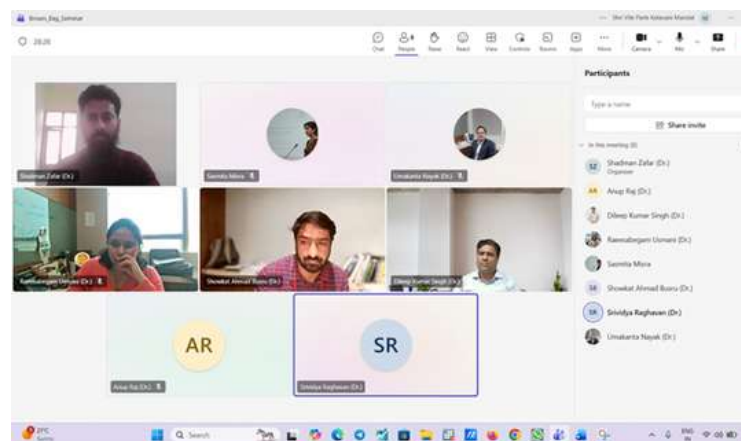


Attendants to Advocates

- Prof. Umakanta Nayak

31st January 2026

In South Asia, family members and friends often accompany the patient to the hospital to get him/her admitted for treatment. They typically upkeep and coordinate with doctors/staff during the treatment period. Their involvement in care giving to the patient and exposure to the hospital procedures and amenities enable them to be considered as one of the important stakeholders of the hospital. But often their needs and satisfaction level is ignored by the hospital administration. This study delves into exploring the facets of hospital architecture and the socio-psychological factors that promotes advocacy among the attendant through qualitative inquiry. The study is carried out using Interpretive Phenomenological Analysis to capture the essential factors that influence an attendant to promote word of mouth advocacy.



Assessing the efficiency of Indian fertilizer industry: does financial performance and innovation matter?

- Dr. Shadman Zafar

11th October 2025

Fertilizer is a resource-intensive, hard-to-abate industry that provides crucial support to sustain agricultural production. This study estimates the technical efficiency (TE) of the Indian fertilizer-producing firms over the years 2009 to 2019. We use the input distance function under the production function framework to find potential input reduction to produce a certain output level. We further examine potential determinants of TE, such as age, ownership, and innovation. We use Greene's (2005) 'true fixed effect' and 'true random effect' to isolate inefficiency effectively from fixed effects. The results demonstrate a notable scope for improvement in TE, with a potential increase of up to 30% for half of the firms. There are substantial differences across firms where the bottom 25 percent of samples have less than 60 percent TE. TE slightly declined, particularly in the case of state-owned firms (SOEs), whereas privately owned firms have greater TE than SOEs. Better financial performance and R&D activity positively influence TE, while experienced firms have better TE. Hence, the results support resource-based theory, which argues that firms with better resources and capabilities achieve greater efficiency. Effective government policies should be implemented to boost firms' capacity for innovation and TE to meet the country's future fertilizer needs.

"How the monsoon shapes up the Indian economy"

- Shadman Zafar

The Hindu Business Line 18th May 2025



How the monsoon shapes up the Indian economy

Promoting climate-smart agriculture actively as a need of the hour, and to adapt rural houses, rural livelihoods need to be diversified

By Shadman Zafar
Updated: May 18, 2025 at 09:42 AM



In India, around 60 per cent of the agricultural land is still dependent heavily on the monsoon. The lack of irrigation facilities compels the farmers to gamble with the monsoon. If you look at other natural phenomena which can affect the economy significantly, there is no other natural phenomenon that comes close to the monsoon, which has a significant impact on the Indian economy. So, the drops of rain that we receive from the monsoon not only provide water to crops but also to India's economic development, impacting food inflation to major policy decisions.

Beyond agriculture: Ripple effects across sectors

The impact of monsoon is indeed not limited only to agricultural activities, but extends beyond various sectors of the country. The times when countries faced insufficient rainfall, such as 2014, 2015 and 2018, a decline of approximately 8 per cent in two-wheeler sales was observed. These sales are regarded as a robust indicator of the rural demand. According to Nielsen-IQ 2022 data, the FMCG (Fast Moving Consumer Goods) sector experienced a sharp disparity between rural and urban demand, which is around 3.5 percentage points during the rainfall-deficit periods. Additionally, the monsoon is quite crucial to the residential and industrial sectors. For example, water collected from reservoirs during the monsoon is used to operate hydropower plants in India, which eventually affects the generation of electricity. Such fluctuations and unstable conditions of the monsoon contribute to electricity costs, particularly during low rainfall times, putting additional pressure on industrial units.

The 2025 forecast: Economic implications

The Indian Meteorological Department (IMD) is optimistic this year regarding the monsoon, which is projected to be near normal. It means if rainfall occurs promptly with minimum variance across regions, the economy will be better off, keeping other factors constant. So, a potential outcome in this case would be a reduction in food inflation. Although food inflation is already low, around 3.16 per cent, it could be further reduced and alleviate the pressure on households. Additionally, favourable monsoon conditions are also anticipated to enhance direct agricultural output, contributing 0.4 per cent to 0.5 per cent of India's GDP this year. In the context of the rural economy, where demand lags

Also read



Monsoon rescues Myanmar and Maldives; Sri Lanka is the next major stop

behind urban demand by 2.6 per cent over the past years, a favourable and evenly distributed monsoon could increase expenditures in smaller towns, villages and lower-income groups. In effect, the RBI, facing normal rainfall, could also ease monetary policy measures because historically, whenever the country experiences a normal monsoon, the RBI has successfully controlled inflation. At the same time, it has implemented policies supporting economic growth, as per the RBI bulletin 2024.

Beyond short-term relief: Addressing structural vulnerabilities

A period where climate change is rewriting the rules and changing the established norms. A country's significant dependence on rainfall presents a concerning scenario, revealing the structural deficiencies within the sector. If we look at the past decade, 2014-2024, India has experienced quite an increase in adverse climatic events such as irregular rainfall, which has increased by around 43 per cent, according to the Indian Meteorological Department. And dry spells during the monsoon also increased by 8 per cent, according to the Indian Institute of Tropical Meteorology. Such shifts in the climatic conditions have considerable economic costs, which are estimated by the Ministry of Finance as approximately 0.7 per cent of the country's GDP annually. Secondly, the inadequate irrigation facilities and infrastructure always remained a central problem in agriculture in India. As you know, still half of the farmland has direct or indirect access to irrigation only, as reported by the Ministry of Water Resources 2024. However, desegregated land seems increasing by only 5.6 percentage points over the past decades.

Now, as we see the monsoon of 2025 approaching, the short-term economic outlook will largely depend on the rainfall patterns across the country. However, in the long term, India must strategically invest in irrigation infrastructure. Particularly the resource-efficient systems like drip irrigation and so on. Promoting climate-smart agriculture actively as a need of the hour, and to adapt rural houses, rural livelihoods need to be diversified. So as long as these changes are not made, Indian agriculture will continue to gamble with the monsoon that could have a broader impact on the economy.

"From War to Field: How Fertiliser Shocks Are Hurting India's Agro-Ecosystems?"

- Shadman Zafar

Rising Kashmir - 7th July 2026

From War to Field: How Fertiliser Shocks Are Hurting India's Agro-Ecosystems

The recent Iran-Israel-US war and the Russian-Ukraine war have disrupted supply chains across the world, especially those of energy and fertilisers

MOHAMMAD AZEEM KHAN & SHADMAN ZAFAR

In India, a farmer is pouring another bag of urea on his wheat field. The government ensures it is the cheapest fertiliser one can acquire. What is often not recognised is that every additional kilo emits nitrous oxide into the atmosphere, a greenhouse gas nearly 300 times more potent than carbon dioxide, which remains there for more than a century. Multiply this across millions of farmers, and you have the concealed climate crisis in India, the unintended outcome of the present fertiliser subsidy policy.

The recent Iran-Israel-US war and the Russian-Ukraine war have disrupted supply chains across the world, especially those of energy and fertilisers. To the world's second-largest fertiliser importer, India, these disruptions have grave implications. Although local production meets most of the country's urea requirements, close to 20 per cent is imported.

The reliance is much greater regarding phosphate and potash; more than 60 per cent and 100 per cent, respectively, are imported, mainly from Russia, China, and the Middle East. Even 90 per cent of the raw materials used to produce fertilisers, such as natural gas, phosphoric acid, ammonia, and rock phosphate are also imported.

The financial burden is already significant. The government proposed an additional fertiliser sub-

sidy of Rs 19,230 crore on top of the first allocation of Rs 1.68 lakh crore in the Union Budget 2025-26. If the instability continues, even the Rs 1.71 lakh crore allocation in 2026-27 Union Budget may not suffice. However, the bigger worry is not just the subsidy bill, but its unintended consequences.

The Imbalance Engine

Urea is insulated against fluctuations in the international market by the government through fixing its price in the domestic market. A variable subsidy by the state will take up any increase in cost. The remaining fertilisers (DAP di-ammonium phosphate) and MOP (muriate of potash) are only given a fixed subsidy; hence their retail prices move with prices in the international market. Consequently, urea remains relatively inexpensive compared to its alternatives.

These price signals prompt farmers to over-rely on urea. Soils should be fed on a balanced diet of three essential nutrients: nitrogen (N), phosphorus (P), and potassium (K), in a desirable proportion of 4:2:1. The Indian soil is being overfed on nitrogen and underfed on the remaining two and the real ratio is distorted to 6.7:2.5:1 at the national level. This imbalance increases as the global prices of phosphate and potash increase.

The environmental cost is immense. The surplus nitrogen is washed into rivers and groundwater, contaminating them. In particular, the contribution of synthetic fertilisers in N2O emis-

sions has doubled in last 20 years (see Figure 1), indicating the over-use of urea. Upon applying to soil, urea is fragmented into different forms of nitrogen through chemical processes, releasing nitrous oxide as a by-product—especially when given in excess.

Figure 1. Trends of N2O Emissions and Urea Consumption



Source: FAOSTAT
Note: N2O Emission is taken on secondary axis.

What If Urea Weren't So Cheap?

When urea is placed under a fixed subsidy like the other fertilisers, the retail price would respond to the market conditions. In the short run, this may place a heavy burden on small and marginal farmers, who may reduce its use, leading to a slight decrease in yields. The large farmers will not reduce much though, capping the overall losses in productivity.

In the long run, the reform would help reduce the overconsumption of nitrogen, promote the balanced use of nutrients, and rebuild the health of the soil, which would be the basis of sustainable agriculture. Doing so would also free up some fiscal space; funds released could be channelised towards irrigation,

agricultural R&D and rural infrastructure, which have much better returns in long term productivity.

A Politically Difficult but Necessary Reform

It might not be politically possible to conduct a complete overhaul, but incremental reforms can produce substantial benefits. India must slowly transfer urea to the Nutrient-Based Subsidy (NBS)-regime, which already applies to other fertilisers, with price band to cushion the small farmers against abrupt shocks. The existing fertiliser DBT system, which currently verifies sales at the point of sale, could be gradually advanced toward direct transfers to farmer accounts, giving them greater choice in nutrient purchases.

The data of Soil Health Card which is already under collection should be used to encourage incentive schemes that will pay off in terms of balanced use of fertilisers as opposed to blindly applying nitrogen. Nano urea, shows potential, though its field-level efficacy and farmer adoption are still evolving and needs further independent evaluation. Further, organic and biofertilisers provide a way to truly low-emission agriculture in the long term.

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