

THE SOCIAL AUDITOR

YOUR INSIGHT JOURNAL



March 2024



ICMAI Social Auditors Organisation

(A Section 8 Company promoted by The Institute of Cost Accountants of India)

Social Stock Exchange

SEBI vide its notification dated 25th July, 2022 has made amendments in the SEBI (ICDR) Regulations, 2018, and SEBI (LODR) Regulations, 2015. Copies of these amendments are being circulated with this communique. These amendments have been made to provide Social Enterprises with additional avenues to raise funds through the Social Stock Exchange (SSE), which is a novel concept in India. It provides eligibility of organizations to raise funds through Social Stock Exchange, eligibility of entities to be classified as “Not for Profit Organization”, eligibility of entities to be classified as “For Profit” Social Enterprises, means through which Social Enterprises can raise funds, and obligations of Social Enterprises.

Furthermore, to strengthen the governance framework in these entities, & provide better confidence to such investors, SEBI has introduced the concept of Annual Impact Report by a Social Auditor. The purpose of this Social Audit is to ascertain the impact made by the Social Enterprise through its activities, intervention, programs or projects implemented during the reporting period. The annual impact report shall be audited by a Social Auditor.

ICMAI Social Auditors Organisation (ICMAI SAO)

To enroll & regulate the Social Auditors and also to prescribe the Social Audit Standards, the Institute of Cost Accountants of India, in compliance with SEBI Regulations, has incorporated a section 8 company titled ICMAI Social Auditors Organization. The ICMAI SAO will enroll eligible CMAs & others as Social Auditors and focus on their capacity building through continuous professional advancement with emphasis on adherence to the highest ethical standards and compliance with the Social Stock Exchange requirements.



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MARCH 2024

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FROM THE CHAIRMAN'S DESK

CMA Ashwinkumar G. Dalwadi
Chairman
ICMAI Social Auditors Organisation

Social cost-benefit analysis is a systematic and cohesive economic tool(method) to survey all the impacts caused by an urban development project[1]. It comprises not just the financial effects (investment costs, direct benefits like tax and fees, et cetera), but all the social effects, like: pollution, safety, indirect (labour) market, legal aspects, et cetera. The main aim of a social cost-benefit analysis is to attach a price to as many effects as possible in order to uniformly weigh the above-mentioned heterogeneous effects. As a result, these prices reflect the value a society attaches to the caused effects, enabling the decision maker to form a statement about the net social welfare effects of a project. A social cost and benefit analysis helps to compare different alternatives for a project in an integrated manner. This is not just a financial consideration. After all, an SCBA also identifies other, non-financial effects.

The societal cost-benefit analysis (CBA) is conducted from the point of view of society as a whole, including the total costs and benefits from the perspective of all stakeholders that have positive or negative benefits from the investment decision. Within a societal cost-benefit analysis, we consider two different perspectives:

- A financial cost-benefit analysis, in which costs and benefits of the project owner play a central role;
- An economic cost-benefit analysis, in which we also include all societal costs and benefits. Examples are GHG emissions, air pollution, and effects on other markets.

To evaluate if the social benefit exceeds the social cost, we apply techniques that are similar to those found in financial appraisals. However, the key difference is that cost-benefit analysis does not consider only financial cash flows or transactions attributable to a firm. It considers all relevant costs and benefits irrespective of who bears those impacts. Consequently, stakeholders beyond the direct investor in a project or program are considered in a cost-benefit analysis.

FROM THE CEO's DESK

CMA (Dr.) S K Gupta
Chief Executive Officer
ICMAI Social Auditors Organisation

S Social Audit is an emerging concept that has become popular and relevant in the context of Good Governance. Social audit through its systematic process allows the civil society to identify the gap between the desired and actual impact of a project / programme / service implemented. It also allows people to enforce accountability and transparency in government service delivery. Social Audit is the process in which, details of the resource, both financial and non-financial, used by public agencies for development initiatives are shared with the people, often through a public platform. Social Audits allow people to enforce accountability and transparency, providing the ultimate users an opportunity to scrutinize development initiatives. A social audit is an ongoing process by which the potential beneficiaries and other stakeholders of an activity or project are involved from the planning to the monitoring and evaluation of that activity or project.

A social audit is a formal review of a company's endeavours, procedures and code of conduct regarding social responsibility and the company's impact on society. A social audit is an assessment of how well the company is achieving its goals or benchmarks for social responsibility. The goal is to identify gaps, improve transparency, promote ethical conduct, and ultimately, create a positive influence on society. Social audit plays a critical role in ensuring that businesses act in a socially responsible and sustainable manner. By holding companies accountable for their actions, social audit can help to prevent them from engaging in harmful practices such as exploitation of workers, environmental degradation, or violation of human rights.

Social Audit is a critical monitoring tool. Social Audit can be taken at any point of time during the implementation and also after the implementation to assess the end results. The general but basic objectives of Social Audit are: to ensure the standard and easy accessibility of local development resources and find out the economic and social gaps; to create awareness among the beneficiaries and development actors; to more active the local development initiatives; to formulate or reform policy based on the interest of common people especially rural people; to end the irregularities of services.

PROFESSIONAL DEVELOPMENT PROGRAMS



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PROFESSIONAL DEVELOPMENT PROGRAMS

MARCH 2024

Date & Time	Name of Program
02nd-03rd March 2024 [Saturday - Sunday] From 10.00 am to 05.00 pm	16th Online Batch Preparatory Course for Social Auditors Examination
15th March 2024 [Friday] From 04.00 pm to 05.15 pm	Relevance of Sustainability Reporting Frameworks & Data
27th March 2024 [Wednesday] from 04.00 pm to 06.00 pm	Importance of ESG in Valuation

UPCOMING PROGRAM

Date & Time	Name of Program
07th April 2024 [Sunday] From 04.00 pm to 05.30 pm	Leveraging ESG for Sustainable and Economic Growth: Strategies for the Future
20th April 2024 [Saturday] From 04.00 pm to 05.30 pm	Life Cycle Assessment of Products
26th April, 05th May, 12th May & 19th May 2024 From 03.00 pm to 07.00 pm	Proficiency Building Program on Social Impact Assessment

Articles

Social Finance - Focus on Social Impact

Dr. S K Gupta

Chief Executive Officer - ICMAI Social Auditors Organisation

The Perspective

Global environmental, social, and governance (ESG) trends are rapidly reshaping the economy and presenting significant risks and opportunities for investors. By 2050, the population is expected to grow by more than 30 percent, to more than 9.5 billion people, with the majority of this growth happening in urban areas in the developing world. Meeting the needs of this population in an increasingly resource-constrained world will require tens of trillions of dollars in investment. This also presents compelling business growth and investment opportunities for investors in many new markets and sectors. Resource scarcity, climate-related impacts, global health dangers, social instability, and substantial demographic changes already are presenting business leaders with issues and influencing decision making that will determine future business success and investment performance. More investors recognize the importance of these global trends to their investment decisions and are adjusting their asset allocation and investment-management strategies accordingly.

What is Social Finance

Not too long ago, the notion of generating social good along with financial returns was considered a fringe idea by most investors. But recently the area of “social finance” has started to enter the mainstream and receive consideration from Wall Street giants and some of the world’s largest institutional investors. Social finance is an approach to managing money which delivers a social dividend and an economic return. Social finance is often used to describe the lending and investment into companies who consider themselves social enterprises, charities, co-operatives, and other impact-focused organizations.

The term can include community investing, microfinance, investing in socially-responsible and sustainable businesses, social impact bonds, and social enterprise lending. Outcome-based philanthropic grant making and program-related investments, sometimes referred to as venture philanthropy, also fall under the umbrella of social finance. Social finance is an approach to managing investments that generate financial returns while including measurable positive social and environmental impact. Social finance includes a full range of investment strategies and solutions across asset classes that can provide an



array of risk-adjusted returns tailored to investor intent. Social finance is a tool that seeks to mobilize private capital for the public good. It creates opportunities for investors to finance projects that benefit society and for community organizations to access new sources of funds. Social finance is a new financial marketplace which relates to the emergence of social economy and social entrepreneurship. It is also associated with the limitations of government policy and the failure of markets to efficiently produce solutions to social and environmental problems. The mitigation of these problems can be supported by a network of innovative social enterprises and financing mechanisms. Social impact bonds, venture philanthropy and crowd funding are mechanisms that transform. Social finance consists of the network of processes, decisions and institutions that finance production of public goods with participation of the private sector, a fusion often called the “third sector” of the economy. The analysis of social finance assesses the feasibility of impact investments, exploring whether the monetary benefit from the production of public goods with the participation of the private sector exceeds the cost. In this context, impact is a value-laden contribution to the solution of a social or environmental problem and investments that are primarily pursued to realize impact are called impact investments. This analysis also assesses the ways of financing impact investments (mainly debt, equity and donations) and the effect of the sources of finance on the governance of social enterprises and investment outcomes .

Social finance investments

- involve access to capital that has a positive impact not only financially but also on society as a whole;
- can be made by different types of investors. These include charitable foundations, retail investors, banks, governments and institutional investors such as pension funds;
- can be made to a variety of organizations that seek to have a positive impact in their communities
- can be made using a variety of financial tools, including loans, community bonds, equity investments and social impact bonds;

Finance for social good

What is social finance? Rachel Kalbfleisch of the International Development Research Centre (IDRC) defines it as a collection of approaches to managing money that create value for society or the environment, often while producing a financial return, while the MaRS Centre for Impact Investing calls it “an approach to managing money to solve societal challenges”. In other words, social finance is a movement that covers various ways of using finance—via socially responsible investments, micro-loans, community investments, and so on—to achieve a social or environmental impact. Social impact investing is commonly used to describe the direction of investment funds to opportunities or companies that have desirable environmental, governance or social factors (also called ESG investing), and is related to social finance, which involves the use financial assets or instruments to fund projects that have a positive social or environmental impact.

Social Finance: Where Wealth and Values Meet

Investors who adopt social finance strategies don't have to sacrifice returns in order to feel good about the makeup of their portfolios or to effect meaningful societal change. The term “social finance” means different things to different people. Often, those words bring to mind the avoidance of so-called “sin stocks” — shares of companies involved in the manufacture or distribution of tobacco or alcohol, or shares of gambling enterprises. But the term encompasses much more. Social finance offers investors ways to realize competitive returns through investments designed to achieve meaningful societal or environmental impact. Investing in socially and environmentally conscious ways is growing in popularity with all types of investors.



Social Finance is an alternative model of investment, which differs from conventional models in one key respect: it demands that investments produce both a social and a financial return. In other words, there must be a tangible social benefit for any community in which the enterprise is based: this could be improved child care services, creating jobs in disadvantaged areas, providing transport for people living with disabilities etc. Social Finance delivers resources to communities and enterprises overlooked by conventional outlets and ensures that all investments produce a social gain or benefit. All funding recipients are assessed first on their capacity to deliver meaningful benefit to either the people or the community they serve and then on their ability to repay the loans.

Key Trends in Social Finance Activity

Much has been written about the evolution of social finance, from the early days of socially conscious investing aligned with religious values, and, later, to the use of social finance as a tool to eliminate racial discrimination and apartheid in South Africa. This focus on values and ethics has promoted the growth of strategies such as negative screening, which uses ESG factors as a basis to exclude sectors, countries, or practices from portfolios or funds. Today, the SRI world has moved from a practice of negative screening and exclusion to one of seeking or encouraging certain characteristics in portfolio companies. Social finance today offers a wide range of options aligned with different risk appetites, return expectations, liquidity needs, and investors' expectations of impact. Today Social finance has grown significantly over the past decade, with strategies and products across asset classes aligned with different investor needs, motivations, and return expectations. Estimates show that social finance activity today is valued at upward of US\$22 trillion, and many strategies have the potential for double-digit growth in the near future. The diverse motivations and trends in social finance activity for some mainstream investor groups is helping drive this growth and diversity in investment opportunities.

Scaling social finance

Despite rising interest in the sector, some investors say the social finance market's development has been held back partly by a lack of suitable products to invest in, confusion surrounding the proliferation of industry terminology and questions of whether or not investments can be profitable given their limited track record. This has left many mainstream investors hesitant to dip their toe in the space. To address these challenges, the social finance sector must come up with better ways to measure non-financial metrics, increase transparency of social and environmental impacts on financial performance and create a wider variety of investment products, growing investor interest in social finance into considerable capital allocation will necessitate systemic changes to the current system. This includes not only improving products to meet investor goals and performance expectations, but also strengthening the enabling ecosystem, including the infrastructure, skills, and incentives that shape business decisions and are needed to execute transactions.

How to come up with a social finance startup idea



This requires a collective effort by the investor community to overcome key challenges and dismantle barriers to entry for mainstream investors in social finance. Investors themselves have an important role in this. They have a number of levers at their disposal, including large amounts of investment capital, the ability to partner with and engage policymakers, deep technical expertise, and the opportunity to exercise sector wide coalition-building power. The myriad of investment activities that generate financial returns and include social and environmental impact should share a common framework. Investors would have greater insight and access to investment opportunities with different levels and types of social impact. Providers, especially broad financial services firms, can encourage expertise to grow social finance from the origination of securities to investment to custody.

Imperatives and drivers of social finance

- Facilitate asset allocation across multiple social finance strategies that cater to varying risk appetites and return expectations.
- Codesign products with established return expectations and clear impact objectives for easier adoption.
- Deepen social finance expertise and knowledge across the investment value chain, particularly among advisory and investment teams.
- Develop and adopt standardized nonfinancial metrics across investment activities. » Integrate social and environmental impact into valuation and pricing of risk.
- Drive consistent and material disclosure of social and environmental impacts on financial performance and impacts on shareholders.
- Share best practices on the integration of social finance into portfolios with stakeholders, peers, and other beneficiaries to promote learning and increase awareness.
- Participate in industry dialogues to clarify and reinforce the interpretation of fiduciary duty to include ESG factors.
- Align internal and external incentives with long-term value and encourage good governance and positive policies that can respond to and support broader uptake of social finance.
- Provide guidance and technical assistance to strengthen the pipeline of investment opportunities for both investors and intermediaries.

Measure for Measure

Almost everyone (with good intentions) hopes to achieve positive social impact. The notion of the social impact of business has become so mainstream that government at the highest levels—including G8 leaders and even the Pope—advocate the creation of institutions to give greater attention to driving social impact”. However, one of the most difficult challenges facing social finance revolves around the question: how do we measure social impact? There are, in fact, many ways to measure it, but the crucial question concerns how to consolidate these many methods under one impact measurement and evaluation system. At present, the impact measurement field is quite chaotic: each institution or region typically has its own assessment criteria for impact, and creates its own metrics. Though in recent decades the Global Impact Investing Network (GIIN) and Social Value UK (formerly the SROI Network) have made efforts to consolidate their metrics, there has not been a single governing authority to establish an official and centralised system of impact measurement and evaluation.

The promise of impact investing in India

Achieving the ambitious sustainable development goals (SDGs) by 2030 will take an estimated \$5 to \$7 trillion per year, with a financing gap of \$2.5 trillion in developing countries. In India alone, the outside challenge has been translated into a financing gap of \$565 billion. While the country has seen huge progress across the social sectors, enormous challenges remain. Closing this gap requires action on several fronts; efficient and effective domestic resource mobilisation, outcome-focused donor efforts to ensure that money is spent well and harnessing private capital for good. In recent years, interest has grown globally amongst governments and markets to develop new investment approaches, such as impact investing or purpose-driven finance. Impact investment refers to the provision of finance to organisations with explicit expectations of financial returns as well as measurable social outcomes.

Conclusion: Looking Ahead

Going forward, social finance faces a broad set of opportunities and challenges. Ellie Howard of Cicero Group suggests that “in time, social finance will become inherent to the practice of investing in line with the progression to a conscious economy”, but that “the sector first needs to establish itself”. In other words, what is now somewhat of a fringe concept—investing to achieve measurable social impact—will eventually become inextricable from “plain-old” normal investing. When that happens, we’ll have an economy that includes social impact in its core calculus; that incorporates more of the full costs and benefits of doing business; and that is more “conscious” of the impacts it has.

To integrate social finance into investment decisions it is necessary to help asset managers, advisors, and intermediaries communicate the options and benefits of social finance more clearly, and in ways that resonate with investors. Innovation funds, impact bonds, and impact investing are all new and fairly complex tools, and considerable work must be done to make these mechanisms as useful and effective as they could be. But there is considerable momentum among, and great opportunities for, investors, foundations, service providers, and government leaders to bring these tools to bear on tackling a host of social challenges, making government work more efficiently, and harnessing the enormous profits of the private sector as forces of good.

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Role of Technology in Advancing ESG Modelling & Analytics

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Environmental, Social, and Governance (ESG) considerations are increasingly pivotal in investment decision-making. Investors acknowledge that a company's performance in these areas significantly influences its long-term sustainability, financial performance, and risk profile. Consequently, there is a heightened demand for robust ESG modelling and analytics to assess, measure, and integrate these factors into investment strategies. Technology plays a crucial role in advancing ESG modelling and analytics, enabling more precise assessments and informed decision-making processes.

One primary way technology is revolutionizing ESG modelling is through the utilization of big data and artificial intelligence (AI). With the proliferation of digital platforms and the emergence of the Internet of Things (IoT), an unprecedented volume of ESG-related data is generated daily. AI-powered algorithms can efficiently analyze this vast amount of data, identifying pertinent ESG metrics and trends with greater speed and accuracy than human analysts alone. Machine learning techniques facilitate the extraction of insights from unstructured data sources such as news articles, social media feeds, and corporate reports, providing a comprehensive view of a company's ESG performance. By leveraging big data and AI, investors can gain deeper insights into the ESG risks and opportunities associated with their investment portfolios.

Furthermore, technology facilitates more sophisticated risk assessment methodologies that integrate ESG factors into traditional financial analysis. By integrating ESG data into risk models, investors can gain a better understanding of the potential financial implications of ESG-related events and trends. For instance, companies with poor environmental practices may face regulatory fines or reputational damage, leading to financial losses for investors. By quantifying these risks using advanced modelling techniques, investors can adjust their portfolios to mitigate exposure to such hazards.

Additionally, technology enables the development of optimization algorithms that balance financial returns with ESG objectives. These algorithms can identify investment opportunities that align with specific ESG criteria while maximizing portfolio performance. By systematically integrating ESG considerations into portfolio construction and asset allocation decisions, investors can achieve their sustainability goals without sacrificing financial returns. This promotes transparency and accountability in ESG reporting and disclosure practices.

Moreover, technology enables the standardization and harmonization of ESG reporting frameworks, reducing inconsistencies, and facilitating comparisons across companies and industries. By utilizing data standards and interoperable platforms, investors can more effectively evaluate and benchmark companies' ESG performance, fostering greater transparency and accountability in the capital markets.

In conclusion, the integration of technology into ESG modelling and analytics signifies a paradigm shift in the way investors assess and manage sustainability risks and opportunities. By harnessing the power of big data, AI, and blockchain, investors can gain deeper insights into companies' ESG performance, enhance risk assessment methodologies, and promote transparency and accountability in ESG reporting practices. As the demand for sustainable investing continues to grow, technology will play an increasingly vital role in driving innovation and advancing ESG integration across the investment landscape.

Pioneering Sustainability: The Intersection of FinTech Evolution and Green Finance in South Asia

Mr. Romex K Jha

(*Co-Founder GreenTechTrade.co | DBA Researcher | Author*)

"The future will either be green or not at all." - Bob Brown

Introduction:

The evolution of financial technology (FinTech) has fundamentally transformed the traditional banking and financial landscape, bringing about unprecedented levels of accessibility, efficiency, and innovation. As Brett King, renowned FinTech author and CEO of Moven, aptly states, "FinTech is the single most important sector to understand right now."

However, as the world confronts the urgent challenges posed by climate change and environmental degradation, there is a growing imperative for FinTech to evolve beyond its traditional boundaries and embrace sustainability as a core principle. This has given rise to the concept of Green FinTech – a movement that seeks to leverage technology and finance to drive positive environmental impact while fostering financial inclusion and economic growth.

Evolution of FinTech:

The evolution of FinTech, as highlighted by industry experts like Chris Skinner, author of "Digital Bank," and Anne Boden, CEO of Starling Bank, has been characterized by a relentless focus on innovation and disruption. From the early days of online banking and digital payments to the emergence of mobile banking apps and robo-advisors, FinTech has reshaped the way individuals and businesses interact with financial services.

Skinner emphasizes the transformative power of FinTech, stating, "The future of banking is about enabling and empowering customers." This sentiment underscores the democratizing effect that FinTech has had on financial services, breaking down barriers to access and empowering individuals to take control of their financial lives.

However, as Anne Boden observes, the evolution of FinTech is not just about technological innovation but also about driving positive societal impact. "We are not just building a bank; we are changing the world," she asserts, highlighting the broader mission of FinTech to drive meaningful change beyond financial profits.

Enter Green FinTech:

Against the backdrop of mounting concerns over climate change and environmental sustainability, there is a growing recognition within the FinTech community that technology and finance can be powerful catalysts for driving positive environmental change.

As Simon Zadek, Chair of the Finance for Biodiversity Initiative, notes, "FinTech has the potential to catalyze a new era of green finance, unlocking investment in sustainable projects and driving the transition to a low-carbon economy."

Green FinTech represents a natural evolution of the FinTech movement, aligning technological innovation with environmental sustainability to address the interconnected challenges of finance and climate change.

Unique Challenges of South Asia:

South Asia, a land of vibrant cultures and a burgeoning population exceeding 1.9 billion, stands at a crossroads. While the region aspires for economic prosperity, the looming threat of climate change casts a long shadow. Here, Green FinTech emerges as a powerful tool, harnessing financial technology to weave a path towards a sustainable future.

South Asia faces a multitude of environmental challenges, intertwined with its social and economic landscape. Here are five key hurdles that Green FinTech can help overcome:

Vulnerability to Climate Change : The region is a hotspot for climate change impacts. Rising sea levels threaten coastal communities, while erratic weather patterns disrupt agricultural cycles and water resources. A 2021 World Bank report estimates that climate change could push an additional 100 million people in South Asia into poverty by 2030.

Energy Deficits and Reliance on Fossil Fuels : Many South Asian countries grapple with energy shortages. To bridge the gap, they often rely heavily on fossil fuels, exacerbating greenhouse gas emissions.

Limited Access to Finance : A significant portion of South Asia's population remains unbanked, hindering investments in clean technologies and sustainable practices. The World Bank estimates that 690million adults in South Asia are unbanked and underbanked.

Fragmented Land Ownership : Land fragmentation, particularly in the agricultural sector, poses a challenge to implementing large-scale renewable energy projects or sustainable farming practices.

Lack of Environmental Awareness : Limited environmental literacy can hinder public support for green initiatives. Green FinTech solutions can play a crucial role in raising awareness and promoting behavior change.

Innovative Ideas for Green FinTech in South Asia : Drawing inspiration from thought leaders in both FinTech and green finance, here are ten innovative ideas for Green FinTech initiatives that could be implemented across South Asia:

Renewable Energy Financing Platforms : Inspired by the vision of Jigar Shah, co-founder of Generate Capital, develop online platforms that connect investors with renewable energy projects in need of funding. By facilitating easy access to renewable energy investments, these platforms can accelerate the transition towards clean energy sources and reduce reliance on fossil fuels.

Carbon Footprint Tracking Apps : Following the lead of climate activist Greta Thunberg, create mobile applications that allow users to track and analyze their carbon footprint based on their financial transactions. By providing insights into individual carbon emissions, these apps can encourage sustainable spending habits and promote eco-friendly consumption patterns.

Green Bonds Marketplace : Building on the expertise of Sean Kidney, CEO of the Climate Bonds Initiative, establish an online marketplace for trading green bonds, which are specifically earmarked for financing environmentally friendly projects. This platform would enable investors to support sustainability initiatives while diversifying their investment portfolios and driving capital towards green projects.

Microfinance for Climate Resilience : Taking inspiration from Muhammad Yunus, founder of Grameen Bank, expand microfinance services to include loans for climate-resilient infrastructure and agricultural practices. By providing small-scale loans to vulnerable communities, microfinance institutions can help build resilience against climate-related risks and promote sustainable livelihoods.

Eco-Friendly Investment Funds : Following the principles of sustainable investing espoused by Lisa Woll, CEO of US SIF, launch investment funds that exclusively invest in companies with strong environmental credentials. These funds could attract socially responsible investors looking to align their financial goals with their sustainability values and drive capital towards environmentally responsible businesses.

Blockchain for Sustainable Supply Chains : Drawing inspiration from experts like Don Tapscott, author of "Blockchain Revolution," and Greenpeace International's blockchain initiatives, utilize blockchain technology to create transparent and

traceable supply chains for eco-friendly products. By enabling consumers to verify the sustainability credentials of products, blockchain can drive demand for environmentally responsible goods and incentivize companies to adopt sustainable practices.

Carbon Offset Trading Platforms : Inspired by the work of Mark Carney, UN Special Envoy for Climate Action and Finance, develop online platforms for trading carbon offsets, allowing businesses to buy and sell credits for reducing greenhouse gas emissions. These platforms can facilitate the transition to a low-carbon economy by incentivizing emission reductions and promoting investments in carbon offset projects.

Green Insurance Products : Drawing on the expertise of green finance experts like Andrew Steer, Ex- President and CEO of the World Resources Institute, introduce insurance products that offer coverage for climate-related risks, such as extreme weather events and crop failures. By providing financial protection against environmental hazards, these products can help mitigate the impact of climate change on vulnerable communities and promote resilience-building efforts.

Sustainable Crowdfunding Campaigns : Following the model of crowdfunding platforms like Kickstarter and Indiegogo, launch crowdfunding platforms dedicated to financing community-led sustainability projects, such as reforestation efforts and waste management initiatives. These platforms can empower individuals and grassroots organizations to drive positive environmental change and mobilize resources for sustainable development initiatives.

AI-Powered Sustainability Analytics : Leveraging the insights of experts like R. Paul Herman, CEO of HIP Investor, develop artificial intelligence (AI) algorithms for analyzing financial data and identifying opportunities for sustainable investments. By harnessing the power of AI-driven analytics, financial institutions can integrate sustainability considerations into their investment decision-making processes and allocate capital towards environmentally responsible projects.

Conclusion:

As FinTech continues to evolve and innovate, the emergence of Green FinTech represents a significant opportunity to harness the power of technology and finance for environmental sustainability. By drawing inspiration from thought leaders in both FinTech and green finance, stakeholders across South Asia can collaborate to create innovative solutions that drive positive environmental change while promoting economic growth and financial inclusion. As Brett King succinctly puts it, "The future of finance is green." Through collective action and collaboration, we can pave the way for a more sustainable and prosperous future for generations to come.

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The Convergence of CSR, ESG, and Sustainability: Driving Business Impact and Social Change

Mr. S M Hussain

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In today's rapidly changing global landscape, businesses are increasingly recognizing the importance of integrating Corporate Social Responsibility (CSR), Environmental, Social, and Governance (ESG) principles, and sustainability practices into their core strategies. This convergence represents a fundamental shift in how companies perceive their role in society and the environment, moving beyond profit maximization to embrace broader responsibilities toward stakeholders and the planet.

CSR, ESG, and sustainability are interconnected concepts that share the common goal of creating positive impacts on society, the environment, and corporate governance. CSR encompasses a company's voluntary actions to address social, environmental, and ethical issues, often extending beyond legal requirements. ESG refers to the criteria used by investors and stakeholders to evaluate a company's sustainability and ethical performance across environmental, social, and governance dimensions. Sustainability, on the other hand, focuses on meeting the needs of the present without compromising the ability of future generations to meet their own needs, emphasizing long-term viability and resilience.

The integration of CSR, ESG, and sustainability principles into business strategies offers numerous benefits for companies, society, and the planet. By aligning business objectives with societal and environmental goals, companies can enhance their brand reputation, build trust with stakeholders, and mitigate risks associated with social and environmental issues. Moreover, adopting sustainable practices can drive innovation, improve operational efficiency, and create new revenue streams, contributing to long-term business growth and competitiveness.

Key areas where companies are increasingly focusing their CSR, ESG, and sustainability efforts include:

1. **Environmental Stewardship** : Companies are adopting measures to reduce their carbon footprint, minimize waste and pollution, conserve natural resources, and transition to renewable energy sources. Initiatives such as carbon offsetting, sustainable sourcing, and circular economy practices are becoming standard practices for environmentally responsible companies.
2. **Social Responsibility** : Companies are addressing social issues such as diversity and inclusion, human rights, labor practices, and community development. This includes initiatives to promote workplace diversity, ensure fair wages and working conditions throughout the supply chain, and support local communities through philanthropic activities and social impact projects.
3. **Corporate Governance** : Companies are enhancing transparency, accountability, and ethical behavior in their governance practices. This involves strengthening board oversight, improving risk management systems, and adopting responsible investment and business conduct policies to align with international standards and best practices.
4. **Sustainable Supply Chains** : Companies are working to ensure that their supply chains are sustainable and ethical, from sourcing raw materials to delivering finished products to customers. This includes initiatives to assess and mitigate risks related to labor rights, environmental impact, and business ethics throughout the supply chain, as well as collaboration with suppliers to drive continuous improvement.
5. **Stakeholder Engagement** : Companies are actively engaging with stakeholders, including investors, customers, employees, regulators, and civil society organizations, to understand their needs, expectations, and concerns related to CSR, ESG, and sustainability. This includes transparent reporting on performance metrics, dialogue and consultation with stakeholders, and collaboration on shared goals and initiatives.

In conclusion, the convergence of CSR, ESG, and sustainability represents a paradigm shift in how businesses operate and create value for society and the environment. By embedding these principles into their core strategies and practices, companies can drive positive impacts, foster resilience and innovation, and contribute to a more sustainable and equitable future for all stakeholders. As businesses continue to navigate evolving social, environmental, and economic challenges, embracing CSR, ESG, and sustainability will be essential for long-term success and impact.

The Rise of Eco-India: How Sustainable Investments are Transforming the Economy

Dr. Amit Manglani, Associate Professor, Guru Ghasidas Vishwavidyalaya

Ms. Divya Nandini Sharma, Research Scholar, Guru Ghasidas Vishwavidyalaya

India's pathway to economic growth has captured global attention. However, a new perspective is being introduced where economic prosperity is intertwined with environmental responsibility. This new perspective has its focus on the rise of Eco-India, an economy actively transforming itself through sustainable investments, i.e. inculcating a conscientious environmental management. The surge of sustainable investments in India, is a positive indicator of India's walk towards Viksit Bharat 2047 which recognizes sustainability as a significant facet of development.

The Green FDI Boom: A Catalyst for Change

Foreign Direct Investment (FDI) focused on climate friendly initiatives, or Green FDI, is experiencing a significant upsurge in India. The trend in share of Green Investments in total FDI show that there has been a significant constant upward trend in Green FDI since the year 2020, the pandemic affected year. This signifies the growing investor concern towards sustainability. Several trends are shaping the future of sustainable investments in India:

- **Upsurge in Investment into Renewables :** According to government statistics, the renewable energy sector alone has attracted over USD 6.1 billion in equity investments in the past three financial years. This also signifies growing investor confidence in India's potential for a sustainable future.
- **Impact Investing :** Investors are increasingly seeking investments that not only generate financial returns but also create positive social and environmental impacts. Impact investing funds are becoming more prevalent, targeting sectors like clean energy, sustainable agriculture, and affordable housing. These funds attract investors who are motivated by both financial gain and a desire to contribute to a more sustainable future.
- **Green Bonds :** Issuance of green bonds, which raise capital specifically for environmentally friendly projects, is witnessing significant growth in India. Green bonds provide companies and government agencies with a dedicated source of funding for green initiatives while offering investors attractive returns with positive environmental impact. This opens up new avenues for financing sustainable development projects.
- **Technological Advancements :** Technological advancements play a crucial role in driving sustainable investments. Continued improvements in areas like Renewable energy storage; Electric vehicle technology; Smart grid management & Sustainable materials etc. will further unlock investment opportunities by making clean technologies more cost-effective, reliable, and scalable.
- **Focus on Data and Transparency :** Improved data collection and reporting standards on environmental, social, and governance (ESG) factors are crucial for attracting investors. Transparency allows investors to make informed decisions based on a project's sustainability credentials. This includes:
 - Standardized ESG reporting frameworks
 - Improved data collection on Green FDI flows and impact of sustainable investments
 - Increased availability of reliable and transparent information on project development and outcomes

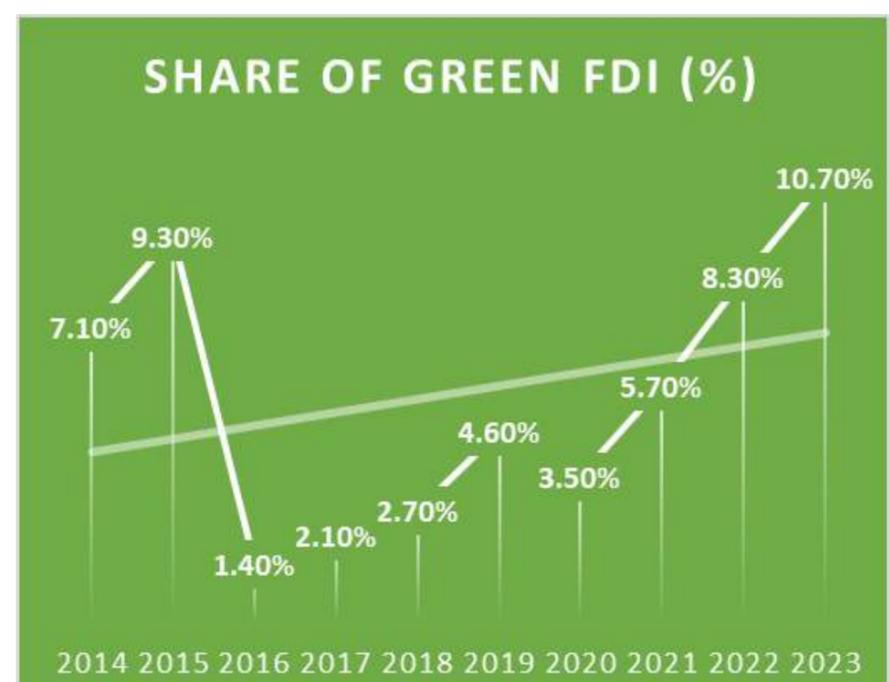


Figure 1: Graphical Representation of Share of Green FDI in Total FDI Inflows Source: MERCOM India and DPIIT Reports

These steps will increase investor confidence and encourage greater participation in the sustainable investment landscape. These emerging trends highlight the growing sophistication of the sustainable investment landscape in India. As these trends gain traction, a significant acceleration in India's transition towards a more sustainable future can be expected.

Beyond Renewables: New Frontiers in Sustainable Investments

While renewable energy remains a cornerstone of Eco-India, sustainable investments are expanding into new and exciting frontiers:

- **Sustainable Infrastructure** : Investments are flowing into green buildings, smart grids with improved energy efficiency, and energy-efficient transportation solutions like electric vehicle charging infrastructure and public transportation upgrades.
- **Circular Economy** : Investments are promoting the adoption of circular economy practices, i.e. reduce and reuse; focusing on reducing waste, extending product lifespans, and creating closed-loop systems for material reuse.
- **Climate-Smart Agriculture** : Investments in technologies and practices that promote sustainable agricultural practices are gaining traction which include: Precision Agriculture, the use of sensors, data analytics, and automation technologies allows for targeted application of fertilizers, pesticides, and water. Soil Health Management, investments in organic farming practices, cover crops, and biofertilizers improve soil health, leading to increased soil fertility and reduced reliance on chemical fertilizers; and, Water-Efficient Irrigation Methods minimizing water waste and maximizing productivity.
- **Blue Economy** : Sustainable investments are also venturing into the blue economy, focusing on marine and coastal resource management:
 - Sustainable Fisheries : Investments in responsible fishing practices, gear innovations, and aquaculture can help protect fish stocks and ensure long-term sustainability of fisheries.
 - Clean Technologies for Ocean Energy : Investments in technologies like wave energy, tidal power, and offshore wind power can harness the vast potential of oceans for clean energy generation.
 - Coastal Protection Programs : Investments in mangrove restoration, seawall construction, and early warning systems can mitigate the impact of climate change on coastal communities and ecosystems

These new investment areas go beyond simply generating clean energy. They represent a holistic approach to sustainability, addressing issues throughout the economic system.

Challenges and Considerations for Eco-India

Despite the remarkable progress, there are challenges that need to be addressed for Eco-India to fully realize its potential:

- **Policy Stability** : Consistent and long-term government policies are crucial for investor confidence and long-term planning in the sustainable investment sector. Regular policy changes can create uncertainty and discourage investment.
- **Capacity Building** : Developing expertise in areas like project evaluation, impact assessment, and ESG integration within both government and private sectors is essential. This will ensure efficient allocation of resources and successful implementation of sustainable investment projects.

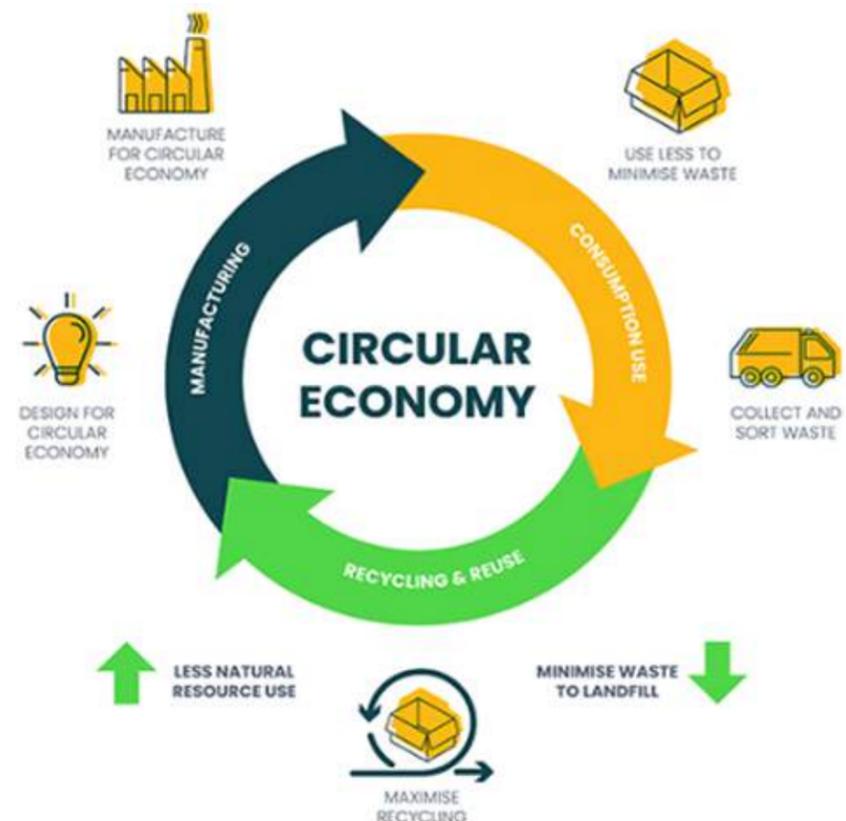


Figure 2: How the Circular Economy Works

Source: <https://www.fortna.com/insights-resources/adopting-a-circular-economy-approach/>

- **Standardization and Data Gaps** : Standardized definitions and improved data collection methods are needed to track Green FDI flows and the impact of sustainable investments. This will provide a clearer picture of the progress being made and facilitate better decision-making.
- **Financing Gaps** : Despite the growth in Green FDI, there is still a financing gap for some critical areas of sustainable investment. Innovative financing mechanisms and public-private partnerships are essential to bridge these gaps.
- Additionally, social acceptance and community engagement are crucial for the success of sustainable investment projects. This can be achieved through:
 - Community outreach and education programs to raise awareness about the benefits of sustainable investments.
 - Ensuring equitable distribution of benefits from green projects to local communities.
 - Empowering local communities to participate in decision-making processes related to sustainable development projects.

Conclusion: A Greener and More Prosperous Future

The rise of Eco-India signifies a paradigm shift. India is demonstrating that economic growth and environmental responsibility can go hand-in-hand. Sustainable investments are not just about environmental protection; they are the key to unlocking a future that is both prosperous and sustainable. As India continues on this path, it paves the way for a future where economic development is decoupled from environmental degradation. This journey will not be without its challenges, but by embracing innovation, fostering collaboration, and establishing itself as a green finance hub, Eco-India can inspire other nations to join its mission and create a more sustainable future for all.

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The Rise of ESG Audits

Mr. Sunny Revankar

Understanding ESG and Sustainability

Traditionally, financial audits have been the cornerstone of ensuring business transparency and accountability. However, the landscape is evolving. Investors, stakeholders, and regulators are increasingly demanding a broader view of corporate performance, encompassing environmental, social, and governance (ESG) factors alongside financial health. This shift necessitates a corresponding change in auditing practices, with ESG considerations becoming an integral part of the process.

Why the Focus on ESG?

Several factors contribute to the growing importance of ESG auditing. Socially responsible investing is on the rise, with investors seeking companies that prioritise sustainability and ethical practices. Stakeholders, including employees, communities, and consumers, are also demanding greater transparency on ESG issues. Finally, regulatory bodies are starting to implement ESG reporting requirements, pressuring companies to demonstrate their commitment to these areas.

Current Regulatory Landscape

While a comprehensive global framework for ESG auditing is still under development, several initiatives are shaping the field:

- The International Sustainability Standards Board (ISSB) is finalising a baseline for ESG disclosure standards, aiming to create a globally consistent approach.
- National regulations in India, BRSR will help in making audits easier.

These regulations, while not dictating specific audit procedures yet, highlight the increasing pressure for standardised ESG reporting.

The Rise of ESG Auditing

In response to these developments, the auditing profession is adapting. Leading audit firms are developing ESG audit methodologies and training their personnel on ESG frameworks. This includes expertise in areas like:

- **Environmental impact assessment:** Evaluating a company's resource usage, waste management, and greenhouse gas emissions.
- **Social responsibility review:** Analysing labor practices, diversity and inclusion initiatives, and community engagement.
- **Governance assessment:** Examining the company's board structure, executive compensation, and risk management practices related to ESG issues.

The Road Ahead

The integration of ESG into auditing is still in its early stages. Standardised ESG audit frameworks and globally recognised accreditation bodies are needed to ensure consistent and reliable assessments. However, the trend is clear: ESG factors are no longer peripheral but central to corporate performance evaluation. Auditors who equip themselves with the necessary expertise will be well-positioned to navigate this evolving landscape and contribute to a more sustainable future.

OTHER READINGS



ICMAI Social Auditors Organisation

(A Section 8 Company promoted by The Institute of Cost Accountants of India)

The Board's Role in Environmental, Social and Governance (ESG)



www.cfg.sa





Introduction

The paradigm shift to sustainability is rapidly gaining ground in today's corporate world. Stakeholders, including investors, lenders, workers, and consumers, seek environmental, social, and governance (ESG) data to make their decisions.

ESG has become a mainstream consideration for boards, and the board has assumed a pivotal role in monitoring and incorporating ESG risks and opportunities into their organisations. A duty of care violation might also occur if ESG considerations are ignored. In light of this, the Centre for Governance (CFG) sought to illustrate how boards structure oversight of ESG issues.

ESG

ESG refers to a company's environmental, social impacts and governance structures.

Environmental criteria examine a company's ecological stewardship, as it's activities may affect the surrounding environment, ecosystems, natural resources, and species extinction. Energy and water consumption, waste management, carbon emissions and climate change are examples of the environmental impact.

Social criteria evaluate how a business interacts with its stakeholders, including workers, vendors, consumers, and local communities. Workplace diversity, business ethics, employee health and safety, and public welfare are also components of the social impact.

Governance includes the board's accountability, transparency, and protection of shareholders' rights. Thus, governance relates to a company's leadership and internal processes, including executive remuneration, internal controls and assurance, board diversity, ethical decision making, and shareholders rights.

The following are examples of themes that may be classified as environmental, social, or governance :





Importance of ESG

Setting aside whether boards are legally obligated to monitor ESG risk, there are good reasons for them to focus on it. Boards should consider ESG strategically as an opportunity to attract investors, clients, and employees.

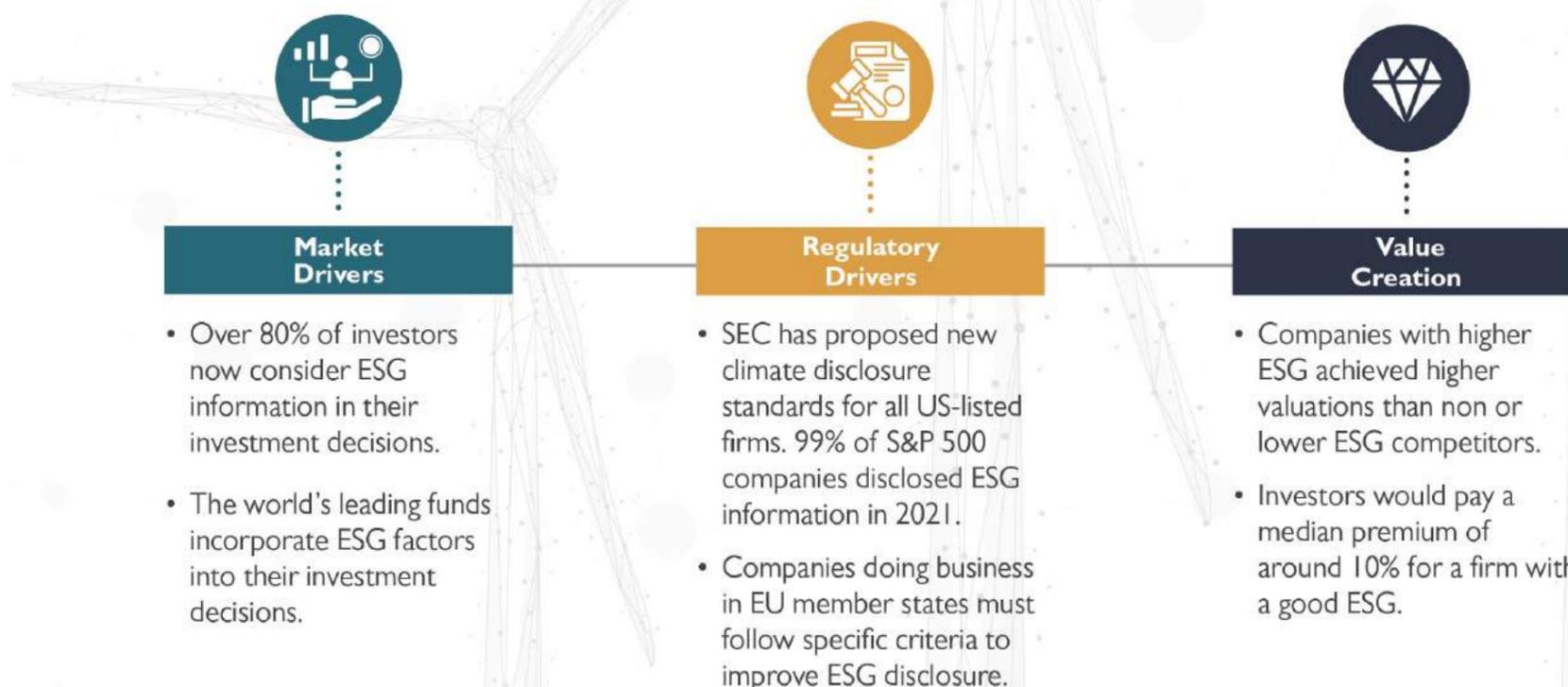
The World Economic Forum issues an annual Global Risks Report, and the hazards have changed dramatically over the last decade. In 2008, just one of the top five risks was related to ESG. In the 2023 report, four of the top five hazards are related to social and environmental factors. The top five list consisted of cost-of-living crisis, natural disasters and extreme weather events, failure to mitigate climate change, erosion of social cohesion and societal polarization. ESG risks formerly considered “black swans” have become more widespread and may soon have a substantial impact.

Companies report on their ESG or sustainability performance for several reasons:

Market Drivers

Investors, clients, lenders, insurers, and other stakeholders increasingly identify that a company's financial performance is tied to its sustainability-related issues. Companies need to generate comparable, trustworthy, and timely ESG disclosures to meet the information needs of these stakeholders. As a result, the world's leading funds, including BlackRock, Swiss Re, CalPERS, Allianz, and Pension Danmark, consider ESG when making investment decisions, and some have committed to making their portfolios carbon neutral by 2050. According to a 2021 PwC report, more than 80% of typical investors now consider ESG information in their investment decisions. There are now over \$25 trillion of assets managed using responsible investing strategies, an increase of 25% since 2014.

A survey on ESG conducted by McKinsey and published in February 2020 showed that 83% of executives and investment experts believe ESG would boost shareholder value. Also, investors indicated that they would pay a median premium of around 10% for a firm with a good ESG track record compared to a company with a poor one.





Regulatory Drivers

Governments worldwide are reacting to the demands of their respective markets by enacting policies that encourage sustainability and increasingly requiring ESG disclosures from businesses. For instance, in the US, the Securities and Exchange Commission (SEC) has proposed new climate disclosure standards for all US-listed firms, which may go into force as early as 2024. By the end of 2018, 85% of S&P 500 firms had already issued an ESG report. Since 2017, companies doing business in EU member states must follow specific criteria to improve ESG disclosure as per the EU Non-Financial Reporting Directive. Given the significance of incorporating sustainability into effective corporate governance, the OECD advocated including sustainability in the OECD Principles of Corporate Governance.

Value Creation

Companies may improve their financial performance and create economic value by assessing and controlling major ESG issues, including growth prospects, operational expenditures, risk profiles, and employee satisfaction. Research confirms that companies with higher ESG achieved higher valuations than non or lower ESG competitors.³

FedEx, for instance, aims to replace its entire 35 thousand vehicles by electric or hybrid vehicles; they have replaced about 20% so far, reducing their fuel expenditures by about 50 million gallons.



The Board's Role in ESG



The Board's Role in ESG

ESG oversight is the primary responsibility of the board. However, how boards carry out their monitoring roles varies by company structure, business sector, and legal system.

Responsibility for ESG oversight lies with the board of directors as part of their fiduciary duties. Boards have ultimate responsibility for a company's sustained prosperity and expansion. Consequently, it is essential for the board to have members who possess ample sustainability knowledge. The Board's primary duties are to guarantee the following:

- o Relevant ESG issues are included in the company's purpose, governance, risk management, decision-making processes, and reporting.
- o There is a firm understanding of and alignment with ESG priorities.
- o ESG metrics and targets are established and monitored.
- o Adequate reporting ensures that material ESG issues are communicated.

Incorporating ESG into purpose and strategy to ensure that companies are doing the right thing for stakeholders is a responsibility of the board. An essential component of this integration is how a firm addresses the requirements and expectations of its stakeholders in light of the risks and opportunities that may impact value creation.



Board of Directors are highly advised to address ESG risks as part of their fiduciary duty to enhance the company's long-term value.



“Corporate purpose” is the main drive for boards to focus on ESG and their firm’s long-term performance. A distinctive mission can direct a company’s decisions to enhance its environmental and social impacts. Companies with a purpose can lead a sustainable strategy, and the primary responsibility of the board is to determine the company purpose.

Aligning ESG objectives with other strategic targets, notably financial goals, and holistically considering ESG can help ensure the essential trade-offs are adequately understood. ESG is intertwined with corporate responsibility, corporate governance, and accountability. A firm’s board of directors should be involved in the ESG process from the start so that they may advise and monitor the company as it develops its ESG priorities and objectives. To have a meaningful impact, ESG must be central to the organisation’s culture and built into the fabric of its operations.

Effective board oversight necessitates understanding how ESG factors are incorporated into business decisions, including strategic choices and enterprise risk management. Boards of directors should oversee ESG risks as they would with any other risk, and ensure the development of a process for identifying and reporting on those risks.

It is becoming common practice to include ESG factors in executive performance-related compensation to incentivise the proper behaviours and hold people in leadership positions accountable for accomplishing the company’s ESG objectives. In addition, it may aid in aligning efforts toward critical goals.

The challenge of disclosing ESG in annual reports can be tackled by conducting a materiality assessment to determine the company’s priorities and build toward the ESG story that needs to be told. This should also include double materiality, not just considering the effect of ESG on corporate activities but also the effect of corporate activities on ESG. Several factors, including a company’s industry, size, geographic reach, business operations, and business model, may drastically alter the weight that ESG concerns carry for a given enterprise.





Currently, there are some challenges in trusting corporate ESG reports. Biases caused by greenwashing (reporting only the positives) can mislead investors looking to invest in businesses that match their performance expectations and ethics². Therefore, boards should exercise active oversight in this area to foster trust and transparency in ESG data by providing visibility over the entire reporting process, accountability, traceability, transparency, controls, and procedures to guarantee the reliability of the data, accuracy, and completeness of disclosures.

Information that is commonly disclosed in ESG reports includes the structure and frequency of ESG reporting concerns to the board and relevant committees; directors' ESG expertise; the allocation of ESG oversight responsibilities among the board and its committees; ESG risks, opportunities, and mitigation approaches; and how ESG corresponds with the company's long-term business strategy.



ESG Oversight Structure

Board structure, number of necessary committees, and whether the board will allocate responsibility to its sub-committees for ESG supervision are matters for each company to consider based on legally required regulations. Corporate committees' structures and responsibilities are changing to address ESG issues more effectively. ESG oversight approaches include:

Oversight by The Entire Board

Some boards may choose to keep primary supervision for ESG at the board level since a successful ESG strategy should match with and be included in the business's purpose and strategy. In this method, boards dedicate substantial time at board meetings to discussing ESG issues. When necessary, boards may also consult an outside subject-matter expert. Smaller organisations and boards with fewer independent members may benefit from this approach. However, many businesses use a hybrid model in which the board works with other committees to oversee ESG.

Oversight by Sustainability Committee

Companies may also form a new, independent committee to oversee ESG. With this method, firms can have in-depth and regular discussions on ESG. However, it risks isolating ESG discussions from other vital business functions such as operation, finance, and strategy. To reduce this risk, the chairperson or a representative of other board sub-committees concerned with ESG might be invited to sit on the sustainability committee. A more efficient synthesis of ESG concerns for the board may be achieved by consolidating committee reporting by having a single committee report to the board rather than several reports from several committees.

Oversight by Existing Committees

In the early phases of implementing an ESG strategy, it may be beneficial for some companies to outsource supervision of ESG to an existing committee (such as the audit, remuneration, nomination, risk, or investment committee). While 67% of S&P 100 firms divide ESG responsibility between two or more committees, 54% of FTSE 100 firms (and 100% of oil & gas firms) have established ESG committees at the board level.



The board delegates its ESG monitoring authorities among its committees, expecting each committee to report back to the board regularly. This approach encourages the incorporation of ESG into operational procedures. Companies adopting this strategy are amending the existing committees' names and charters to reflect their expanding responsibilities. Given the broad nature of ESG, existing committees may share the responsibility of monitoring ESG. For example:

- o Overseeing ESG risk management falls within the risk committee's responsibility.
- o Internal controls, transparency, regulations, and assurance concerning ESG matters fall within the audit committee's responsibility.
- o Compensation and incentives related to ESG considerations are performed by the remuneration committee.
- o The investment committee considers finance and investment options related to ESG.
- o The nomination committee considers ESG experience when nominating directors and board members.

Regardless of organisational structure, boards must prevent roles from being duplicated and must keep committees' agendas connected. Having board members serve on all committees is one method to guarantee the Board's active participation in critical ESG issues. Even if the board distributes authority over ESG oversight to one or more committees, the board maintains ultimate responsibility.

The Sustainability Accounting Standards Board (SASB) has issued a set of industry-specific standards that identify material issues per industry and recommended disclosures against each issue.



ESG in Saudi Arabia

As part of the Saudi 2030 vision initiatives, the Kingdom of Saudi Arabia is dedicated to enacting sustainable development appropriate to the kingdom's unique circumstances. The Ministry of Economy and Planning's 2018 Voluntary National Review details the Kingdom's progress toward all 17 Sustainable Development Goals (SDGs) and illustrates plans to strengthen its position in sustainable development.

To carry out its mission and connect PIF's wide range of sustainable projects with sustainable funding, PIF published the Green Finance Framework in February 2022. By joining the United Nations Sustainable Stock Exchanges Initiative in 2018, the Saudi Stock Exchange "Tadawul" aimed to raise awareness of ESG issues and inspire sustainable investment. In 2017, Tadawul issued voluntary ESG guidelines for Saudi-listed companies to help them navigate ESG.

In January 2023, the GCC Exchanges Committee released a standardised set of ESG disclosure metrics aligned with the World Federation of Exchanges and the Sustainable Stock Exchanges framework. The metrics include issues from greenhouse gas emissions and water consumption to staff turnover and gender diversity to data protection and ethics. This is a crucial move toward aligning ESG disclosure in the GCC states. The framework serves as guidelines for businesses that want to start disclosing their ESG activities.

In light of rising expectations that governments around the world will use sustainable finance to fund "green" projects like carbon credit



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PIF actively contributes to the Kingdom environmental initiatives through driving the investment and innovation required to address climate change impact and achieve net zero carbon emissions by 2060.



programs and markets, nuclear, carbon capture and confinement, biofuels, solar power, green hydrogen, and renewable energy sources, Saudi Arabia is putting more emphasis on ESG initiatives. Last year, the PIF announced the launch of the Regional Voluntary Carbon Market with a (\$133 million) capital, and it was announced on the Saudi Green Initiative Forum that Saudi Arabia aims to reach Net Zero by 2060 through the Carbon Circular Economy approach.

Saudi Arabia has made a significant leap in environmental regulations, which are becoming more stringent. This means ESG litigation is making its way to Saudi Arabia. It is also of particular interest to Saudi corporations with operations or assets abroad because of the potential for ESG lawsuits and liability. Damage to a company's image and loss of value among its stakeholders may result from ESG-related criticism and "greenwashing" charges. Therefore, Saudi companies should consider continuous improvement of their implementation of ESG risk management tools and strategies.



ESG Questions Board Directors Should Ask

The board and relevant committees should ensure that ESG is a part of their agendas and is effectively managed. The following questions will help directors fulfil these responsibilities:



1. Is ESG integrated with the company's purpose, strategy, and governance? If not, the board should consider whether it should be and whether stakeholders' ESG expectations are met.
2. Has the company assessed ESG risks and opportunities? Does the company have an approved ESG plan with clear performance targets and metrics? Has the company allocated sufficient resources to manage ESG risks effectively?
3. Does the company have an established policy and framework for ESG that identifies and coordinates the right employees, departments, and committees to define the roles, responsibilities, and competencies required for ESG reporting?
4. Are ESG risks in operational areas understood, managed, and appropriately reported? Is there ESG awareness training for the workforce, including contractors and suppliers? Are ESG requirements built into employee job descriptions, contractor contracts, and directors' remunerations?
5. Does the company produce a publicly available annual sustainability report detailing its material ESG performance? Does the company have internal processes and auditing arrangements for ESG reporting to verify the accuracy, reliability, and completeness of ESG data?



Conclusion

ESG issues are increasingly in the spotlight of today's business world. The board's monitoring of ESG continually evolves, and boards must take a proactive approach to understand the evolving impact of ESG issues on their businesses to foster long-term sustainable value creation. This article outlined the Board's role in effective oversight and governance of ESG matters.

There is no one-size-fits-all approach to ESG issues, and each organisations should consider their specific structure and circumstances in conducting ESG disclosure and governance. A key challenge is that more guidance is needed on this issue. Strong corporate governance is essential for going forward with ESG and achieving the attitude shift necessary to drive sustainable transformation.

Finally, the ESG monitoring and reporting will support our nation's steps to realise Vision 2030, improve the Saudi capital market, and support the global commitment to accomplish the United Nations' Sustainable Development Goals.





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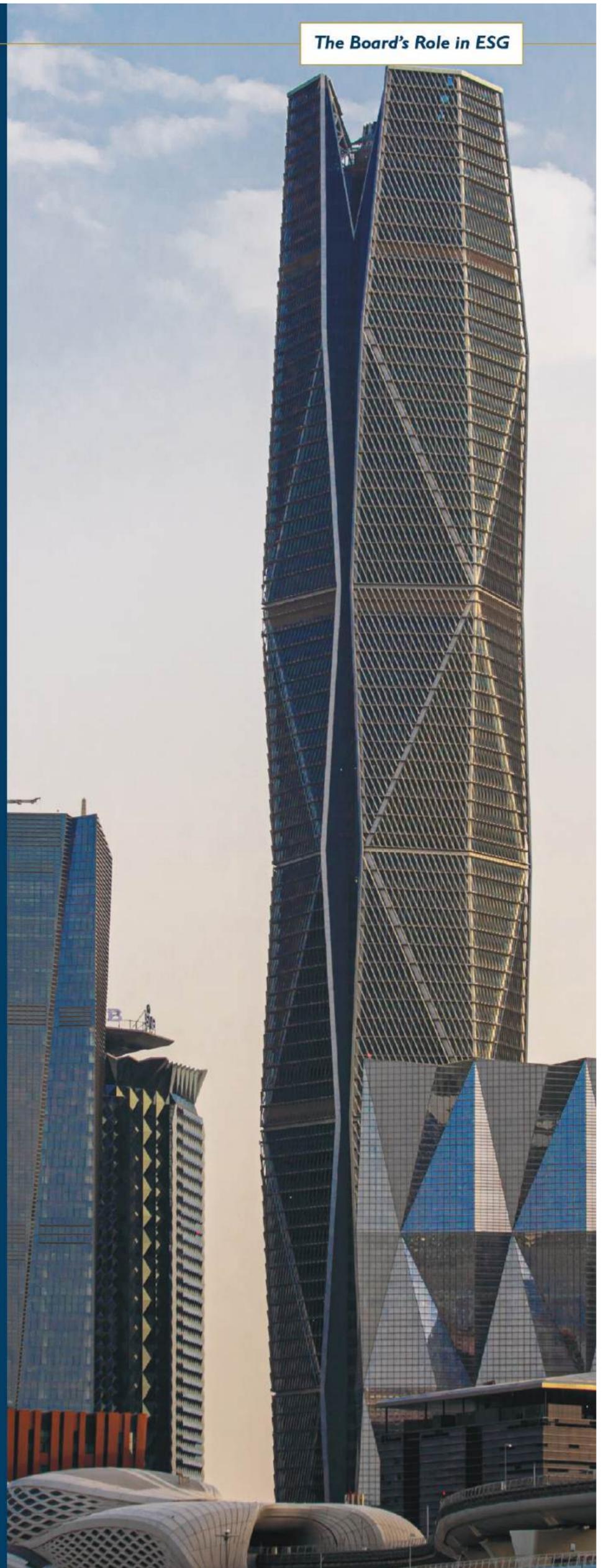
About us

Centre for Governance CFG was established by the Public Investment Fund in 2020. We aim to drive sustainable value creation for Saudi Arabia by enhancing the corporate governance practices. CFG is designed to provide unique solutions to its corporate clients as well as the individuals looking for upskilling programs in the governance domain. Beside the capabilities we have internally, CFG leverages the excellent relationships it has with the world's best institutes and leading global consulting firms.

CFG can help: Get in touch to talk about our solutions.

info@sfg.sa or www.cfg.sa

The Board's Role in ESG



INDIA CLIMATE



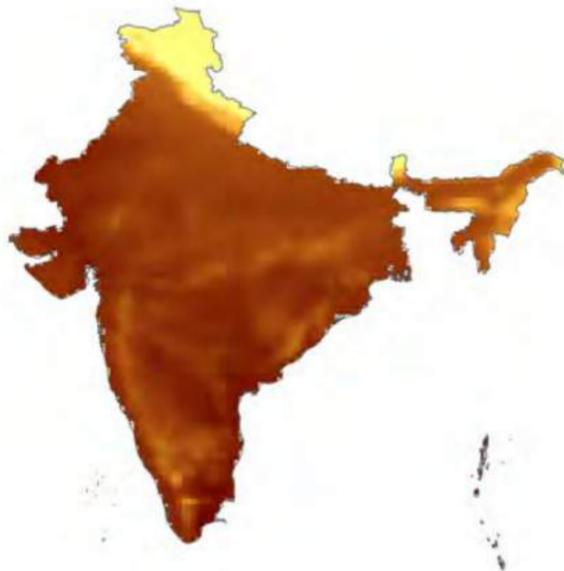
OVERVIEW

The climate in India is generally monsoonal whilst at the same time possessing a wide variety that ranges from tropical in the south to temperate and alpine in the Himalayan north. India's climate is strongly influenced by the Himalayas and the Thar Desert. The Himalayas act as a barrier to cold winds from central Asia, keeping most of the country warmer than other places found at similar latitudes around the world. The Thar Desert attracts the summer monsoon winds from the south-west regulating the rainy season.

TEMPERATURE

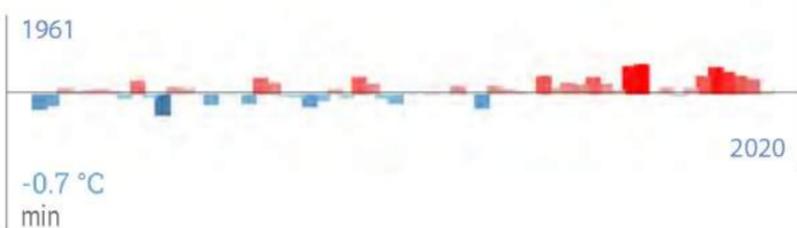
The temperature regime in India is controlled by the distance from water bodies, ocean currents and relief characteristics. In general, annual temperatures are fairly homogeneous and fall in the northern part of the country.

MEAN TEMPERATURE



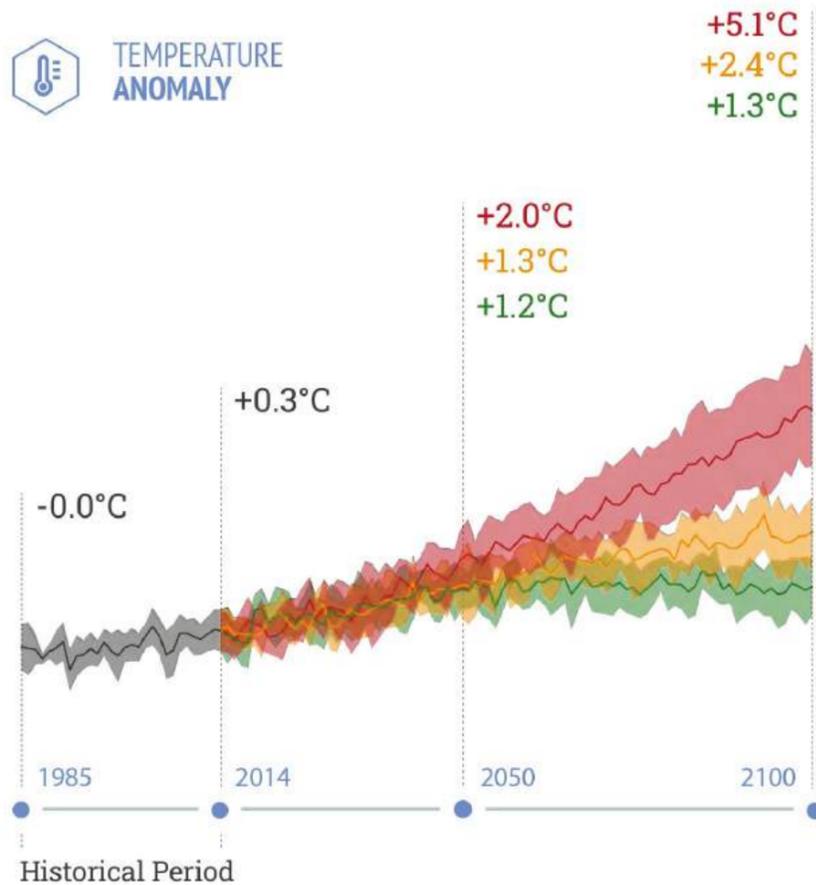
TEMPERATURE TREND

Temperature anomalies over the last 60 years with respect to the annual mean of 25°C in India during the 1961-1990 period



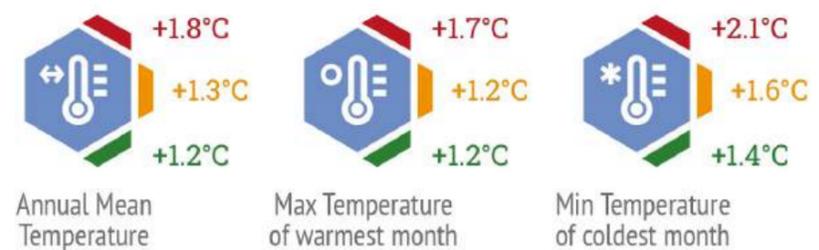
TEMPERATURE PROJECTIONS

Under a low emissions scenario projected temperature variations will remain contained under +1.5°C, both by 2050 and 2100. Under a high emissions scenario, with no reduction in GHG emissions, much greater temperature anomalies are expected by both 2050 and 2100.



EXPECTED VARIATION FOR TEMPERATURE AT 2050

The indicators show variations in selected temperature characteristics for a thirty-year period centred on 2050 (2036-2065) with respect to the reference period 1985-2014.



PRECIPITATION

The precipitation regime in India is very complex and is mainly governed by monsoon winds from the southwest. The rainy season is between June and September, during which almost 75% of annual precipitation occurs.

Average precipitation in India is around 1,250 millimetres per year, although a huge spatial variation can be detected. The west coast and north-east India receive more than 4,000 millimetres of precipitation per year. On the other hand, areas such as western Rajasthan and adjacent parts of Gujarat, Haryana, and Punjab see less than 600 millimetres per year. The rest of the country receives moderate precipitation. Due to the nature of monsoons annual precipitation is highly variable.

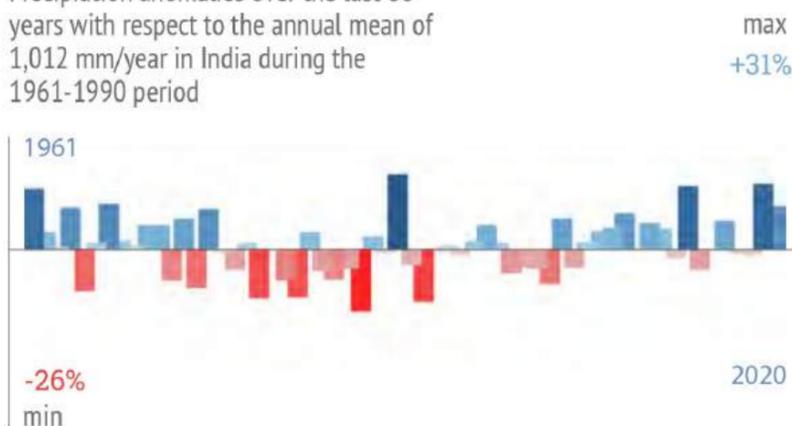
MEAN PRECIPITATION

156 7,773
mm/year / Over 1991-2020



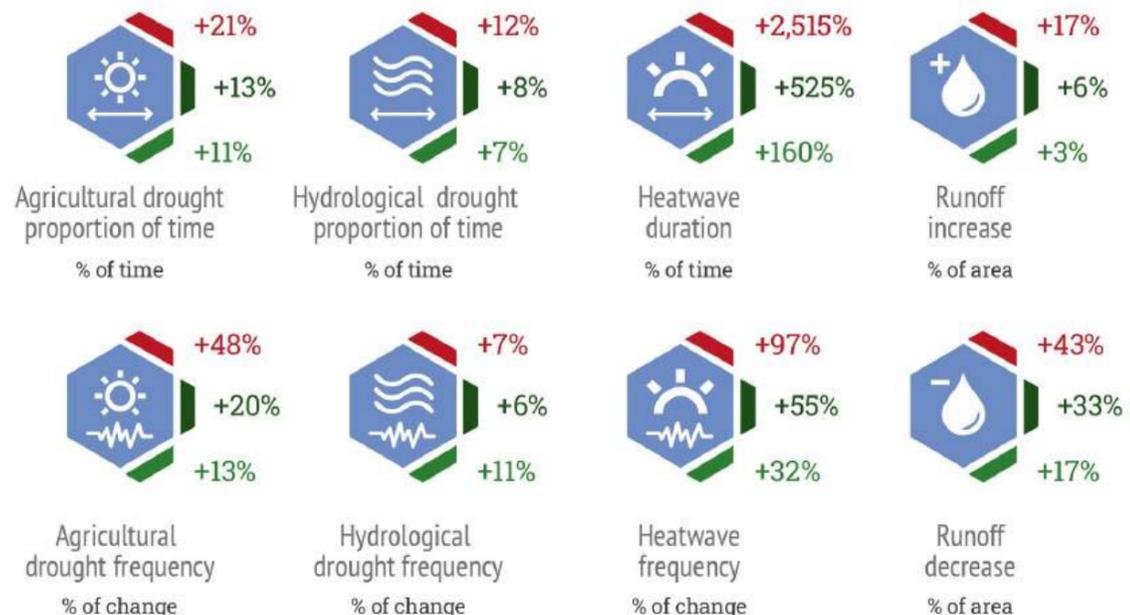
PRECIPITATION TREND

Precipitation anomalies over the last 60 years with respect to the annual mean of 1,012 mm/year in India during the 1961-1990 period



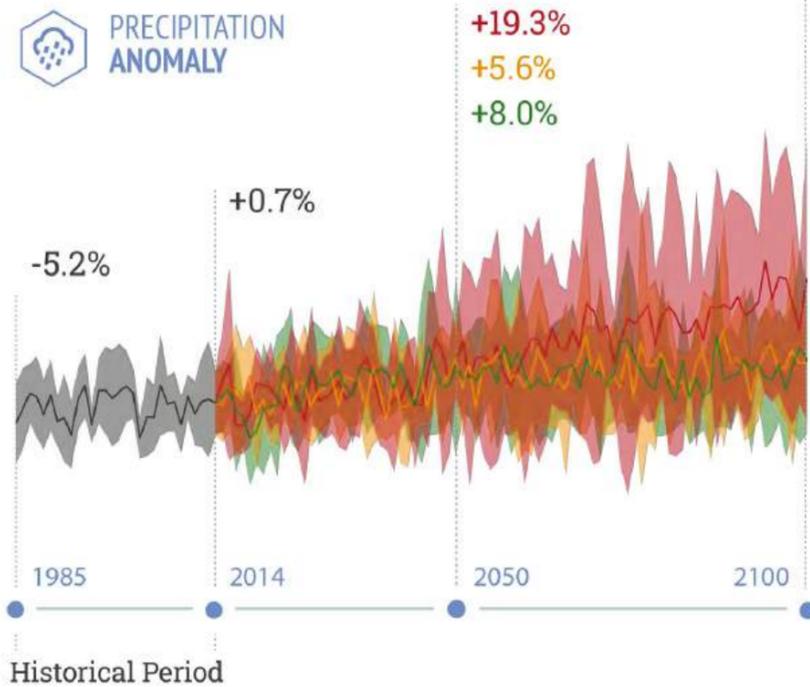
VARIATION OF SPECIFIC CLIMATE INDICATORS

Climate indicators variation showing impacts of climate change on sectors such as agriculture, health and water. Analysis considers 3 threshold average temperature increase: **+1.5°C, +2°C, +4°C.**



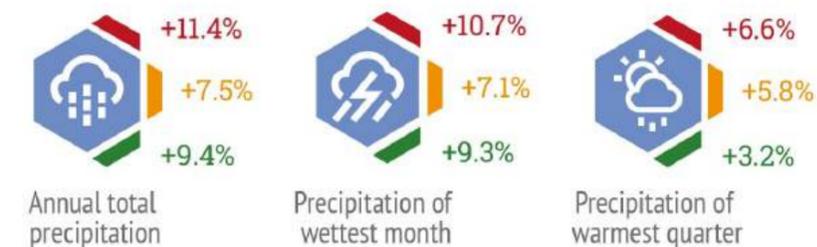
PRECIPITATION PROJECTIONS

Precipitation trends show a very complex signal, under all emissions scenarios, with a very large variability among climate models. This can be explained considering the complexity of the precipitation regime and dynamics requiring more detailed spatial and temporal analysis.



EXPECTED VARIATION FOR PRECIPITATION AT 2050

The indicators show variations in selected precipitation characteristics for a thirty-year period centred on 2050 (2036-2065) with respect to the reference period 1985-2014.



INDIA OCEAN

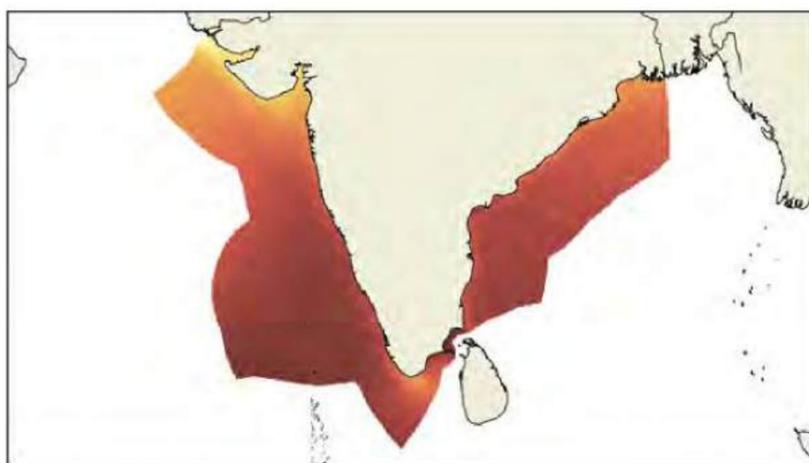


OCEAN IN INDIA

India's marine exclusive economic zone (EEZ) has mostly warm coastal waters, which are characterized by a mosaic of ecosystems such as coral reefs, backwaters, mangroves, and seagrasses meadows. Indian coastal systems can be divided in two main areas: the Bay of Bengal and the Laccadives region on the western side.

CURRENT CLIMATE CONDITIONS

Mean sea surface temperature reflects the rather homogeneous climate of the region, with slightly colder waters in the northern areas.

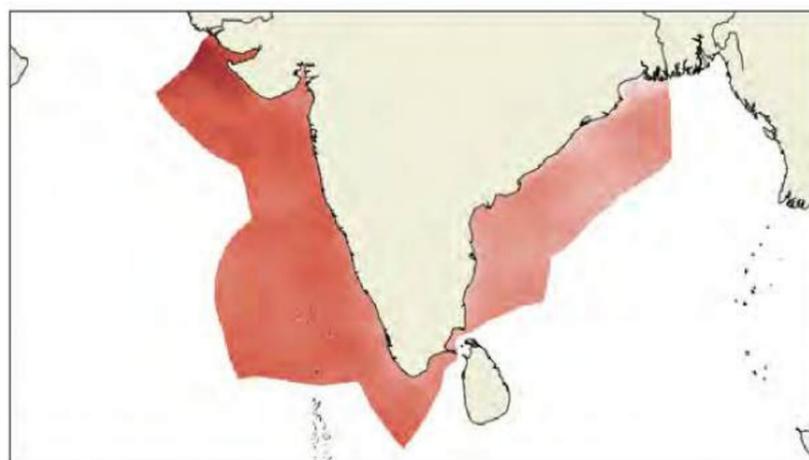


26 30 **MEAN**

SEA SURFACE TEMPERATURE

Celsius degrees / Over 1991-2020

0 0.4 **TREND**

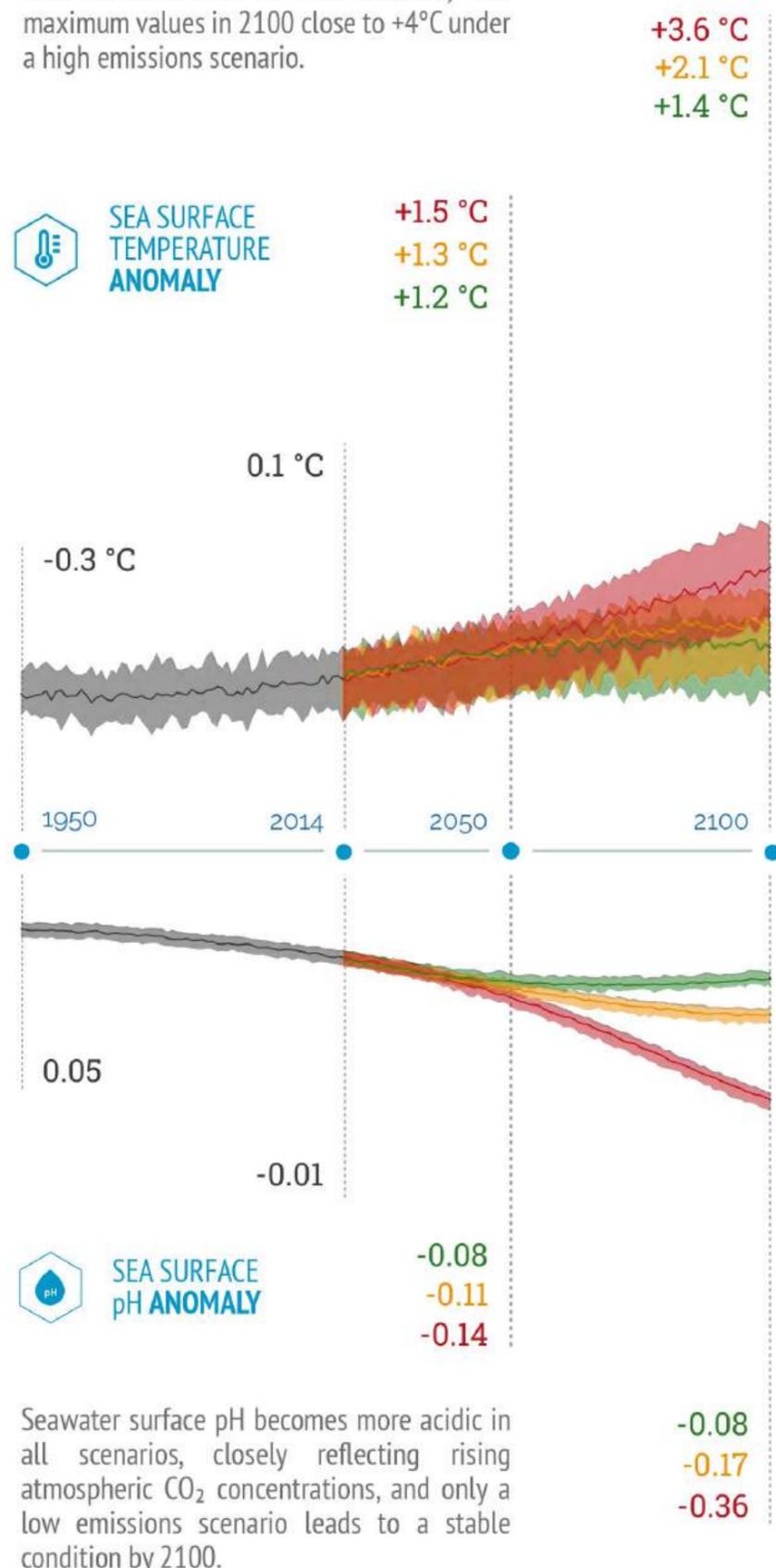


Surface temperature trends indicate a general warming of 0.2°C per decade in all marine areas.

FUTURE PROJECTIONS

Projected annual changes within the marine EEZ for the two most significant marine indicators of climate change: sea surface water temperatures and pH.

Seawater temperature changes are in line with the definitions of each scenario, with maximum values in 2100 close to +4°C under a high emissions scenario.



Seawater surface pH becomes more acidic in all scenarios, closely reflecting rising atmospheric CO₂ concentrations, and only a low emissions scenario leads to a stable condition by 2100.

ECOSYSTEM INDICATORS AT 2050

Regional changes in key marine ecosystem indicators under projected future scenarios by mid-century (2036-2065) with respect to present climate conditions (1985-2014).

Temperature regulates the metabolism of marine organisms determining which habitats remain suitable. Excessive warming will likely push ecosystems beyond tolerance thresholds.

pH represents the acid/base status of marine waters, where a decreasing pH reflects the acidification of the ocean due to increased absorption of atmospheric CO₂.

Oxygen is fundamental to sustain marine life and its reduction can have a large impact on coastal ecosystem services including fisheries and aquaculture.

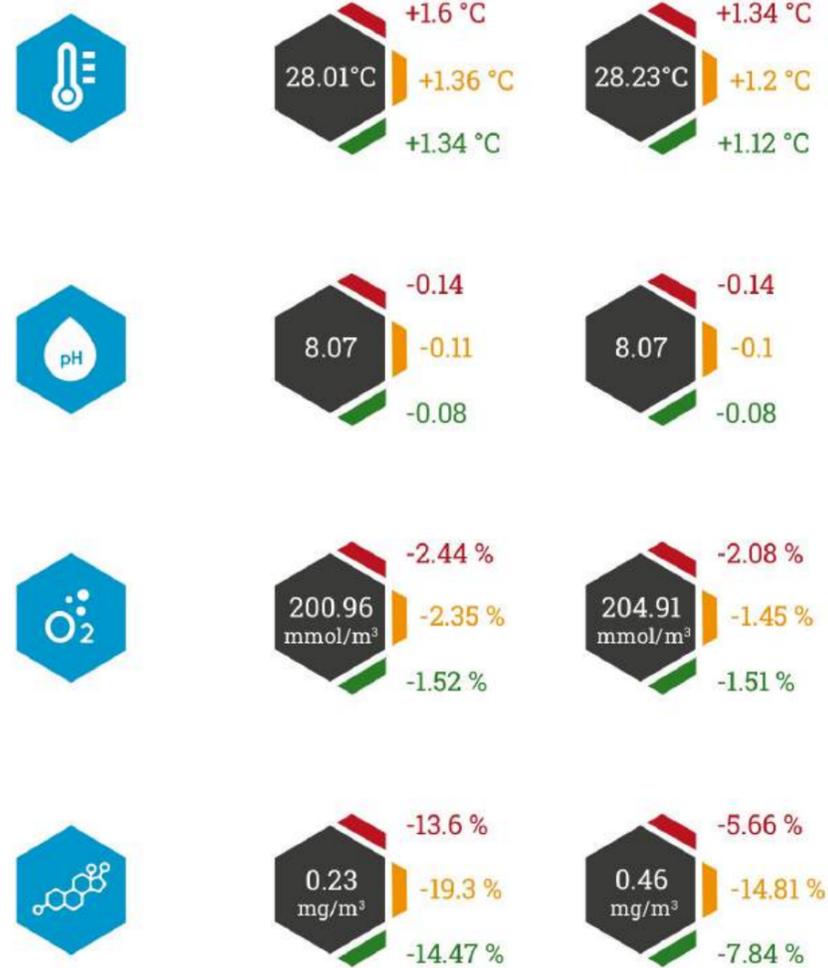
Chlorophyll is an indicator of the biomass available at the base of the marine food web supporting all ecosystem productivity.



Arabian Sea



Bay of Bengal



FISH CATCH POTENTIAL

Fish catch potential is an estimate of the maximum fish catch achievable given the marine resources available over a sustained period. It is linked to the concept of maximum sustainable yield, meaning the maximum amount of fish that can be extracted from a system without causing a collapse in fish populations.

It is a characteristic of the natural system, which is substantially different from realized catch, and a direct result of the fishery policy in place.



ANALYSIS DETAILS

All datasets were analysed using only data from within the marine EEZ and therefore excluding overseas territories, detached islands and any disputed or joint territories with other nations. In the assessment of current climate conditions, seawater surface temperature data was obtained using satellite observations distributed in the framework of ESA Climate Change Initiative.

Future projections of marine indicators are represented by the combined analysis of results from 15 different Earth System models participating in the Coupled Model Intercomparison Project Phase 6 (CMIP6). These models include new and better representations of physical and biogeochemical processes, compared to previous IPCC assessment reports.

Fish catch potential data was obtained using the FAO's technical report and refers to the best and worst case climate scenarios from the Fifth IPCC Assessment Report. These mean estimates are subject to substantial uncertainties as discussed in the original work.

INDIA COASTS



OVERVIEW

India's 17,000 kilometres of shoreline and coastal zones is densely populated with approximately 14% of the population concentrated in coastal districts, amounting to approximately 200 million people. India's coastal areas are very diverse, with a wide range of geomorphology types and ecosystems, including rocky coasts, sandy beaches, mangroves, tidal flats, estuaries and coastal lagoons. The main coastal cities are Mumbai, on the west coast, Chennai, on the east coast, and Kolkata, on the Ganges Delta.

Shoreline Length

17,181 km



Sandy Coast Retreat at 2050

-116.3 m



CLIMATE CHANGE HAZARDS

Coastal hazards such as erosion, storm tide inundation and permanent flooding, can have strong adverse impacts on coastal regions, with loss of sandy shores, damage to settlements, infrastructure and ecosystems. Climate change may exacerbate these impacts due to rising sea levels and increasing impacts of waves and storms. Climate change impacts on the coastal zone of India are mainly driven by rising sea

levels and possible changes in storm intensity and direction, which can exacerbate erosion issues and drive flooding of low lying coastal areas. In addition, changes in rainfall patterns may also exacerbate flooding risk for low lying coastal areas. These impacts are of particular concern in areas where people's livelihoods are based on coastal resources and tourism and in India's coastal mega-cities.

SEA LEVEL RISE

Relative sea level rise has been observed over the past century around the coast of India, with a yearly average increase of approximately 1.56 millimetres per year since the 1990s. The latest IPCC projections indicate that, by 2050, global sea levels may rise between 0.18 metres, under a low emissions scenario, and 0.23 metres, under a high emissions scenario.

EXTREME SEA LEVEL

On average, one in 100 extreme sea level events are expected to rise from 2.05 metres at present day to 2.23 metres by 2050 under a medium emissions scenario.

Observed and projected sea level rise at 2050



Current and projected extreme sea level at 2050



OBSERVED STORMS



The wave climate influencing the Indian coast is very dynamic and driven by seasonally reversing monsoon winds. Annual average significant wave height ranges from 1.5 to 2.5 metres, with the highest waves reaching more than 3 metres. The wave climate is also influenced by the annual and inter-annual variability in monsoon wind and rainfall. In the Indian Ocean north of the equator tropical cyclones can form throughout the year on either side of India.

FUTURE STORMS



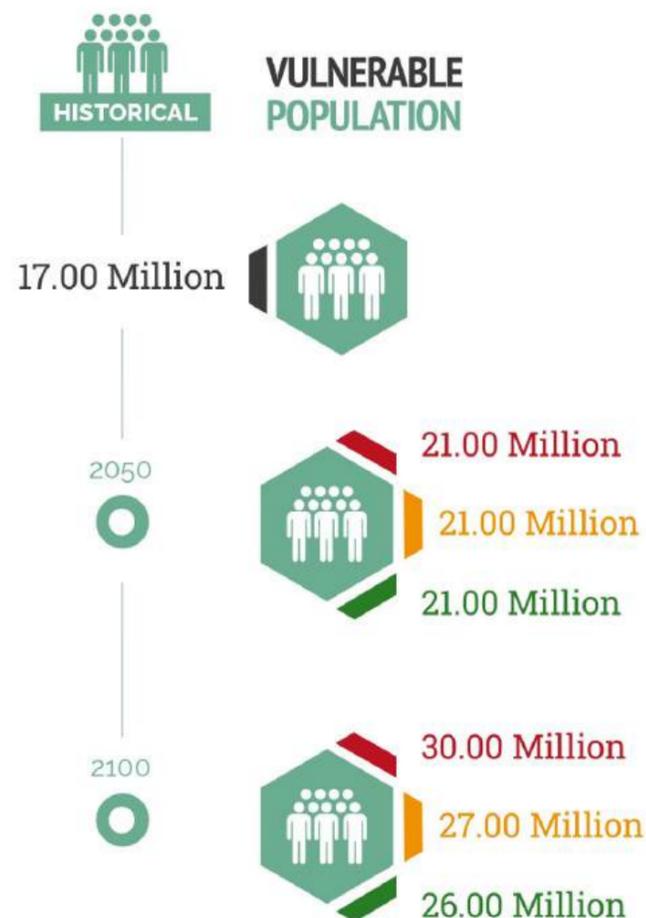
Waves and storms around the Indian coast are expected to change in the future. Recent projections show an increase in wave heights and periods along much of the Indian coast, with maximum wave heights increasing by more than 30% in some locations. At most locations along the east coast, wave periods are expected to increase by almost 20%, whereas along the west coast an increase of around 10% is expected. Similarly, water elevation due to cyclone activity is expected to increase.

VULNERABILITY AND RISK

Approximately 64 million people live in low elevated coastal areas that are less than 10 metres above sea level. These areas are exposed to both coastal erosion and storm surges, with the highest exposure found on the east coast of India. Most of the people in low lying coastal areas are concentrated in the Ganges Delta, one third of which is within the Indian territory, including the city of Kolkata which is home to 4.5 million people.

With a growing coastal economy and an increasing population in coastal areas, India has been managing recent coastal risks with large scale investments aimed at protecting infrastructure, with numerous programs dealing with coastal risk management.

Under a medium emissions scenario, the population exposed to the annual coastal flood level is expected to increase from 17 million to 21 million by 2050.

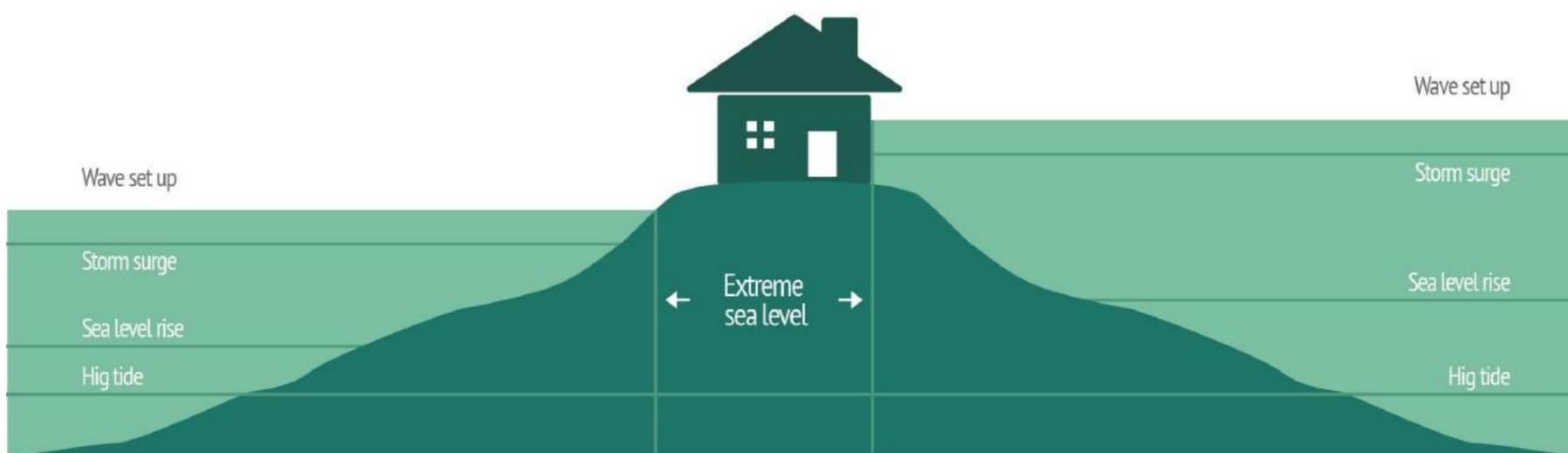


INFLUENCE OF SEA LEVEL RISE ON EXTREME SEA LEVEL

Present and future sea level rise are a consequence of carbon induced global warming causing melting ice and ocean expansion due to heat accumulation.

The extreme sea levels reported here are based on the 100-year storm surge + wave set up + sea level rise + high tide indicators. The first two parameters (storm surge + wave set up) are based on the 100-year value for the event; sea level rise is its projected value at 2050; and high tide is the absolute value of the highest tide calculated for a given locality, which won't be influenced by climate change.

- + **Wave set up** refers to the accumulation of water near the shore due to the presence of breaking waves.
- + **Storm surge** is an occasional increase in sea level driven by shoreward wind-driven water circulation and atmospheric pressure.
- + **High tide** is usually the highest tide reached in a given location based on tide records.



Present sea levels have risen globally by approximately 20 centimetres over the past century.

Future sea level rise is a projection based on different global warming scenarios, at approximately 100 centimetres by the end of 2100, with consequent inundation during extreme sea level events.

INDIA WATER



OVERVIEW

In India, demand for water resources has been escalating due to a fast growing population over the past century. Total population has already surpassed 1.3 billion and is expected to stabilize only by the year 2050.

Increasing domestic, agricultural, and industrial water requirements are serious challenges for India. Monsoons, the most important source of water for the country, undergo large inter-annual variations associated with global anomalies.

Hence, large disparity in rainfall are reflected in water resources. As a result, vast areas of interior India are arid and semi-arid, with consequent water availability issues.

CLIMATE CHANGE HAZARDS

Climate change can affect water resources through increasing temperatures, higher rates of evapotranspiration and altered rainfall patterns. This leads to changes in the water cycle, including decrease of snow and ice coverage, alterations of surface runoff and groundwater storage, as well as drought and flood occurrence. Per capita availability of freshwater in all major river basins is decreasing rapidly as a

KEY POINT RUNOFF

Major and medium river basins contribute over 90% of the total runoff in the country. Locally, surface runoff is expected to decrease drastically in arid and semi-arid India in the future.

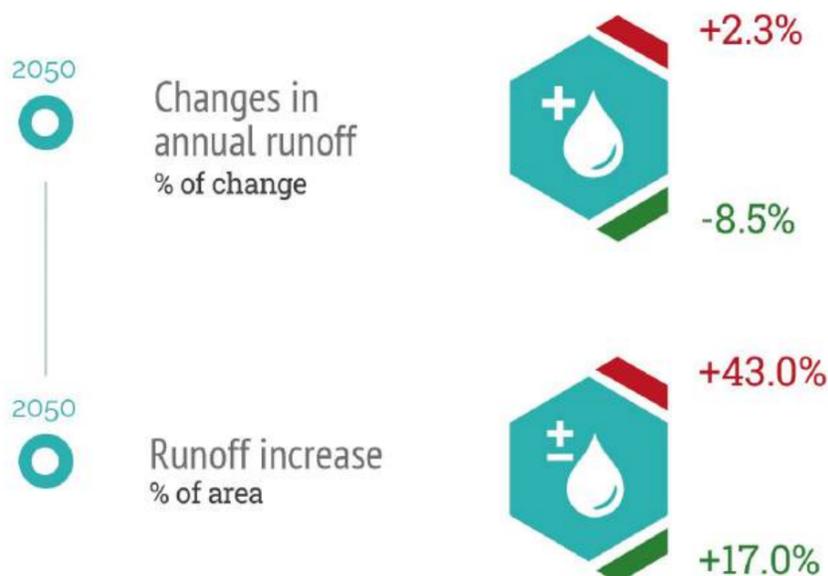
At a country scale, an average change in surface runoff by approximately -9% and +2% is expected respectively under low and medium emissions scenarios for the 2045-2055 period compared to 2015-2025.

If temperatures rise by 1.5°C, 2°C or 4°C, 17%, 33.4% or 43% of the country will likely experience an increase in runoff, while 3%, 6.4% or 17% of the surface of the country will likely experience a decrease in runoff, respectively.



The Ganges-Brahmaputra-Meghna system is the major contributor to the total water resources potential of the country. Its share amounts to about 60% of total water resource potential of all rivers. About 40% of utilisable surface water resources are presently found in this large system. In the majority of river basins, present utilisation is high and in the range of 50-95% of utilisable surface resources. In rivers such as the Narmada and Mahanadi, however, utilisation percentage is quite low. The corresponding values for these basins are 23% and 34%, respectively.

result of changes in climate and a growing population. Available resources, in addition, are being depleted and degraded at a fast pace and a large part of river basins will face water scarcity by the year 2050. Even without taking into account the possible impacts of climate change, eight river basins will be critically water scarce by 2050.



KEY POINT DROUGHTS

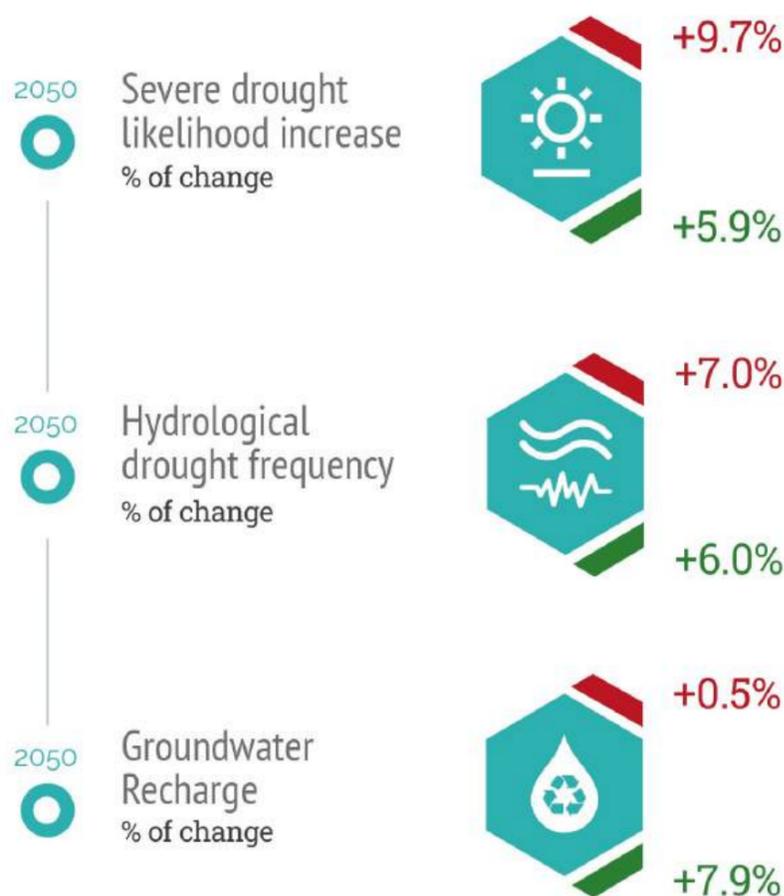
Drought causes significant water and food insecurity, leading to economic losses and financial risks in developing countries like India. Droughts pose enormous challenges for drinking and irrigation water supply and also affect the economy of India, where more than 68% of people are dependent upon agriculture. Moreover, about 18% of India's total area is drought-prone, and about 50 million people are annually affected by drought. India faces droughts due to poor summer monsoons caused by natural climate variability or climate change.

In the Deccan Plateau region of India significant drought conditions occur once in 3 years. The Deccan region sees the highest frequency of severe droughts in all of India.

KEY POINT GROUNDWATER

A large part of India is under intensive agriculture and mostly irrigated with this resource. Rapid groundwater depletion remains one of India's most profound sustainability challenges. Extraction of non-renewable groundwater for irrigation in India was used on about 68 cubic kilometres of land per year for the year 2000, which is the highest in the world.

Sustaining groundwater is essential for meeting the needs of food and water in the current and projected future climate, and these necessities appear even more urgent in the northwest regions such as Punjab. There are uncertainties associated with groundwater recharge under climate change, which are linked to precipitation projections under the future climate. Groundwater storage is projected to increase

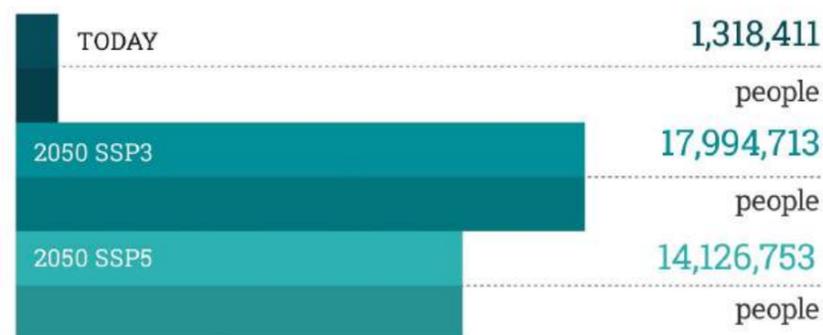


in some Indian areas under the future climate in the absence of groundwater extraction for irrigation primarily due to projected increase in precipitation. Nevertheless, longer droughts and projected increase in irrigation water demands can pose further challenges to already depleted groundwater resources in India.

KEY POINT FLOODS

The increased risk of flash floods as a result of changing rainfall patterns over India has been reported in several recent studies. Extreme precipitation events in India in the past caused flooding, affected the economy, and resulted in the loss of lives. For instance, an extreme precipitation (940 millimetres in 18 hours) event in Mumbai (July 2005) was a disaster that led to flooding that affected 20 million people and caused around 1,200 deaths. Similarly, Mumbai experienced flooding in September 2017 due to extreme precipitation (330 millimetres in 24 hours), which largely affected road transportation. Furthermore, Chennai received 483 millimetres of precipitation in 48 hours in November 2015, which had a devastating impact causing widespread damage. By 2050 slight changes in the number of days with intense precipitation (more than 50 millimetres of rain) is

POPULATION AFFECTED BY RIVER FLOODS



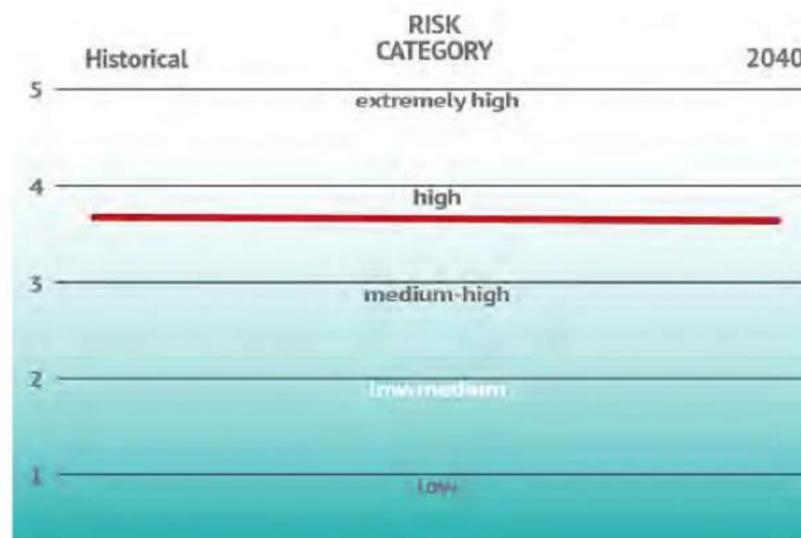
expected, with a small increase of 0.20 days under a low emissions scenario and 0.32 days under a medium emissions scenario.

RISK INDICATORS

The water stress index summarises current and future water related vulnerabilities and risks at the global level. Scores are based on the ratio of total water withdrawals, including agriculture, industrial and human consumption, to available renewable surface and groundwater supplies.

WATER STRESS

India's water stress level is considered high for the recent past (1960-2014 average), and it is expected to remain that way in the near future (2030-2050) based on climate change projections.



INDIA

AGRICULTURE



OVERVIEW

With a population of 1.37 billion people, India is one of the most populous countries in the world. Given its large spatial distribution and agro-ecosystem diversity, several farming systems exist with a significant cultivation of rice, wheat, sugarcane, vegetables and fruit trees.

Whereas agricultural contribution to national GDP has declined over the last decades, a large share of the population still depends on agriculture for its subsistence. Irrigation schemes are still expanding to enhance food security. In fact, over 14% of India's population is thought to be undernourished. Agriculture adsorbs over 90% of total water withdrawal in a country with high stress on water resources, raising severe sustainability issues if it is to sustain further irrigation development and cope with climate risks.



379.9 Mt
Sugarcane



174.7 Mt
Rice



99.9 Mt
Wheat



51.3 Mt
Potato



28.7 Mt
Maize



24.9 Mt
Mango

Added Value of Agriculture, Forestry and Fishing



228,143
USD Million



398,681
USD Million

2000

2018

Share of Agriculture Value added in Total GDP



27.9 %



15 %

2000

2018

Agricultural land



170,130
Thousand HA



169,416
Thousand HA

2000

2018

Area Equipped for Irrigation



60,432
Thousand HA



70,400
Thousand HA

EXPECTED IMPACTS ON AGRICULTURE PRODUCTIVITY

Rising temperatures, reduction in average annual precipitation, and intensification of extreme events such as heat waves and drought, affect production variability with a tendency towards yield reduction for many cultivated species, accompanied by a probable decrease in food quality. Crops respond to increases in temperatures with changes in duration of the growing season, early appearance of phenological phases and potential shifts of cultivation areas toward higher latitudes and altitudes for better growing conditions. However, impacts vary significantly depending on the geographical area and specific crops in question.



Changes in precipitation patterns

Rising temperatures

Increased frequency of dry spells and drought

Temperature variability

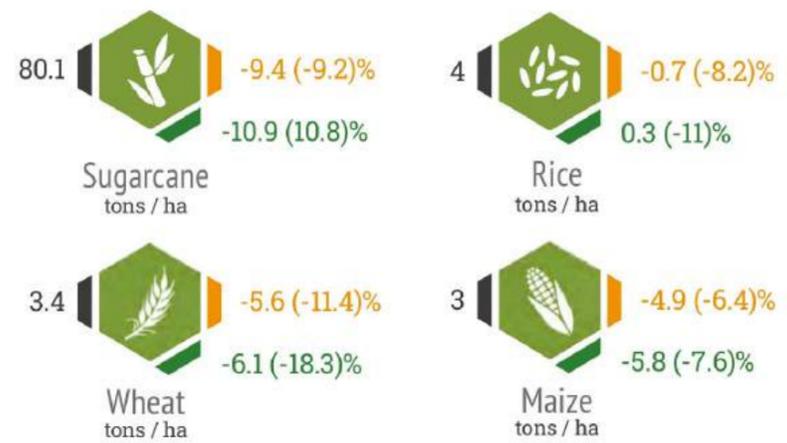
Increasing intensity of extreme weather events

CROP PRODUCTIVITY

Crop productivity refers to the harvested yield of a crop per unit of land area. It is strongly influenced by climate and other environmental and management factors.

Climate change is expected to have an impact on the productivity of several major crops, although this may in part be offset by the fertilizing effect of higher CO₂.

Impacts are estimated using a range of model projections based on low to high emission scenarios and reported as percentage changes between the 30-year average around the historical period and the 30-year average around 2050.

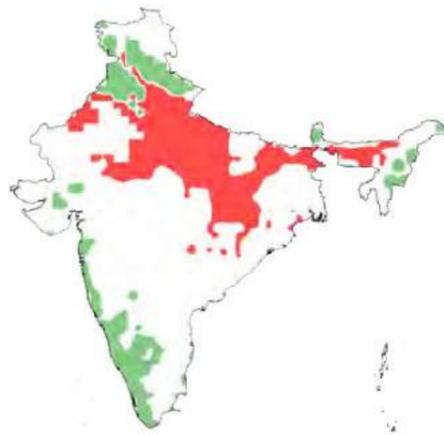


2050

Productivity change with (without) the CO₂ fertilization effect. Estimates assume sufficient water and nutrient supplies, and do not include impacts of pests, diseases, or extreme events.

CHANGE IN RICE

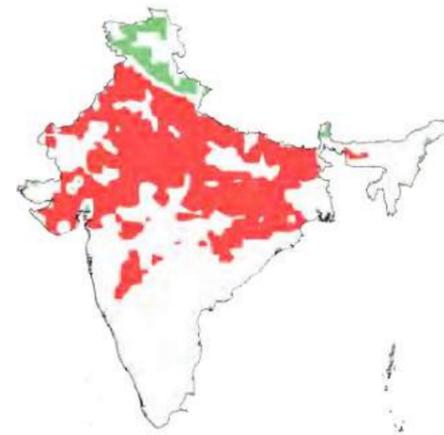
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Increasing temperatures will have a strong negative effect on rice yield, especially in the northern and central areas where 15% to 40% of current rainfed rice locations may be at risk. Positive effects on rice yield can be expected in the southern, and to a certain extent eastern, regions. Productivity of wheat is projected to decrease up to 20% in some areas. The strongest decline is expected over central and south-central areas, whereas an increase is foreseen for cooler

CHANGE IN WHEAT

- = +



environments. Sugarcane is a climate sensitive crop and will show a marked decline in crop yields due to higher temperatures overcoming optimum level for photosynthesis. Mango production may be harmed in tropical regions with already prevailing high temperatures. On the other hand, rising minimum temperatures are extending farming into new areas which were previously too cold for mango production.

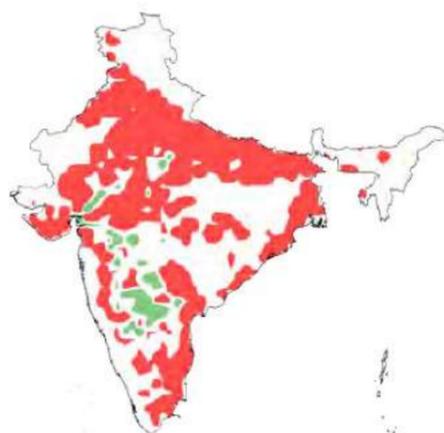
ADAPTATION IN AGRICULTURE AND WATER RESOURCES

Climate change may have some positive effects on some of the most widely used crops. However, higher temperatures will generally require an increase in irrigation demand due to higher plant evapotranspiration. Utilization of freshwater resources is already significantly high in agriculture, and projected to increase in the future. Climate

change will reduce water resources and enhance streamflow seasonal variability. Large parts of India have been dependent on groundwater resources for intensive cereal production. Groundwater may be further depleted and unable to act as a resilient resource under future and more extreme droughts.

CHANGE IN WATER DEMAND

- = +



Agriculture Water Demand
% of change



2050

To meet agricultural demand for a growing population and cope with climate risks, it will be essential to further promote usage of wastewater and sustainable agriculture through water-efficient adaptation practices.

INDIA FORESTS



FORESTS IN INDIA

India's vast and varied topography hosts a diverse range of forests: from moist and dry tropical forests to temperate and subtropical montane ones, as well as Himalayan and scrub forests.

Over 20% of India's forests are primary, making them some of the richest in terms of biodiversity. Indian forests provide water, health, food security and jobs for a country with a growing population of more than 1.3 billion people.

FORESTED AREA AND CARBON STORAGE

Forests cover 25% of India with a steady increase in recent decades. According to recent calculations by the Ministry of Environment Forest and Climate Change, the total carbon stock of Indian forests is over 7 gigatonnes of carbon (of which over 20% in Himalayan forests). Indian forests are a crucial carbon sink.

FOREST PRODUCTIVITY

Forest productivity or Net Primary Production is the net carbon captured by plants. It is the difference between the carbon gained by Gross Primary Production - net photosynthesis measured at the ecosystem scale - and carbon released by plants' respiration. It is expressed per unit land area.



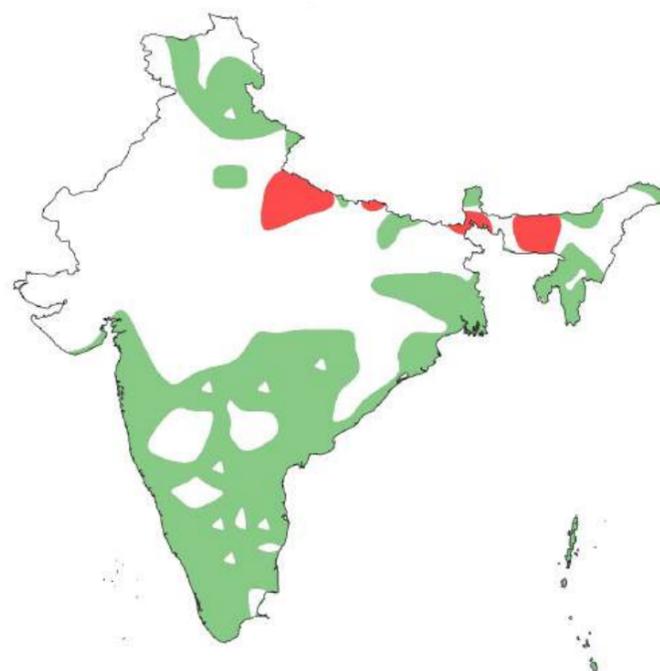
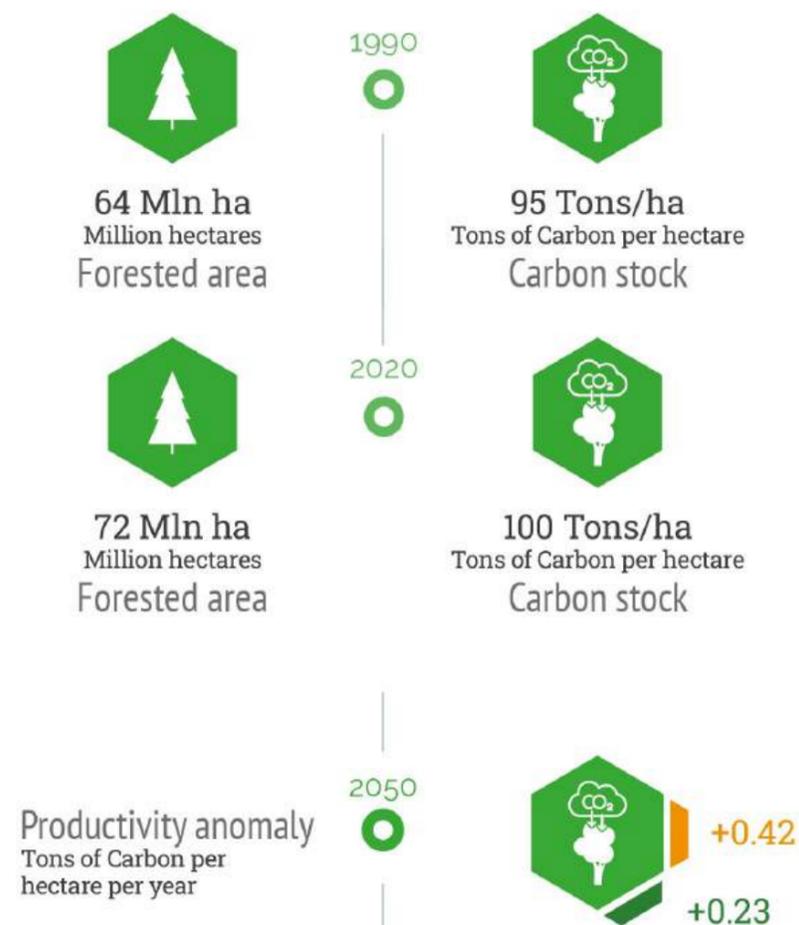
A slight increase is possible especially in southern areas.

+ Fertilizing effect of increasing atmospheric CO₂ and rising temperatures promotes productivity



Decrease expected in some sub-Himalayan areas.

+ Increasing risk of drought stress due to modifications in the water regime reduces productivity



KEY SPECIES UNDER CLIMATE CHANGE



XERIFICATION HIMALAYA
Most forests types, particularly Himalayan forests, are turning xeric



REDUCTION SAL TREE
Decline of sal tree in central India



REDUCTION TEAK
Decline of teak from very moist and moist forests

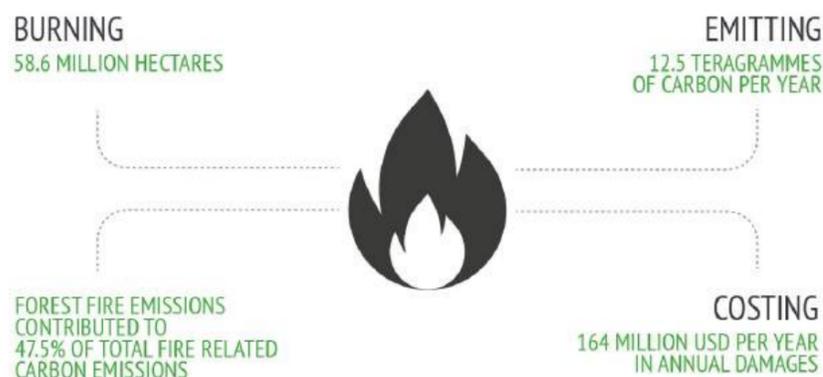


LOW VULNERABILITY TROPICAL AND MONTANE FORESTS
Less vulnerability shown by tropical rain and montane wet temperate forests

FIRES IN INDIA

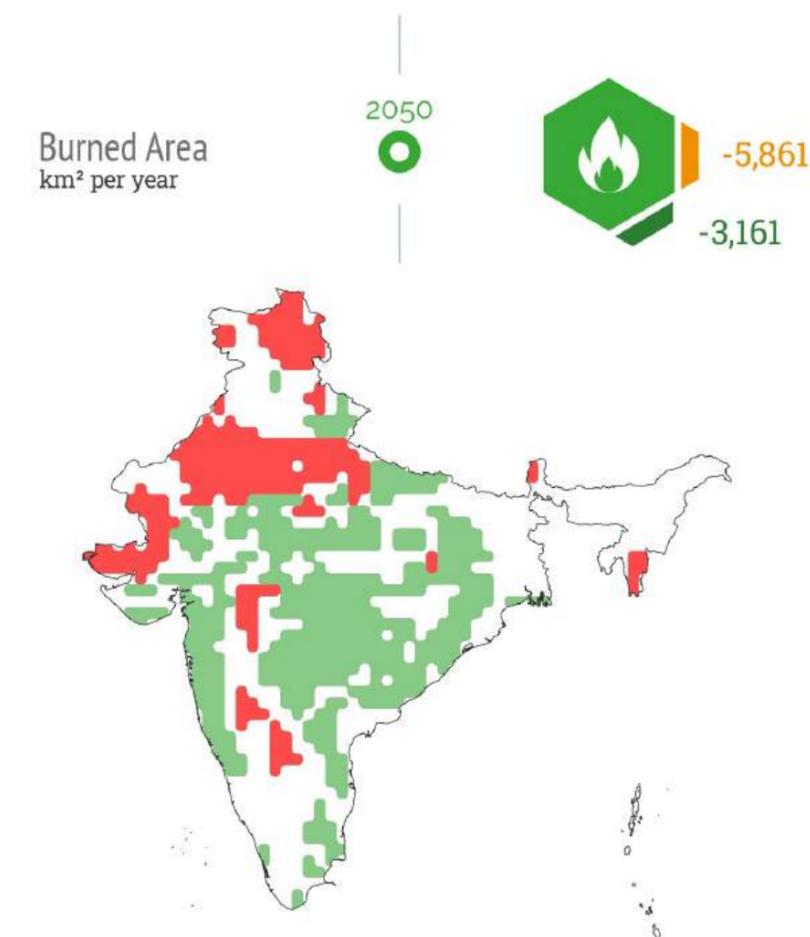
Fire is a structural ecological process that provides several types of ecosystem services and impacts on socio-ecological systems, including human health, carbon budgets, and climate change. Changes in global fire activity are influenced by multiple factors such as land-cover change, policies, and climatic conditions. Fire also releases large quantities of greenhouse gases into the atmosphere, contributing to a vicious cycle.

During the last two decades, the total forest area affected by fire was approximately 58.6 million hectares.



FUTURE BURNED AREA

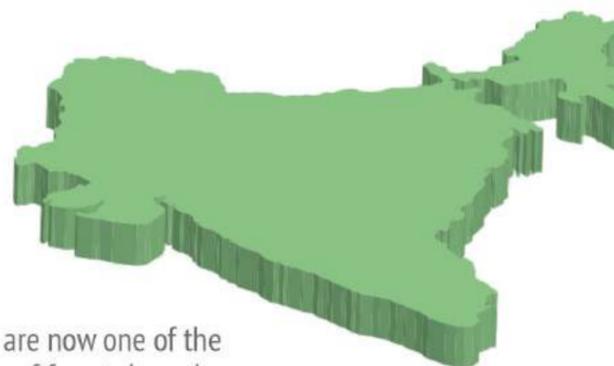
By 2050, under both low and medium emission scenarios, a decrease in burned area is expected in tropical and subtropical broadleaf forests over central India. However, a slight increase in burned area is expected over north and north-western areas dominated by xeric shrublands, deciduous forests and alpine steppes.



WHERE DO FIRES OCCUR?

Forest fires affect dry deciduous broadleaved forests in particular due to abundant fuel load and low moisture content in soil.

In the north-east, forest fires are mainly associated with traditional practices of shifting cultivation.



Forest fires are now one of the main causes of forest degradation in India, particularly in the regions of Madhya Pradesh, Odisha, and Chhattisgarh.

CASE STUDY: AIR QUALITY

Due to a prolonged dry spell, 2021 was the worst year out of the last 15 in terms of forest fires in northern India. Uttarakhand's forest fires emitted nearly 0.2 teragrammes of carbon, a record that had gone unchallenged since 2003. On top of forest fires, post-monsoon agricultural fires further affected the already high concentrations of urban air pollution in the Indo-Gangetic Plain. During the period from 2012-2016, their contribution ranged from 7% to 78% of the maximum observed PM_{2.5} increments in Delhi, suggesting that changes in farming practices that reduce agricultural fires could produce significant health benefits. Another challenge related to forest fires is the threat to protected areas and biodiversity conservation. In eastern India's Similipal Biosphere Reserves, approximately 10-30% of the territory burns each year. In march 2014 a large fire burned in the Sri Venkateshwara National Park, which is home to a wide range of uncommon species.

FUTURE FIRE EMISSIONS

Fire emissions might follow similar spatial patterns to burned areas. A slightly potential increase is expected in eastern subtropical forests and rainforests, particularly under a medium emissions scenario.



INDIA URBAN



OVERVIEW

India's urbanization rate is expected to grow from 35% in 2020 to more than 50% in 2050. Migration from rural areas due to climate impacts is expected to contribute substantially to this increase in urban population.

Smaller urban areas with less than 300,000 inhabitants have a predominant role in terms of share of the urban population. However, megacities with more than 10 million inhabitants are home to one fifth of the urban population. Urbanization rates are growing rapidly, and urban areas are growing faster than rural areas. India's urban population is expected to grow from 340 million in 2008 to 590 million by 2030, an increasing trend which is expected to continue until 2050 in all types of cities, but in particular in megacities.

Built up areas cover 2.27% of India (67,385.25 square kilometers).



Graphs refer to data provided by United Nations, Department of Economic and Social Affairs, Population Division (2018). World Urbanization



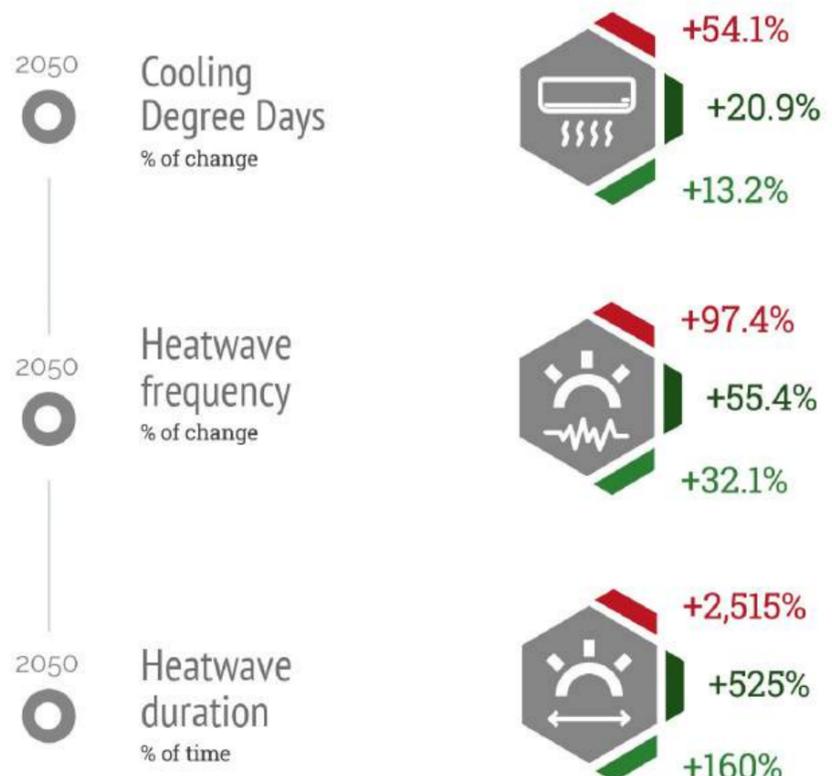
OVERVIEW OF KEY CLIMATE IMPACTS IN URBAN AREAS

Indian cities are exposed to multiple climate impacts connected to heat stress and flooding, which amplify the challenges caused by other factors such as poverty and rapid growth combined with scarcely managed urbanization.

HEATWAVES AND HEAT STRESS

Between 1965 and 2010, heat waves increased by an average of 0.23 cases per decade and their duration extended by 0.71 days per decade. Regular heatwave events occur almost every year over most of the country, in particular in the northwest and the south-eastern parts. Average duration of heatwaves over northwest India is between 5 to 7 days per season.

Between 1960 and 2009, mean temperatures in India increased by 0.5% and heat related mortality also rose. In 2010, more than 1,300 people died in the city of Ahmedabad due to heatwaves, with subsequent heatwaves in 2013 and 2015 killing more than 1,500 and 2,500 people across the country. During the intense heatwave of 2016, temperatures reached 52.4°C in the city of Jaisalmer. Heatwaves will become more frequent and prolonged, extending the periods of overheating in urban areas.



HEAT, POVERTY AND AIR POLLUTION

Indian cities are among the world's most polluted and put city dwellers at risk throughout the country, exacerbating the impacts of heatwaves in urban areas. The entire urban population of India is constantly exposed to unsafe levels of air pollution which exceed the WHO's threshold values.

Mortality from heat waves is higher in low-income groups with no access to electricity and those that depend on outdoor work.

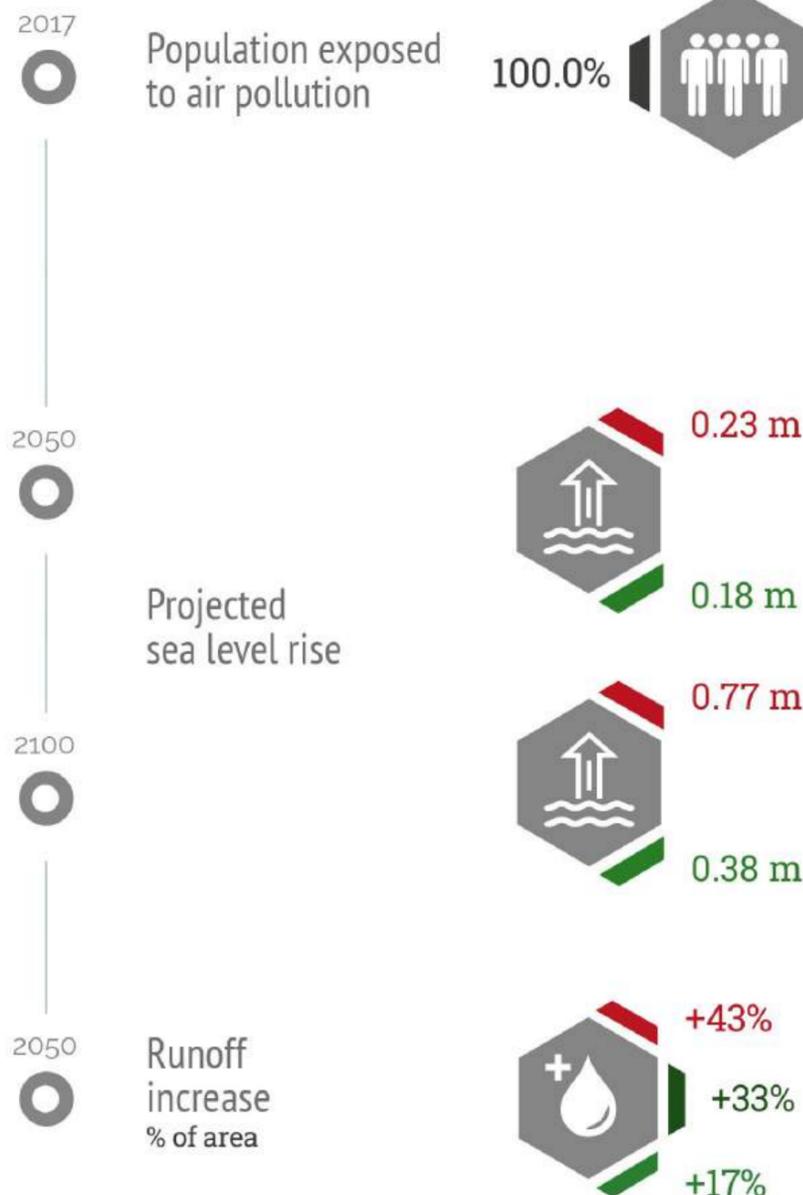
COASTAL FLOODING

Three of India's five mega-cities (Kolkata, Mumbai and Chennai) are situated in low-lying coastal areas which are exposed to regular tropical typhoons. Intense rainfall during the monsoon season is also among the key challenges for most other Indian cities, alongside increasing drought events during the dry season.

FLOODING

Intense rainfall during the monsoon season causes regular traffic break downs and hinders urban activities such as going to school, as well as flooding low-lying slums for days. In 2005 an exceptional storm surge with heavy rainfall in Mumbai left killed over 1,000 people, of which most lived in slum areas. The widespread flooding throughout the city, had a strong impact on economic activities and caused the national stock exchange and banking system, including ATMs, to shut down.

Despite reduced rainfall quantities, both rainfall events and storm surges will become more intense. Under a changing climate, a one in 100 years flood event in Kolkata could cost up to 6.8 billion USD due to damage and losses to business interruptions, health care facilities etc. A case similar to the one which occurred in Mumbai in 2005, which corresponds to a one in 100 year event, could increase total losses from 700 to 2,305 million USD.



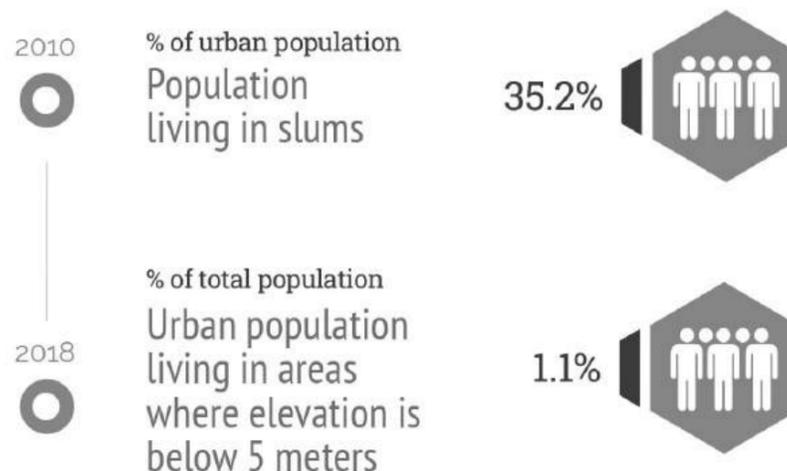
SURFACE SEALING AND FLOODS

Heavy precipitation in cities is problematic due to the high level of sealed surfaces. Soil sealing increases run off and reduces the amount of water absorbed by soil. Where there are large amounts of impervious ground cover, short duration extreme rainfall events can lead to increased flooding, even resulting in flash floods.

UNCONTROLLED URBANIZATION

Risks arising from climate change will add to existing risk drivers in Indian cities, which are commonly due to poverty, ecosystem degradation, and poorly governed, rapid urbanization which resulted in the growth of unplanned settlements and slums, frequently situated in highly exposed areas such as flood plains or steep hills.

35% of urban households live in slums with scarce access to safe drinking water and sanitation, inadequate housing and lack of drainage



INDIA HEALTH



OVERVIEW

With a population of 1.4 billion and increased climate change risks due to coastal and inland river flooding, increased heat stress, water and food insecurity, and changes in the occurrence of climate-sensitive diseases, India's decades of advancement in health and social development may be threatened. Extremely hot days (temperatures higher than 35°C) are expected to

increase from approximately five per year in 2010, to around 42 per year in 2100. As a result, the death rate due to climate change is projected to increase by 10% - equivalent to 60 deaths per 100,000 people by the end of the century. By 2100, around 1.5 million additional deaths due to climate change are expected in India.

HEAT RELATED MORTALITY

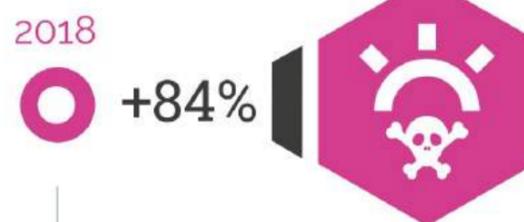
India reported over 31,000 heat-related deaths of people older than 65 in 2018.

Between 1960 and 2009, an increase of 0.5°C in summer mean temperatures increased the probability of mass heat-related mortality by 146%. Under a high emissions scenario, excess mortality will increase by 10% by 2100.

This is equivalent to 1.54 million excess deaths per year due to climate change by 2100 under a high emissions scenario. However, under a medium emissions scenario, this number is projected to decline by 80%. In 2018, there was an 84% increase in heat-related deaths in India compared to the 2000 to 2004 baseline.

Heat-related mortality

% change with respect to 2000-2004



IMPACTS ON LABOUR

Labour is directly affected by changes in environmental conditions. Warming affects both the number of hours worked (labour supply) and on the productivity of workers during their working hours (labour productivity). Both labour supply and productivity are projected to decrease under future climate change in most parts of the world, and particularly in tropical regions.

Parts of sub-Saharan Africa, south Asia, and southeast Asia are at highest risk under future warming scenarios. Future climate change will reduce global total labour in the low-exposure sectors by 18 percentage points and by 24.8 percentage points in the high-exposure sectors under a 3.0°C warming scenario

The effects of climate change on the livelihoods of vulnerable workers engaged in subsistence farming, the informal economy, and the tourism sector has been increasing. 1°C increase in annual temperatures leads to a 2% decline in industrial productivity in India. Total labour is expected to decline by 13.4% under a low emissions scenario, and by 24% under a medium emissions scenario.

Impact on total labour

% change with respect to 1986-2005 baseline



CLIMATE CHANGE AND DENGUE

Dengue has spread throughout the tropical world over the past 60 years and now affects over half the world's population. Globally, vectorial capacity for both dengue vectors (*A. aegypti* and *A. albopictus*) has been rising steadily since the 1980s, with nine of the ten highest years occurring since 2000.

Climatic stressors are one important driver of the current distribution and incidence of dengue. Climate change is likely to expand the geographical distribution and suitability of several vector-borne human infectious diseases including dengue. The risk of dengue transmission is increased by warming climates, as the growth and development of mosquitoes are significantly influenced by temperature, precipitation, and humidity.

CLIMATE CHANGE AND ZIKA

Zika virus has spread to at least 49 countries and territories since 2013. Climate change impacts on transmission suitability risk have increased over the years and future warming over 1.3 billion additional people could face suitable transmission temperatures for Zika by 2050.

DENGUE AND ZIKA: POPULATION AT RISK

Epidemiological risks from dengue and Zika will increase due to future climate change in India.

Under a medium emissions scenario, 98.1% of the population will be at risk of transmission-suitable mean temperatures for dengue by 2050, whereas 97% will be at risk under a high emissions scenario. In the case of Zika, 97.2% of the population will be at risk by 2050 under medium emissions.

CLIMATE CHANGE AND MALARIA

Malaria presents a significant public health challenge in India, with more than one million reported annual cases. 76.7% of the Indian population will be at risk of malaria under a low emissions scenario in 2050, whereas 73.7% will be at risk under a high emissions scenario.

POLLUTION AND PREMATURE MORTALITY

1.67 million deaths were attributable to air pollution in 2019, accounting for 17.8% of total deaths in the country. By 2060, 2,039 deaths will be caused by outdoor air pollution per year per million people, compared to 508 in 2010.

Dengue suitability

% of population at risk



Zika suitability

% of population at risk



Malaria suitability

% of population at risk



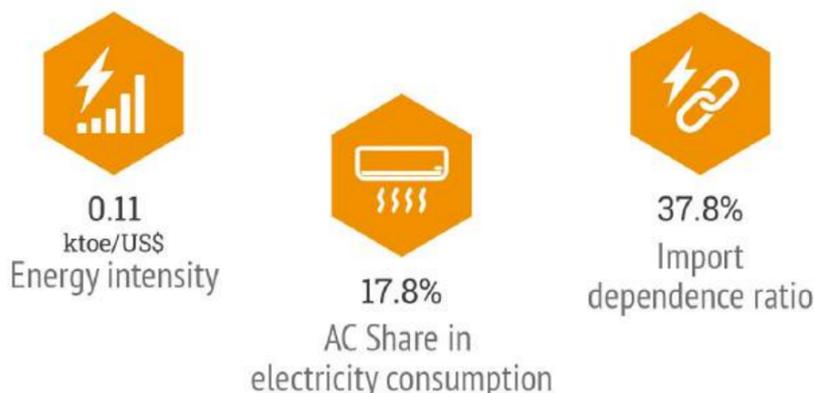
INDIA ENERGY



ENERGY SYSTEM IN A NUTSHELL

India's energy demand has grown fast, tripling over the last 30 years, and increasing by 60% in per capita terms. Energy consumption is the world's third highest (908 million tonnes of oil equivalent). India claims over 10% of the global increase in energy demand since 2000. Per capita energy use and emissions are still less than half the global average.

Within India's energy mix, coal and oil shares grew, while biomass dropped. India is highly dependent on coal, which covers half of energy demand.



CLIMATE CHANGE TODAY



WATER

In India, 40% of thermal power plants are in areas of high water stress and hence have a capacity factor 21% lower relative to plants with better water availability. In 2013-2016, 14 of the 20 largest utilities faced at least one shutdown due to water shortages. In 2016 alone, 14 terawatt-hours were lost due to insufficient water availability.

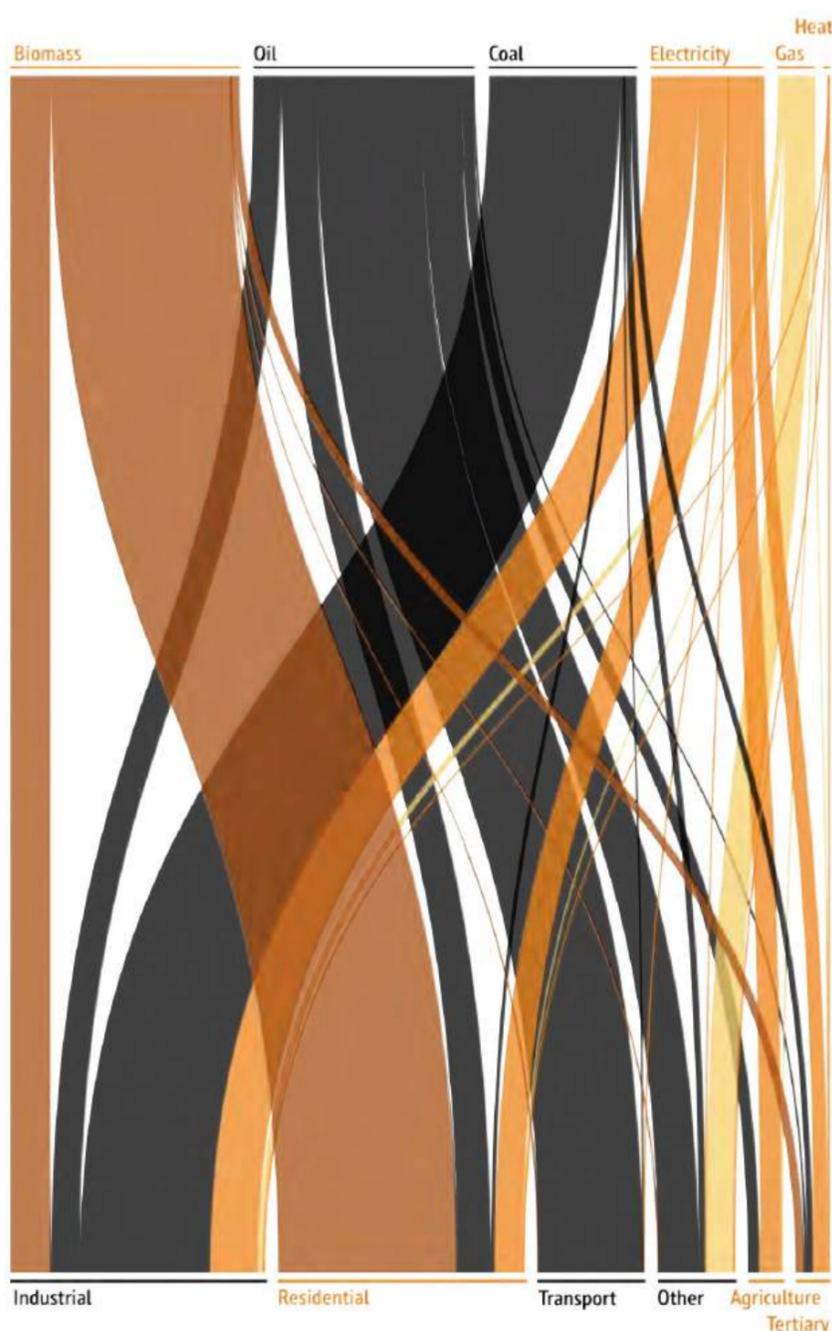


EXTREME EVENTS

IN 2019, UNSEASONAL PRECIPITATION AND STORMS DAMAGED SEVERAL SOLAR PLANTS. RISING HEAT STRESS AFFECTED HIMALAYAN GLACIERS AND LED TO INCREASED RISKS OF DROUGHTS AND FLOODS. IN 2021, A GLACIAL LAKE OUTBURST CAUSED FLASH FLOODS IN THE HIMALAYAN REGION DESTROYING TWO HYDROELECTRIC DAMS.

ENERGY SUPPLY

The current (2019) energy mix of total primary energy supply in India is dominated by coal (45%), oil (25.6%) and biofuels (20%). Natural gas accounted for 5.7% of total primary energy supply and hydro, solar and wind together accounted for 2.5%. India is dependent on imports for both coal and oil. Despite having rich coal reserves, domestic production cannot keep pace with demand. A lack of domestic oil reserves leaves India highly reliant on crude oil imports.



ENERGY DEMAND

Energy is used by the industrial sector (34% of final demand, mostly in the iron and steel industry), and by the residential (29%) and transport sectors (17%, mostly for road transport). The tertiary sector claims about 4% of final demand. Air conditioning accounts for 17.8% of residential electricity demand (2017). Energy demand largely exceeds domestic supply; hence imports are needed and shortages occasionally occur.

FUTURE ENERGY DEMAND

In India, higher cooling needs are projected to require additional installed power generation capacities of 36 gigawatts by mid century and 136 gigawatts by the end of the century under a high emissions scenario. Energy demand is predicted to increase, as the small drop in heating demand is going to be more than compensated by the vast increase in cooling needs, resulting in a net increase of energy demand of about 1,714 PJ (475 billion Kwh) by 2050 under a medium emissions scenario.

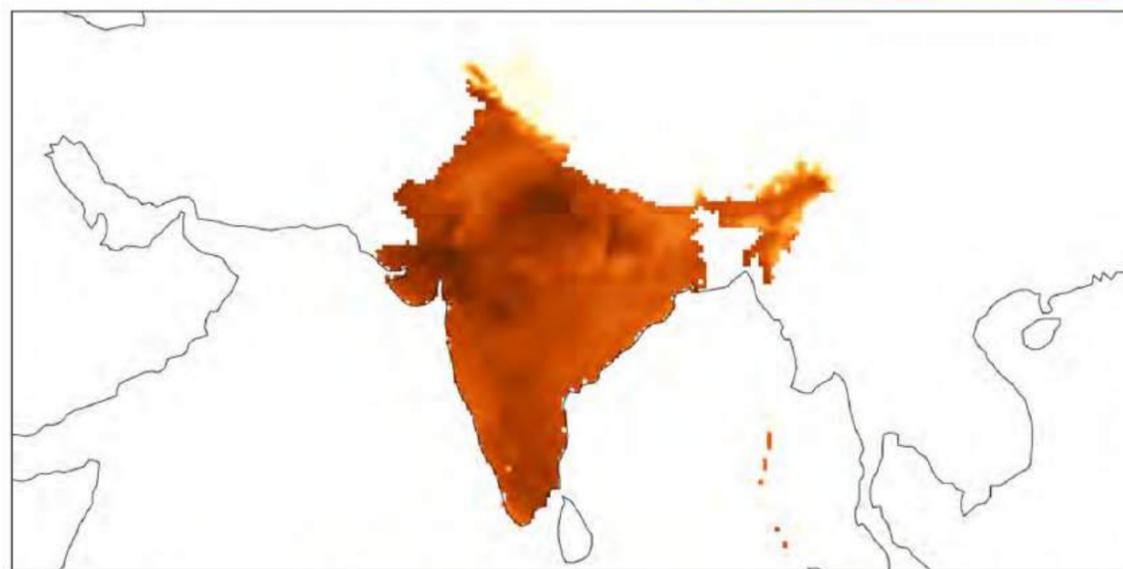
Net change in energy demand due to changes in HDD/CDD
Billion KWh



COOLING NEEDS

It is expected that India will face an increasing number of extreme heat spells. Very strong increase in cooling needs are expected all over the country, particularly in the southern and in the central states, where the capital New Delhi and the largest cities are located. Moderate increases are expected only near the northern border. This may result in increasing pressure on already constrained energy infrastructure assets.

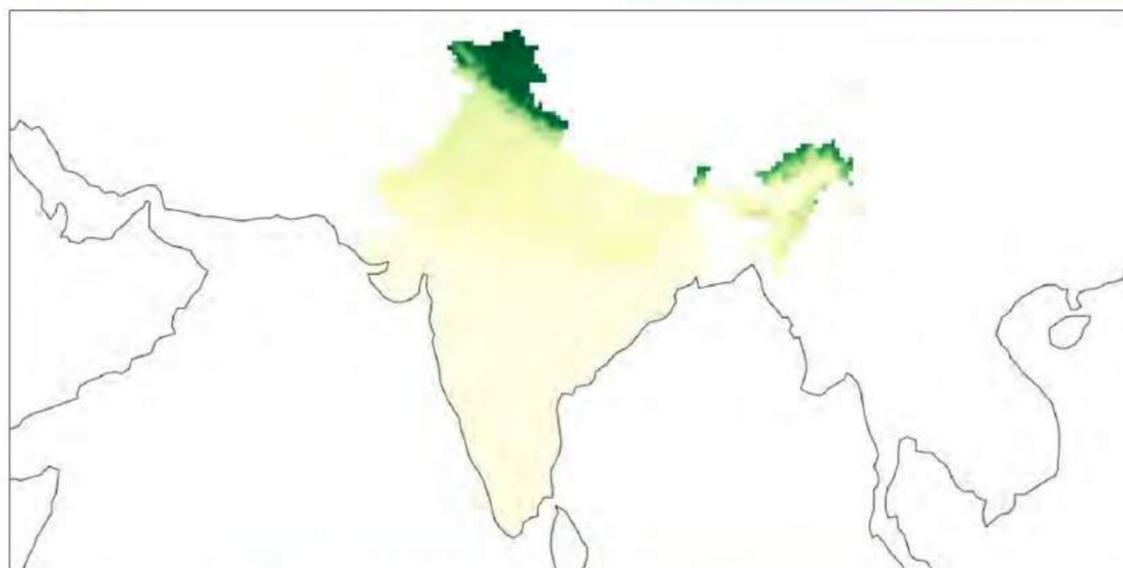
COOLING DEGREE DAYS



HEATING NEEDS

Heating degree days are of almost no relevance in the peninsular part of India. Heating needs are expected to decrease strongly in the states and territories closer to the northern mountain ridges (Ladakh, Jammu and Kashmir, Himachal Pradesh, Uttarakhand and Arunachal Pradesh), which are however not as densely populated as the rest of India.

HEATING DEGREE DAYS



FUTURE ENERGY SUPPLY

The future Indian energy mix is likely to be determined by energy policies and hence is outside the scope of this report. The government set ambitious coal and renewable energy targets, and most energy models expect coal to dominate. India aims to quadruple renewable energy capacity by 2030 and to more than double the share of natural gas. India's NDC include a 40% target for clean-energy installed power-generation capacity and up to a 35% reduction in emissions intensity of GDP by 2030.

Change in Hydropower generation % of change



EXPECTED IMPACTS OF CLIMATE CHANGE

As water availability is predicted to decrease, most of India's power plants become vulnerable. A large share of fossil fuel infrastructure is located in areas highly vulnerable to climate hazards, such as ports, which will be increasingly threatened by more frequent and severe cyclones and storms.

New projects like Udipi Power Plant (Udipi), Tata Power, Adani Power (Mundra) will be vulnerable. Himalayan glaciers are predicted to shrink fast. This will pose significant threats to hydropower generation.

INDIA ECONOMY



OVERVIEW

India ranks 7th in terms of GDP in the G20 group, with one of the largest growth rates. Due to COVID, for the entire 2020/21 financial year, the overall rate of contraction in India was, in real terms 7.3%.

IMPACTS ON GDP

Without any mitigation, climate change could severely undermine the development gains made in India in recent decades. In a moderate climate change scenario, India is projected to potentially lose between 0.8 and 2% of its GDP by mid century.

By the end of the century costs could double, reaching up to almost 10% of GDP (or 237 billion EUR) under a high emissions scenario.



SECTORAL ECONOMIC IMPACTS

IMPACTS ON INDUSTRY AND INFRASTRUCTURE

Natural disasters linked to weather extremes pose significant risks to the population and infrastructure in India. Approximately 12% of land is at risk of river flooding and erosion.

The majority of the coastline, densely populated in particular along the eastern part of the country with cities like Calicut, is prone to cyclones and tsunamis, whereas mountainous regions are at risk from landslides and avalanches.

IMPACTS ON AGRICULTURE

Globally, India is the largest producer of milk, pulses and jute, and is the second largest producer of rice, wheat, sugarcane, groundnut, vegetables, fruit and cotton.

At a national level, the agricultural sector is significant, employing more than 60% of the population, and contributing to 16% of GDP in 2019.

The agricultural sector in India is particularly vulnerable to the effects of climate change such as increasing temperatures and variability in rainfall. This will have significant repercussions for the Indian economy and the country's food security that relies mostly on domestic production to meet the needs of a growing population.

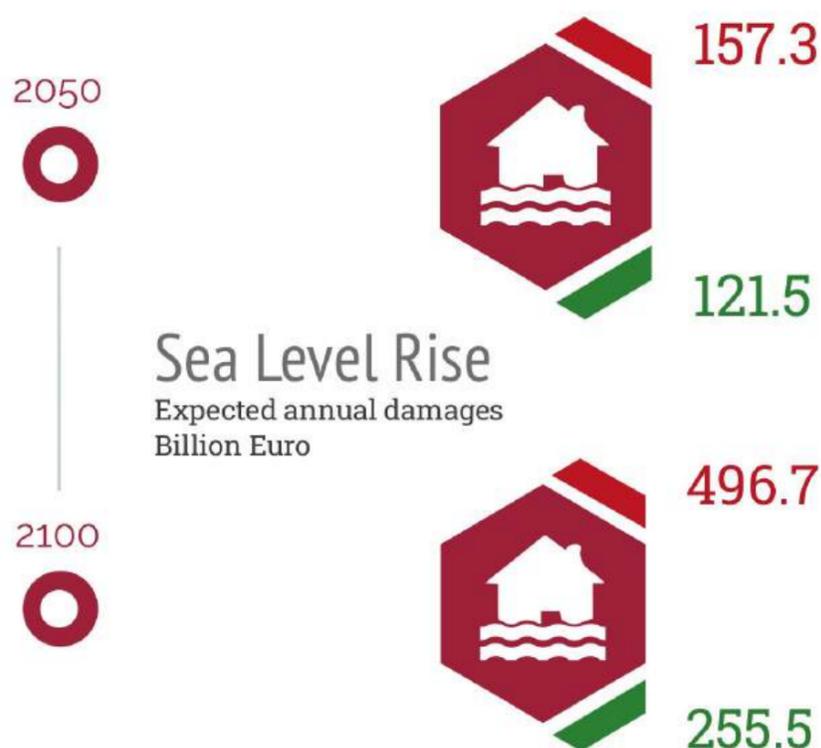
In particular, declines are projected for rice and wheat yields due to climate change, with economic losses by the mid century between 43 and 81 billion EUR (or 1.8-3.4% of GDP).

This is also expected to have substantial effects on Indian farmers' income. It is estimated that in the absence of any adaptation measure, climate change could decrease average farm incomes by 15%, peaking at 25% for unirrigated areas, by the end of the century.

SEA LEVEL RISE DAMAGES

Without any improvement in coastal protection, in a low emissions scenario projected asset losses can amount to 121.5 billion EUR by mid-century and 255.3 billion EUR in the second half of the century.

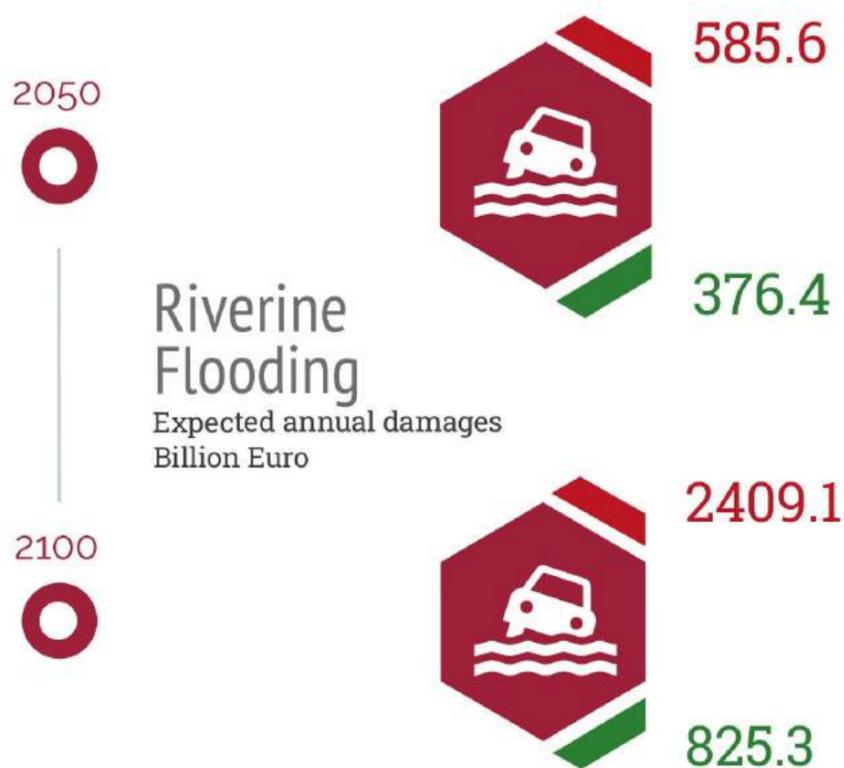
The high emissions scenario features higher losses with potential costs ranging from 157.3 billion EUR in 2050 to 496.7 billion EUR by the end of the century. Sea level rise is also expected to displace many vulnerable coastal communities with an estimated cost from forced migration that, under high emissions, could reach up to 580 million EUR by the end of the century.



RIVER FLOODING DAMAGES

Fluvial flooding is expected to cause substantial losses. The expected annual damages by 2050 are estimated to be 376.4 billion EUR under a low emissions scenario and rise to 585.6 billion EUR under a high emissions scenario.

By the end of the century costs are projected to rise substantially to annual damages of 825.3 billion EUR under a low emissions scenario and may reach 2,409.1 billion EUR under a high emissions scenario.



IMPACTS ON ENERGY

As with all other economic sectors, energy supply and energy networks in India will undergo more intense stress due to droughts and extreme events such as typhoons and floods.

Economic impacts of shifts in household and firm energy demand (see chapter on energy) are difficult to predict and will mostly lead to redistribution effects. In the case of India, there is no demand for heating of any significance in most of the country, and hence the large increase in cooling demand is expected to result in a substantial increase in energy bills.

IMPACTS ON TOURISM

In terms of the tourism sector, to the best of our knowledge no exact costs of climate change have been estimated. However, the occurrence of natural disasters has been linked with a reduction in foreign tourists, but does not seem to affect domestic tourists.

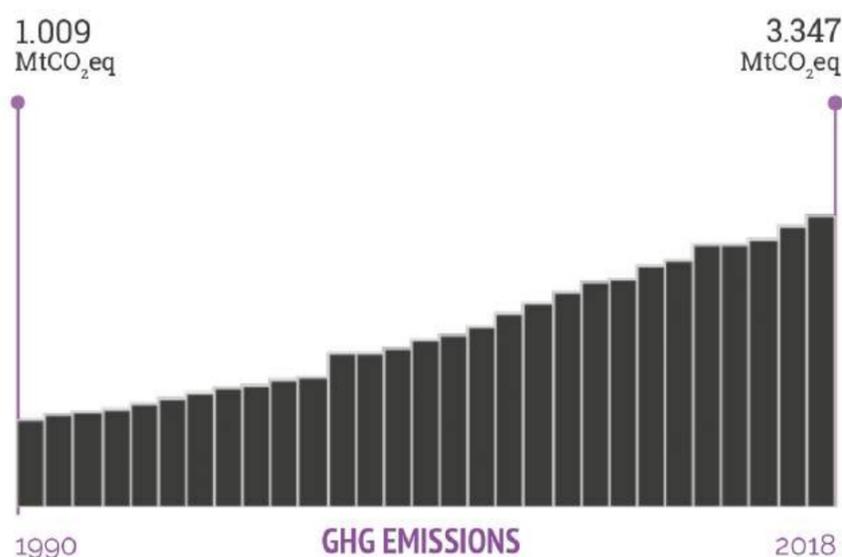
Foreign visitors tend to avoid areas of natural disasters to reduce any risks or disruption, whereas domestic tourists in India mainly travel for religious or social reasons.

INDIA POLICY



OVERVIEW

Although India is the 2nd most populated country in the world, it has the lowest rate of emissions per capita among G20 countries, accounting for 6.8% of world total GHG emissions in 2018. However, emissions are increasing steadily.

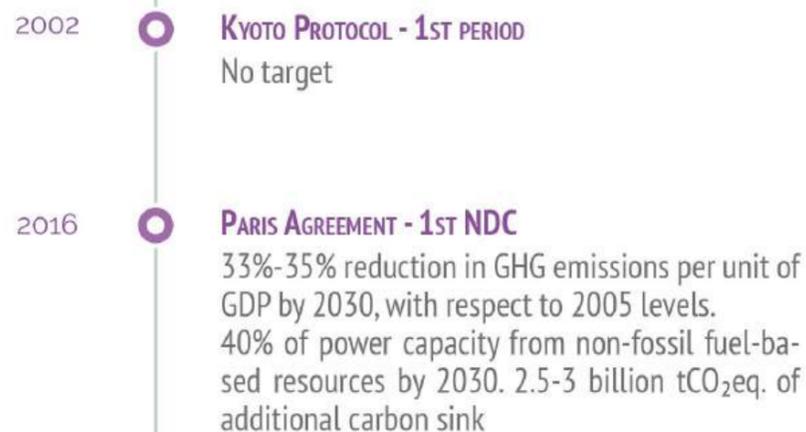


INTERNATIONAL COMMITMENTS

India ratified the Paris Agreement in 2016. Its NDC commits to lower the carbon intensity of each unit of GDP by 33%-35% in 2030 (with reference to 2005 levels), to reach 40% of its power capacity supplied by non-fossil fuels by 2030 and to create additional carbon sink up to 3 billion tCO₂eq by 2030.

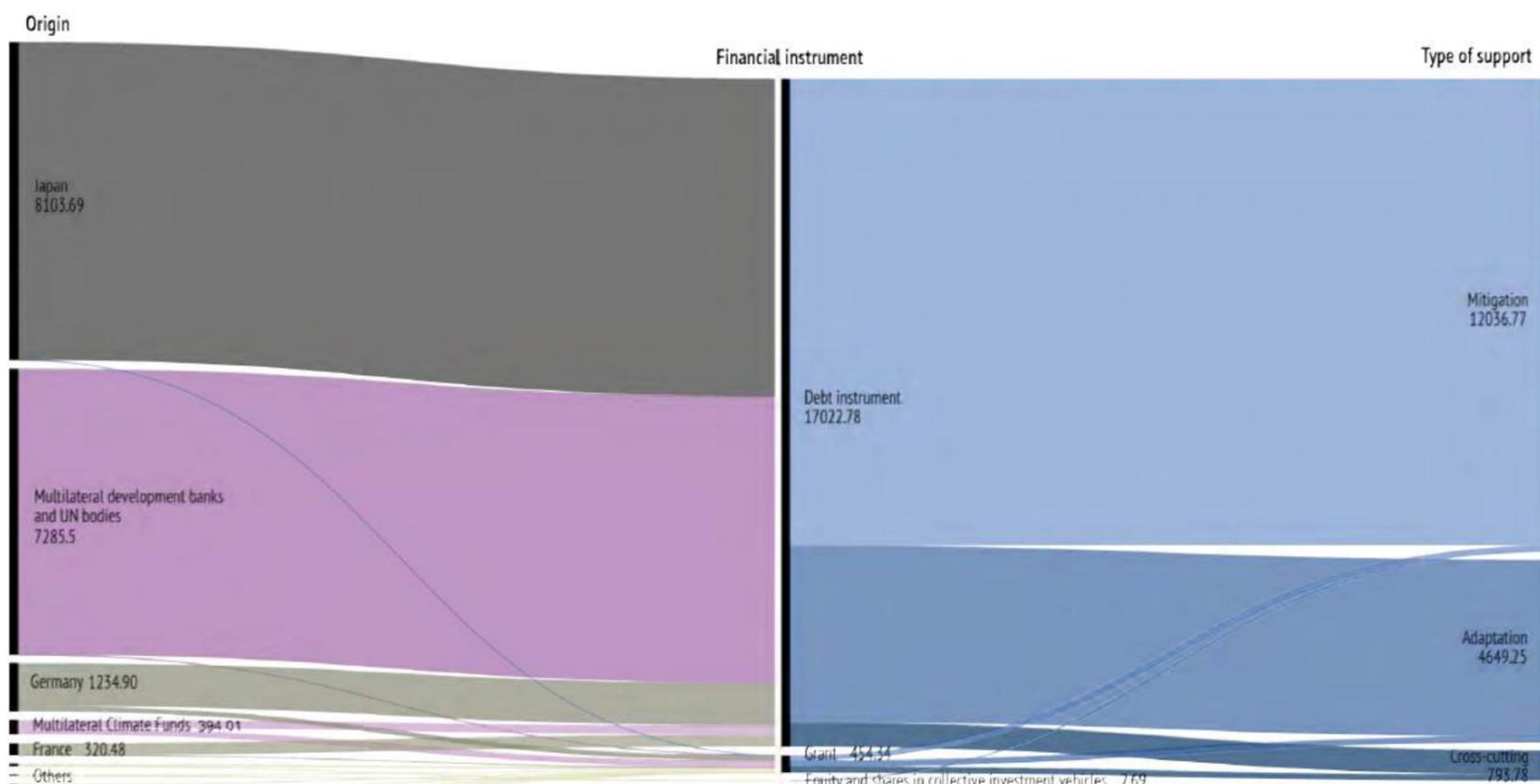


CLIMATE POLICY COMMITMENTS CHRONOLOGY



INTERNATIONAL CLIMATE FINANCE ASSISTANCE

In 2017-2018, India received 17.5 billion USD in climate-related development finance, according to OECD DAC data. The main sources were bilateral agreements, with Japan as the main donor. Almost all the amount reported is in the form of debt and equity instruments.



SUSTAINABLE RECOVERY POLICY

In 2020, India spent 20.75 billion USD to recover from the sanitary crisis: a fraction of its total expenditure (478,42 billion USD). According to the Global Recovery Observatory, sustainability accounts for 3,6 billion USD.



DOMESTIC ADAPTATION POLICY

India has a commitment for adaptation in its NDC. To achieve its targets, India developed an integrated mitigation and adaptation plan. The plan designates sub-national entities and sectoral authorities to provide adaptation plans.



ENERGY TRANSITION

Among the G20, India is lagging behind in the process of transformation of its energy sector; in particular, the country is at the bottom of the ranking for what regards the Efficiency composite, which takes into account transmission and distribution losses of the electricity grid, the level of energy intensity of the economy and the access to clean cooking services.

India is not progressing much in Emissions, which considers the urban air quality and the level of CO₂ emissions. In order to tackle the negative consequences of climate change, there is a lot to do in these two domains. On the contrary, India is quickly moving away from the use of Fossil Fuels and is pushing for their replacement with decarbonized energy sources as also demonstrated by the progress made in the penetration of renewables.

Finally, although the trajectory is encouraging, there is still room for improvement in the Electrification composite, showing the need to improve the quality of electricity supply in terms of readiness, costs, reliability and transparency.

Only actively pursuing an energy transition based on decarbonization and electrification – from policy and regulation, to health and education – will enable countries to benefit the most from future opportunities and fight climate change whilst ensuring an equitable distribution of wealth.

The Energy Transition indicators were developed by Enel Foundation in cooperation with SACE, and provide a retrospective analysis based on historical data.

ADAPTATION POLICY HIGHLIGHTS

TRANSNATIONAL INITIATIVES

Indian Himalayas Climate Adaptation Programme

The programme aims to enhance the resilience of vulnerable communities in the Indian Himalayas by strengthening Indian institutions in climate science, with a specific focus on glaciology and related areas, as well as planning and policy

NATIONAL INITIATIVES

Modelling of Changing Water Cycle and Climate

Development of hydrological resource assessment and management tools to quantify possible response to climate change and variability

National Water Mission (NWM)

The mission was launched in 2011 to ensure water security and improve access to the resource. It covers the entire water management cycle from water conservation to increasing water use efficiency

SUBNATIONAL INITIATIVES

Climate Change Adaptation in Rainfed Regions of Maharashtra, Madhya Pradesh, and Andhra Pradesh Project (CCA Project)

CCA Project trained local communities to identify and combat climate disasters. It created irrigation models and maps and it maintained springs and canals by clearing lantana and planting bamboo. Where applicable, fish ladders were built to help fish go upstream for breeding

Madurai Action Plan for Blue-Green Infrastructure

The city identified 14 future proofing projects to rehabilitate sewer systems; improve solid waste management; rehabilitate and green infrastructure; manage surface water against floods; balance water supply-demand; plan the future governance system

Energy Transition



Renewables



Electrification



Fossil Fuels



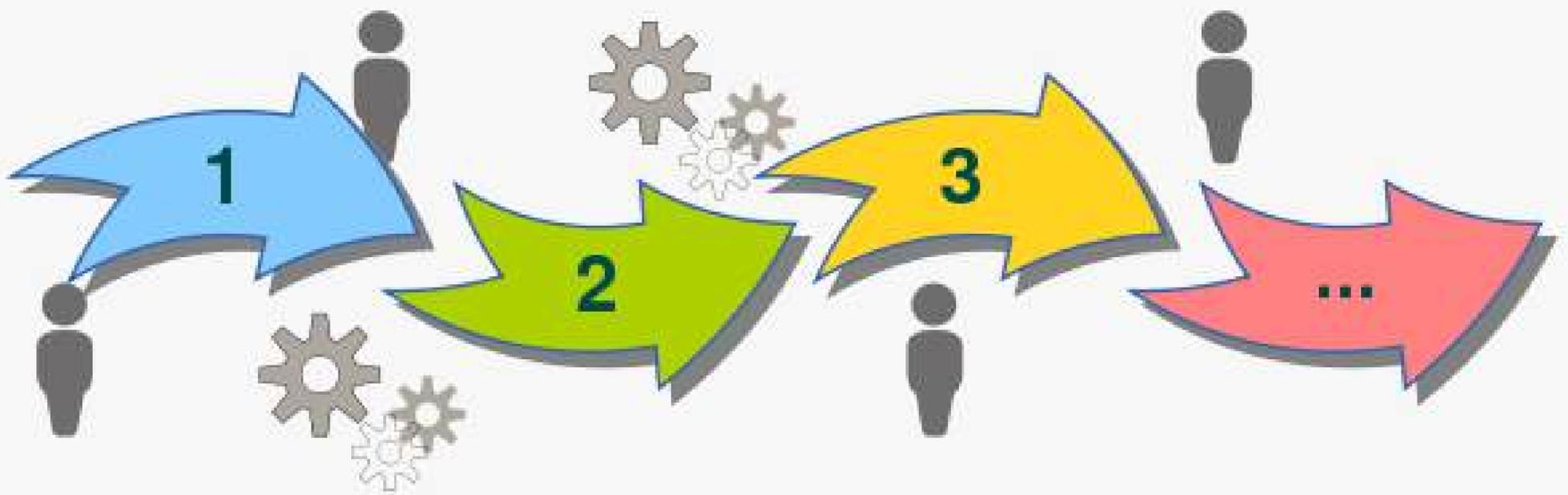
Efficiency



Emissions



PROCEDURE FOR REGISTRATION OF A MEMBER WITH ICMASAO



ICMAI Social Auditors Organisation

(A Section 8 Company promoted by The Institute of Cost Accountants of India)

PROCEDURE FOR REGISTRATION OF A MEMBER WITH ICMAI SAO

Eligibility Criteria for Social Auditor

A. An Individual if he

- holds the required qualification and experience;
- have attended a course at the National Institute of Securities Markets (NISM) and received a certificate of completion after successfully passing the course examination; and
- is registered with a Self-Regulatory Organisation (SRO) [e.g., ICMAI Social Auditors Organization]

B. A Firm/Institution that has partners/employees who meet with the criteria for being a social auditor and has a track record of minimum three years for conducting social impact assessment.

Eligibility Qualification & Experience for Social Auditor

- Post-graduates from universities recognized by the University Grants Commission (UGC) with a minimum of 3 years of experience in the development sector, or
- Graduates from universities recognized by the UGC with a minimum of 6 years of experience in the development sector, or
- Cost and management Accountant, Chartered Accountant, or Company Secretary holding valid Certificate of Practice.

No individual shall be eligible to be registered as a Social Auditor if he:-

- is a minor;
- is not a person resident in India;
- does not have the qualification and experience specified in SEBI notification;
- has been convicted by any competent court for an offence punishable with imprisonment for a term exceeding six months or for an offence involving moral turpitude, and a period of five years has not elapsed from the date of expiry of the sentence.

Provided that if a person has been convicted of any offence and sentenced in respect thereof to imprisonment for a period of seven years or more, he shall not be eligible to be registered;

- he is an undischarged insolvent, or has applied to be adjudicated as an insolvent;
- he has been declared to be of unsound mind; or
- he is not a fit and proper person.

Explanation: For determining whether an individual is fit and proper ICMAI SAO may take account of any consideration as it deems fit, including but not limited to the following criteria-

- integrity, reputation and character,
- absence of convictions and restraint orders, and
- competence,

Procedure for Enrolment as a member

Entry of Application : Entry for application received for registration of social auditor is to be made in a register maintained by ICMAI SAO followed by stamping of application mentioning date of reception it.

Acknowledgement of Application : Every application received is to be acknowledged to the applicant within 7 working days of its receipt via mail.

One Time Enrolment fee : Rs. 3,000/- Plus GST @18%

Membership fees : Rs. 5,000 plus GST @18% for three years

Internal Verification of application along with fee and supporting documents as mentioned in enrolment Form.

- Registered form – duly completed
- Passport-size photo

- Copy of proof of residence
- Self – attested copy of Aadhar card, PAN card and Passport (if available).
- Copies of documents in support of educational qualifications, professional Qualification, Experience, and Social Auditors examination
- Copy of proof of payment of Admission/Enrolment Fee and Annual Fee
- Copy of Self Declaration, the format of the same is annexed with the Enrolment form (Annexure – 1).

Verifying Qualification and Experience

Copies of documents demonstrating qualification, employment and practice as –

- Cost and Management Accountant enrolled with the Institute of Cost Accountants of India.
- Company Secretary enrolled with the Institute of Company Secretaries of India,
- Chartered Accountant enrolled with the Institute of Chartered Accountants of India and/or empaneled with the Comptroller & Auditor General of India.
- Graduate / Post-Graduate from universities recognized by the University Grants Commission (UGC).
- Requisite experience of minimum of 3/6 years in the development sector
- Copies of certificate of employment from the employer(s), specifying the period of such employment.

Before registering a person as its Member ICAI SAO is required to verify the following:

- Whether the applicant holds requisite qualifications & experience as indicated above.
- Whether the applicant holds valid Certificate of Practice if he is a Cost and management Accountant, Chartered Accountant, or Company Secretary.
- Whether the applicant have attended a course at the National Institute of Securities Markets (NISM) and received a certificate of completion after successfully passing the course examination.
- Whether the individual/firm/institution holds requisite social sector experience in providing assurance of non-financial information. (e.g., nutrition, education, health, water & sanitation, energy conservation, environment and climate change, etc.)
- Whether the firm/institution has required number of partners/employees meeting the criteria for being social auditor and has a track record of minimum three years for conducting social impact assessment.
- Whether any disciplinary proceedings are pending, or any disciplinary action has been taken at any time in the preceding three years against the professional member or firm/institution by the ICAI, ICAI, ICSI, any SRO or any other regulator.
- Whether ICAI, ICAI, ICSI, any SRO or any other regulator has initiated any criminal proceeding against the professional member or firm/institution and is pending for disposal?
- Whether the professional member/ person had an unblemished service with the last employer if he was in employment? The applicant must submit a conduct certificate from his last employer.

External Verification

The applicants' particulars are sent to verifying authority (ICAI / ICAI/ICSI) to verify the following:

- Confirmation on verification of Membership Number provided by the Member
- Date of enrolment as member
- Number of years as member, whether he is continued to be member since his enrolment
- Information on whether the Member has ever been found Guilty of Misconduct. If his Membership was removed.
- COP Date
- COP Number
- Firm No.
- Firm Name

- **Years of Experience in Practice**
- **Whether the member is in full-time practice or part-time practice?**
- **Whether the Member has been in Practice continuously? If not, please mention the block of period during which the Member was in practice and the block of period for which Practice was discontinued**

(e) After examination of the application, ICMAI SAO shall give an opportunity to the applicant to remove the deficiencies, if any, in the application.

(f) ICMAI SAO may require an applicant to submit additional documents, information, or clarification that it deems fit, within reasonable time.

(g) ICMAI SAO may reject an application if the applicant does not satisfy the criteria for registration or does not remove the deficiencies or submit additional documents or information to its satisfaction, for reasons recorded in writing.

(h) The rejection of the application shall be communicated to the applicant stating the reasons for such rejection, within thirty days of the receipt of the application, excluding the time given for removing the deficiencies or presenting additional documents or clarification by the ICMAI SAO, as the case may be.

(i) The acceptance of the application shall be communicated to the applicant, along with the registration number.

Issuance of Certificate of Enrolment/Registration

Upon successful registration, Applicant is issued certificate of registration within 7 working days from the date of registration with ICMAI SAO (through courier and via mail)

DETAILS REGARDING SOCIAL AUDITORS EXAMINATION CONDUCTED BY NISM



ICMAI Social Auditors Organisation

(A Section 8 Company promoted by The Institute of Cost Accountants of India)

Social Auditors Certification Examination

The examination aims to create a pool of social auditors who would assess the impact of social interventions of various social enterprises who raise funds through the Social Stock Exchange platform.

Examination Objectives

On successful completion of the examination the candidate should:

- Know the basics of social auditing, Code of conduct of Social Auditors.
- Understand the general concepts related to social stock exchange, social audit and social impact assessment.
- Know the Social Impact Reporting disclosures and regulations.

Assessment Structure

The examination consists of 85 multiple-choice and 3 case-based/caselet questions (each case having 5 questions) totaling to 100 marks. The assessment structure is as follows:

Multiple Choice Questions[85 questions of 1 mark each]

85*1 = 85

Case-based Questions[3 cases (each cases with 5 questions of 1 mark each)]

3*5*1 = 15

The examination should be completed in 2 hours. The passing score for the examination is 60. There shall be negative marking of 25 percent of the marks assigned to a question.

Test Details

Name of Module: NISM Series XXIII: Social Auditors Certification Examination

~ 85 multiple-choice and 3 case-based/caselet questions (each case having 5 questions) totaling to 100 marks.

* Negative marking – 25% of the marks assigned to the question.

+ Payment Gateway Charges extra.

Passing Certificate will be issued only to those candidates who have furnished/ updated their Income Tax Permanent Account Number (PAN) in their registration details.

Frequently Asked Questions (Social Auditors)

1. Who can take NISM-Series-XXIII: Social Auditors Certification Examination?

The following persons can take NISM-Series-XXIII: Social Auditors Certification Examination:

- Individuals registered as social auditors
- Employees of Social audit firm
- Students pursuing social work and interested in gaining more knowledge in Social Audit

2. How can I register for NISM-Series-XXIII: Social Auditors Certification Examination?

Candidates can register at <https://certifications.nism.ac.in/nismaol/>

After successful registration, candidates may select a test centre, date and time slot of their choice on the Test Administrator website. Candidates are required to follow further instructions available on the Test Administrator websites.

3. What is the fee structure?

The fees for “NISM-Series-VIII: Social Auditors Certification Examination” is Rupees One Thousand Five Hundred only (Rs. 1500/-) plus applicable GST.

4. What is the assessment structure?

The examination will be of 100 marks, will have 100 questions, and should be completed in 2 hours. There will be negative marking of 25% of the marks assigned to a question. The passing score for the examination is 60%.

5. Is there a study material available for preparing for this examination?

You will receive a soft copy of the workbook/study material after enrolment for the examination. For non-receipt of a soft copy of the workbook/study material, you may contact NISM at: certification@nism.ac.in

6. Do I have to pay for the study material?

You will receive a soft copy of the workbook/study material free of cost after enrolment for the examination. Candidate can buy printed workbooks from Taxmann Publications Private Ltd.

Visit <https://www.taxmann.com/bookstore> to place your orders for NISM workbooks.

If you prefer to order by phone, please call your nearest store directly to place your order. [Click here](#) to get the details of your nearest store.

7. I have passed NISM Social Auditors Certification Examination, when will I receive the certificate?

Only the candidates who have produced their Income Tax Permanent Account Number (PAN) during registration would receive the NISM Certificate within two weeks of appearing for the examination.

Candidates who produced other identification proofs would not receive the NISM certificate. They would receive only the temporary mark sheet at the end of the examination.

8. I have not provided my PAN information at the time of taking the certification examination. How do I obtain the certificate?

Candidates who have not provided their PAN information during registration may upload the same from their candidate dashboard from NISM's portal. After receiving and verifying PAN details, the candidate will receive the certificate from the Test Administrator they have registered with. No additional payments are necessary for obtaining the certificate.

9. I have passed NISM Social Auditors Certification Examination and also provided PAN details, however I have not received a certificate. Whom should I contact?

For non-receipt of certificate contact: certification@nism.ac.in

10. What is the validity period of the certificate?

The certificate will be valid for 3 years from the date of the examination.

11. Can I request for re-evaluation of NISM Certification Examinations?

NISM Policy on Re-evaluation of performance of candidates appearing for Certification Examination and resolution of doubts about the questions forming part of such examination, if any.

“No re-evaluation of the performance of candidates appearing for Certification Examination conducted by NISM (Mandatory & Non-Mandatory examination) is permitted since the assessment of answers, with respect to Certification Examinations questions which are in the nature of the selection of only one correct answer from multiple choices offered, is carried out in an objective manner by in-built system architecture created for Certification Examination without any scope for human intervention and subjectivity element. Also, considering the examination structure, no disclosure of the questions and/or answers is permitted as it will violate the confidentiality of the question bank, which is the essence of the examination.

In view of the above, no communication regarding re-evaluation, etc. will be entertained/serviced by NISM.” Subject to the above request/s received from a candidate for resolution of doubts about a question forming part of such examination will be considered as per the following policy.

(1) Candidate’s request/s will be considered only when he/she specifically mentions particular question or two which he/she thinks contain errors. Claims/ to recheck more than two questions shall normally be not permitted unless substantive material is provided by the candidate as to why he/she considers errors in such questions. In no case, claim/s to recheck all the questions appeared in his/her question paper shall be entertained.

(2) No request/s to disclose/discuss question/s and/or their answers shall be entertained as disclosure of the question/s will violate the essence of the question bank viz. breach the confidentiality/secretcy of the Question bank.

(3) Only those request/s made on-the-spot (before leaving the test center) will be considered for verification.

(4) When a valid request is received from a candidate at the Test Centre, it shall be forwarded by the respective TA to NISM. NISM’s team will look into claim relating to the contested question/s to verify whether there is a mistake in the question or answer. If it is prima facie found that the question or answer contains a mistake, no score will be computed and consequently no score card will be issued then at the Test Centre.

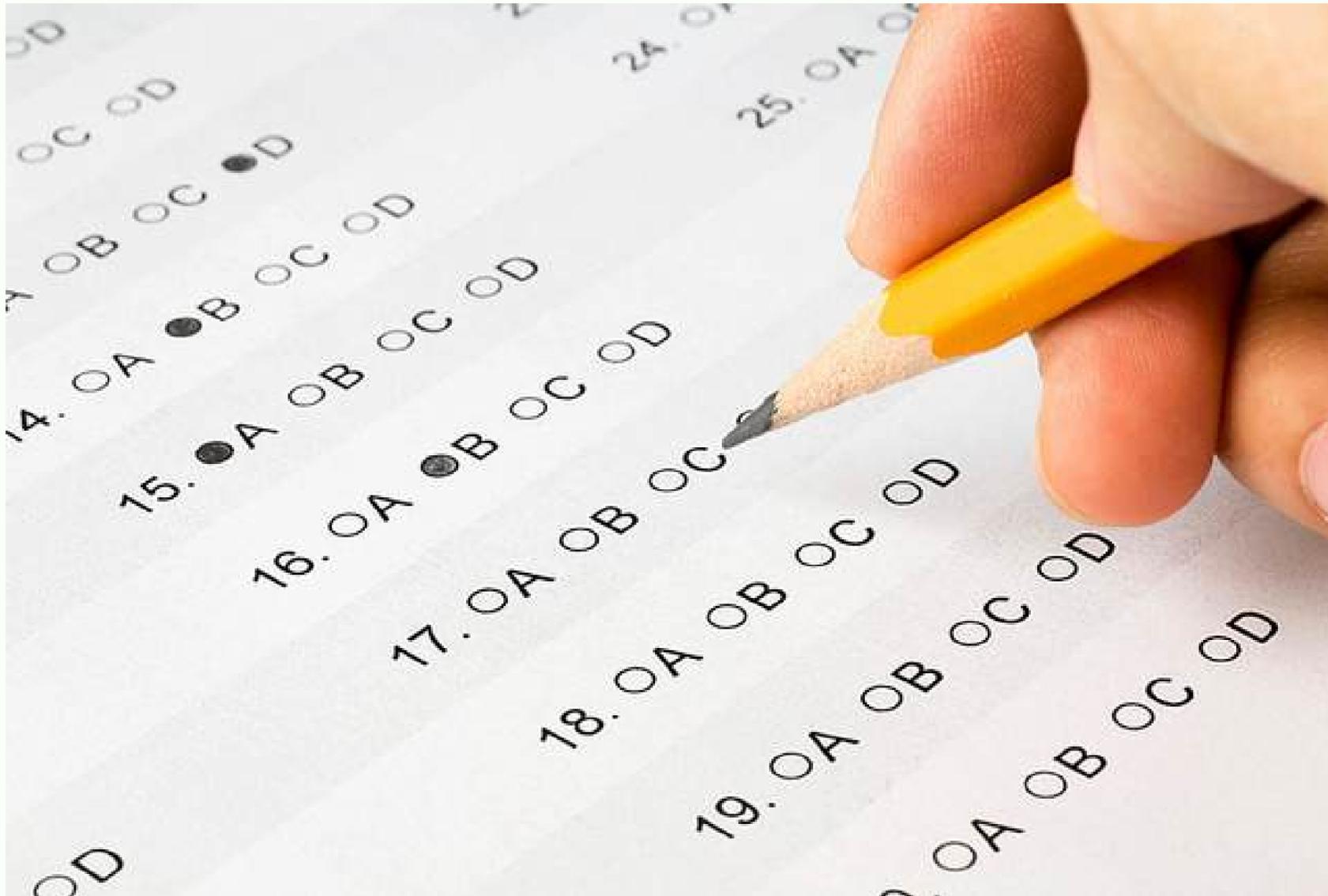
(5) Such matter will then be escalated with the question / answer to the Committee with the details of the nature of error, the correct version of the question or contested correct answer and system recognized correct answer. The Committee, after due diligence and proper scrutiny, will arrive at a conclusion whether the claim made by a candidate in relation to a question or answer is right. Such conclusion will be recorded in writing and put up for formal approval to the authority of NISM.

(6) Score computation, kept in abeyance as per point 4, shall be carried based on the approval as per point – 5. Such score card will then be issued to the candidate by TA/NISM.

(7) Even though NISM endeavours best efforts and has put in place a robust mechanism to review its question bank intermittently, attributable to continuous changes taking place emanating from dynamics of the market, encompassing products and features, and its regulatory framework, there is a possibility of inadvertently escaping some updation and/or escaping indirect impact on some question/answer. Therefore, to take care of such eventuality, the above process of entertaining request from the candidate in relation to the question/answer is put in place.

(8) The above policy and process will be subject to review from time to time and shall be binding and final in relation to any claim and/or matter when disposed off with the approval of the authority of NISM.

MULTIPLE CHOICE QUESTIONS



ICMAI Social Auditors Organisation

(A Section 8 Company promoted by The Institute of Cost Accountants of India)

Compiled & Contributed by CMA Jacky Singh

(Cost Accountant, Registered Valuer, Social Auditor, Surveyor & Loss Assessor, Arbitrator, Independent Director)

Question 1 - Which of the following approach of Social Impact Assessment uses surveys and statistical data analysis as methods for assessment?

- A. Quantitative
- B. Qualitative
- C. Monetization
- D. Optimisation

Answer - A. Quantitative

Question 2 - Partnership model is being used by the world bank in their projects where groups like provide funding and technical support to impact evaluations.

- A. DIME (Development Impact Evaluation)
- B. SIEF (Strategic Impact Evaluation Fund)
- C. GIL (Gender Innovation Lab)
- D. All of the above

Answer - D. All of the above

Question 3 - What type of Accounting can act as a proof of Social Commitment?

- A. Cost Accounting
- B. Human Resource Accounting
- C. Social Accounting
- D. Financial Accounting

Answer - C. Social Accounting

Question 4 - Disclosure in respect to statement of utilisation of funds is required by

- A. SEBI (AIF) Regulation 2012
- B. SEBI Act 1992
- C. SEBI (LODR) Regulation 2015
- D. SEBI (ICDR) Regulation 2018

Answer - C. SEBI (LODR) Regulation 2015

Question 5 - Holding period of listed debt securities to be classified as long term capital asset is

- A. More than 1 year
- B. More than 2 year
- C. More than 3 year
- D. More than 1.5 year

Answer - C. More than 3 year

Question 6 - An auction is resorted to when there are shortages in delivery by a/an

- A. Custodian
- B. Seller broker
- C. Investor
- D. Bank

Answer - B. Seller broker

Question 7 - The offer documents of the social enterprises for various modes of fund raising shall require disclosure of aspects

- A. Registration
- B. Workflow document
- C. Risk Disclosure Document
- D. Differentiators

Answer - D. Differentiators

Question 8 - . In reference to AIR, in absence of baseline study, is required to be mentioned.

- A. Detailed situation analysis
- B. Detailed geographical analyses
- C. Details historical analysis
- D. Detailed project analysts

Answer - A. Detailed situation analysis

Question 9 - The should present findings objectively and fairly .

- A. Social Audit Report
- B. Annual Impact Report
- C. Social Audit Standards
- D. CSR Project Report

Answer - A. Social Audit Report

Question 10 - The Provided codes of conduct for stock brokers.

- A. SEBI Prohibition of Insider Regulations Act
- B. PMLA
- C. Securities Contracts Regulation Act
- D. SEBI (Stock Broker) Regulation Act

Answer - D. SEBI (Stock Broker) Regulation Act

Question 11 - Smaller companies trying to solve their CSR deployment strategy can rely on the SSE for less – complex ways to invest upto..... of their funds

- A. 90%
- B. 95%
- C. 100%
- D. 99%

Answer - C. 100%

Question 12 - Which of the following is a key metric for a social Auditor

- A. Social impact

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- B. Financial performance
- C. Profit maximization
- D. Cost minimization

Answer - A. Social impact

Question 13 - Which of the SIA approach is difficult to use considering the target population

- A. Quantitative
- B. Qualitative
- C. Behavioral
- D. Monetization

Answer - C. Behavioral

Question 14 - Governing Council of Social Sector Exchange shall have minimum meetings in a year

- A. One
- B. Two
- C. Three
- D. Four

Answer - D. Four

Question 15 - Theory of Change Model detail out:

- A. The input and activities
- B. The inputs, activities and outputs
- C. The inputs, activities, output, and outcomes
- D. The inputs, activities, outputs, outcomes and impact

Answer - D. The inputs, activities, outputs, outcomes and impact

Question 16 - Social Impact Assessment (SIA) can be conducted for frames to be used across different programmes

- A. Standard Time
- B. Any Time
- C. 3-5 years Time
- D. 15-20 year

Answer - B. Any Time

Question 17 - The is measured by an independent third-party evaluator

- A. Social Impact
- B. Social intent
- C. Social outcome
- D. Social activity

Answer - C. Social outcome

Question 18 - Which of the following is not a key partner in a Development Impact Bond Structure?

- A. Outcome funders
- B. Risk investors
- C. Custodians
- D. 3 rd Party Evaluator

Answer - C. Custodians

Question 19 - The objective of information repository (IR) is to create and maintain a database of reliable, accurate and timely information, in Form, so that it can provide investors with transparent and comparable information.

- A. Electronic
- B. Physical
- C. Both A and B
- D. Either A OR B

Answer - A. Electronic

Question 20 - What is a scope limitation in a social audit?

- A. Inability to obtain sufficient appropriate evidence
- B. Lack of access to primary data sources
- C. Insufficient funds to conduct the audit
- D. Lack of cooperation from the organization being audited

Answer - A. Inability to obtain sufficient appropriate evidence

GUIDELINES FOR ARTICLES

The articles sent for publication in the journal “The Social Auditor” should conform to the following parameters,

which are crucial in selection of the article for publication:

- The article should be original, i.e. Not Published/ broadcasted/hosted elsewhere including any website.
- A declaration in this regard should be submitted to ICMAI-SAO in writing at the time of submission of article.
- The article should be topical and should discuss a matter of current interest to the professionals/readers.
- It should preferably expose the readers to new knowledge area and discuss a new or innovative idea that the professionals/readers should be aware of.
- The length of the article should not exceed 2500-3000 words.
- The article should also have an executive summary of around 100 words.
- The article should contain headings, which should be clear, short, catchy and interesting.
- The authors must provide the list of references, if any at the end of article.
- A brief profile of the author, e-mail ID, postal address and contact numbers and declaration regarding the originality of the article as mentioned above should be enclosed along with the article.
- In case the article is found not suitable for publication, the same shall be communicated to the members, by e-mail.

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