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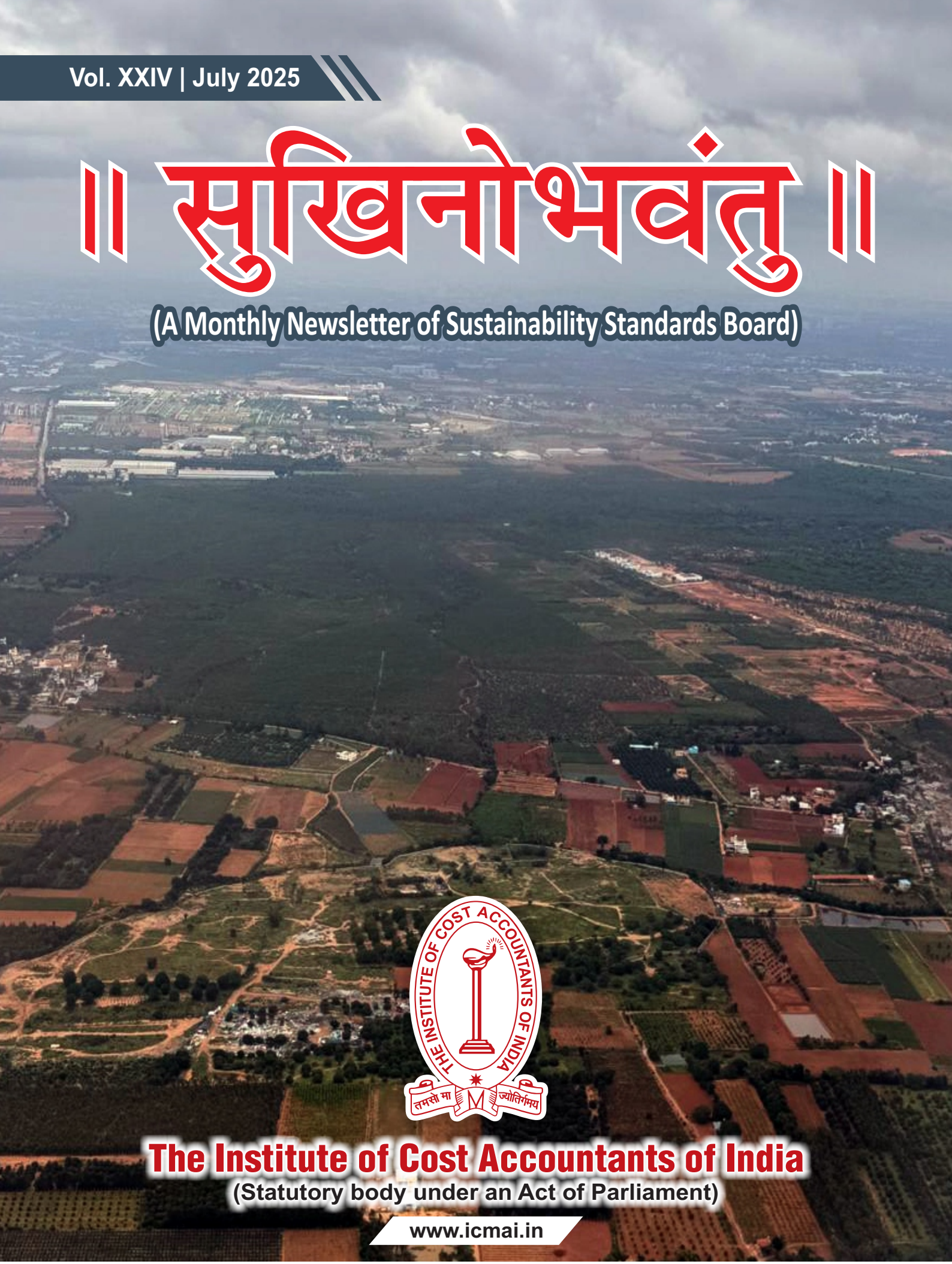
॥ सुखिनोभवंतु ॥

(A Monthly Newsletter of Sustainability Standards Board)



The Institute of Cost Accountants of India

(Statutory body under an Act of Parliament)

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Behind every successful business decision, there is always a CMA

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Message From Chairman, SSB

Every journey, no matter how meaningful, has its destined closure. Just as every sunset marks the promise of a new dawn, the conclusion of a tenure is an opportunity for introspection and renewal. As I pen this final message as Chairman of the Sustainability Standards Board (SSB) for the year 2024–25, I am filled with gratitude and a deep sense of fulfilment.

This year has been a remarkable chapter—one enriched with collective accomplishments, impactful initiatives, and an unwavering commitment to sustainability. I take immense pride in reflecting on the milestones achieved and the positive feedback received from various forums, which served as constant motivation for our team to aim higher.

Our flagship initiative, the **fortnightly webinar series "*Vasudhaiva Kutumbakam*,"** became a beacon of knowledge and collaboration. Held diligently every fortnight, it brought together distinguished voices—from regulators and sustainability professionals to domain experts—without repetition of speakers, ensuring fresh perspectives and diverse insights throughout the year.

Our **monthly newsletter "*Sukhinobhavantu*"** resonated widely, introducing innovative and thought-provoking columns such as *Mandala*, *Ask Your Psychologist*, *Vruksha Series*, *The Art of Everyday Etiquette*, *Voices of Science: Real Ideas for Real Sustainability*, and many others. It has become a vibrant platform reflecting the spirit of sustainability in every sphere of life. We also did the annual the best article awards for the newsletter and after two vigorous review process from external experts we awarded in the Sustainability Summit the two best awardees of Best and the second best person for their articles in the newsletter. This year we wish to continue in the same tempo the best articles assessment process.

We also proudly launched the **Certificate Course on ESG**, which has successfully completed three batches since its inception in July 2024. With over 200 participants enrolled, this initiative is building a strong foundation of ESG-capable professionals. We have ensured rigorous weekend classes, proctored examinations, project evaluations, and timely certification. The fourth batch is currently in progress.

We have also approved the ICMAI Sustainability Standards (ISS 1 & ISS2). The ICMAI Sustainability Standard (ISS 1) pertains to General Requirements for Disclosure of Sustainability-related Information and ICMAI Sustainability Standard (ISS2) relates to the Climate Related Disclosures. The Guidance Notes will be soon released.

Given the breadth and depth of our work, it's not possible to capture every accomplishment here. Hence, we have prepared **a detailed Annual Report** of the SSB's activities for 2024–25, featured in this newsletter. I encourage you all to read it and witness the scale of our collective efforts.

None of these accomplishments would have been possible without the dedication and collaboration of an extraordinary team. I wish to express my heartfelt gratitude to **CMA Bibhuti Bhusan Nayak**, President (2024–25), and **CMA T.C.A. Srinivasa Prasad**, Vice President (2024–25), ICMAI, for entrusting me with the responsibility to lead the Board and for their constant encouragement.

I extend special thanks to my esteemed colleagues on the SSB for their rock-solid support in translating our vision into reality.

I am also deeply thankful to all the eminent speakers of the *Vasudhaiva Kutumbakam* series, the erudite authors who contributed to *Sukhinobhavantu*, the dedicated officials of the SSB Secretariat and the support teams from IT, CPD, design, and other directorates for their tireless efforts in ensuring seamless execution of all our initiatives.

As we transition into a new leadership phase, I remain hopeful that the momentum we have built will not only be sustained but will scale greater heights. The future of SSB is bright, and I am confident that the spirit of innovation, teamwork, and purpose will continue to guide its path.

Let us remember—**no goal is too ambitious when powered by teamwork and dedicated service.**

Professionally yours

CMA (Dr.) Ashish P.Thatte
Chairman
Sustainability Standards Board (ICMAI)
July 21, 2025

SDGs and Goal wise Status Report of Indian States (Part-X)

CMA Arunabha Saha
Practicing Cost Accountant
Thane

The Sustainable Development Goals (SDGs) offer a broad and useful framework to understand how states are performing in terms of social well-being, economic development, and environmental protection. When we look at the SDG performance of the remaining four states — Telangana, Uttar Pradesh, Uttarakhand, and West Bengal of our series. We see that each has its own set of strengths and areas where more work is needed. These differences reflect the unique situations and development paths of the four states. This analysis covers SDG indicators from Goals 1 to 16, helping us identify where states are doing well and where focused efforts are needed. Understanding these trends is important to promote inclusive and long-lasting development in these four states.

Critical Review: Performance Indicators of SDG:

SDG-1 (No Poverty)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
Head Count ratio as per the Multidimensional Poverty Index (%)	5.88	22.93	9.67	11.89	14.96
% of households with any unusual member covered by a health scheme or health Insurance	69.20	15.90	62.50	33.70	41.00
Persons offered employment as a % of person who demanded employment under- MENREGA	99.96	99.98	99.88	99.59	99.74
% of population (out of total eligible) receiving social protection benefits under PMMVY	Null	43.03	68.49	–	46.29
% of household living in kachha houses	1.30	6.40	4.20	4.30	4.60
SDG-1 Index score	**81.00**	**57.00**	**83.00**	**63.00**	**72.00**

Performance:

1. Telangana

Strengths:

- Very low multidimensional poverty (5.88%) – among the best.
- High health insurance coverage (69.20%) – well above national average.
- Excellent MGNREGA implementation (99.96%) – nearly universal demand fulfillment.
- Lowest % of households in kachha houses (1.30%).

Weaknesses:

- No data available on PMMVY beneficiaries, which limits full evaluation of social protection reach.

2. Uttar Pradesh

Strengths:

- Strong performance in MGNREGA implementation (99.98%).

Weaknesses:

- Highest MPI among the four (22.93%) – critical poverty concern.
- Extremely poor health insurance coverage (15.90%).
- Below-average PMMVY coverage (43.03%).
- Highest share of kachha houses (6.40%) – infrastructure concern.

3. Uttarakhand

Strengths:

- High SDG-1 Index Score (83) – highest among all.
- Low poverty ratio (9.67%).
- Strong health insurance coverage (62.50%).
- Good PMMVY social protection coverage (68.49%).
- Low kachha housing (4.20%).

Weaknesses:

- No major weaknesses, though performance can be strengthened in housing and insurance to reach 100%.

4. West Bengal

Strengths:

- Effective MGNREGA implementation (99.59%).
- Moderate poverty ratio (11.89%), below national average.
- Low % of kachha housing (4.30%).

Weaknesses:

- Low health insurance coverage (33.70%).
- No data available for PMMVY coverage – creates an evaluation gap.

SDG-2 (Zero Hunger)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
% of beneficiaries covered under NFSA, 2013	99.96	99.29	100.00	100.00	**99.01**
% of children under 5 years who are underweight	31.80	32.10	21.00	32.20	**32.10**
% of children under 5 years who are stunted	33.10	39.70	27.00	33.80	**35.50**

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
% of pregnant women aged 15-49 years who are anaemic	53.20	45.90	46.40	62.30	**52.20**
% of women (aged 15-49 years) whose BMI below 18.5	18.80	19.00	13.90	14.80	**18.70**
Rice and wheat produced per unit area (3 years average) (kg/ha)	3,392.62	3,234.68	2,857.33	2,947.96	**3,052.30**
Gross value Added (constant price) in agriculture per worker (in lakhs/ worker)	0.73	0.73	0.73	1.02	**0.86**
SDG-2 Index Score	63.00	63.00	86.00	56.00	57.00

Performance:

1. Uttarakhand

Strengths:

- Highest SDG-2 score (86), clearly outperforming others.
- Lowest underweight (21%) and stunting (27%) rates in children under 5.
- Lowest percentage of underweight women (13.90%).
- 100% NFSA coverage.

Weaknesses:

- Lower agricultural yield (2,857.33 kg/ha) and GVA (₹0.73 lakh/worker) – could improve productivity.

2. Telangana

Strengths:

- Highest agricultural productivity (3,392.62 kg/ha).
- Very high NFSA coverage (99.96%).

Weaknesses:

- High underweight (31.8%) and stunting (33.1%) among children.
- Significant anaemia among pregnant women (53.2%).

3. Uttar Pradesh

Strengths:

- High NFSA coverage (99.29%).
- Good agricultural productivity and GVA per worker (₹0.73 lakh).

Weaknesses:

- Worst stunting rate (39.7%) among children.
- High percentage of underweight children (32.1%).
- No standout health or nutrition indicators; needs focused intervention.

4. West Bengal

Strengths:

- Best agriculture GVA per worker (₹1.02 lakh) – indicates higher economic efficiency.
- 100% NFSA coverage.

Weaknesses:

- Highest anaemia rate among pregnant women (62.3%).
- High underweight and stunting prevalence.
- Lowest SDG-2 score (56) – despite good economic output, social nutrition indicators are poor.

SDG-3 (Good Health & Well-being)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
Maternal Mortality Ratio (per 100,000 live birth)	43.00	167.00	103.00	103.00	**97.00**
Under 5 Mortality Rate (per 1,000 live births)	23.00	43.00	26.00	22.00	**32.00**
% of children in the age group 9-11 months fully immunised	106.13	99.41	93.72	98.01	**93.22**
Tuberculosis case notification against target in %	91.18	95.06	98.40	77.67	**87.13**
HIV incidence per 1,000 uninfected population	0.05	0.04	0.05	0.03	**0.05**
Life expetance	70.00	66.00	70.60	72.30	**70.00**
Suicide rate (per 100,000 population)	26.30	3.50	7.00	12.80	**12.40**
Death rate due to road traffic accidents (per 100,000 population)	19.92	10.30	9.02	5.86	**12.40**
% of institutional deliveries out of the total deliveries reported	100.00	94.98	93.64	99.12	**97.18**
Monthly per capita out-of-pocket expenditure on health as a share of MPCE	14.40	16.60	12.50	16.90	**13.00**
Health worker density per 1,00,000 population	30.31	20.72	51.77	37.48	**49.45**
SDG-3 Index Score	73.00	61.00	84.00	79.00	77.00

Performance:

1. Uttarakhand

SDG-3 Score: 84 (Highest among four)

Strengths:

- Highest health worker density (51.77 per 1 lakh population) – reflects strong healthcare infrastructure.
- Good immunisation coverage (93.72%) and life expectancy (70.6 years).
- Lower maternal (103) and child mortality (26) compared to national high-risk states.

Areas of concern:

- Suicide rate (7.00) is moderate but concerning.
- Higher out-of-pocket expenditure (12.5%) still burdensome.

2. West Bengal

SDG-3 Score: 79

Strengths:

- Best life expectancy (72.3 years) and lowest road traffic death rate (5.86).
- Strong performance in institutional deliveries (99.12%) and child immunisation (98%).

Areas of concern:

- High anaemia and suicide rates (12.8).
- Lower tuberculosis case notification (77.67%) – potential under-reporting.

3. Telangana

SDG-3 Score: 73

Strengths:

- Perfect institutional delivery rate (100%) and highest immunisation (106%).
- Moderate life expectancy (70 years) and robust health infrastructure.

Areas of concern:

- High suicide rate (26.3) and road accident deaths (19.92) – safety and mental health issues.
- Moderate maternal mortality (43) still needs attention despite good service access.

4. Uttar Pradesh

SDG-3 Score: 61 (Lowest)

Strengths:

- Good TB notification (95%) and immunisation (99.41%).
- Institutional deliveries are near national standards (94.98%).

Areas of concern:

- Worst MMR (167) and child mortality (43).
- Lowest life expectancy (66) and high out-of-pocket spending (16.6%).
- Indicates significant gaps in healthcare quality and affordability.

SDG-4 (Quality Education)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
Adjusted Net Enrolment Rate in elementary education (clss 1-8) (%)	100.00	94.00	100.00	100.00	**96.50**
Average annual dropout rate at secondary level (class 9-10)	13.70	9.70	5.00	18.00	**12.60**
Gross Enrolment Ratio in higher secondary (class 11-12) (%)	64.80	50.70	78.80	62.00	**57.60**

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
% of students in garde VII achieving at least a minimum proficiency level in terms of nationally delined learning outcomes to the pupils at the end of the grade	69.50	68.00	77.50	77.50	**77.23**
Gross enrolment Ratio in higher education (18-23 years)	40.00	24.10	41.80	26.30	**28.40**
% of persons with disability (15 years and above) who have completed at least secondary education	20.80	17.80	24.70	16.60	**19.30**
Gender Parity Index for higher education (18-23 years)	1.08	1.02	1.09	1.03	**1.01**
% of persons 15 years and above who are literate	75.70	72.00	83.50	80.60	**76.70**
% of schools with access to basic infrastucture (electricity and drinking water both)	90.81	89.43	84.06	97.06	**88.65**
% of Schools with computers	42.90	27.00	58.30	18.40	**47.50**
% of trained teacher at secondary level (class 9-10)	97.80	88.40	96.90	97.20	**92.20**
Pupil Teacher ratio at secondary level (clss 9-10)	10.00	27.00	11.00	17.00	**18.00**
SDG-4 Index Score	64.00	64.00	73.00	68.00	61.00

Performance:

1. Uttarakhand

SDG-4 Index Score: 73 (Highest)

Strengths:

- High learning outcomes (77.5% proficiency in Grade VII) and highest higher secondary enrollment (78.8%).
- Good literacy rate (83.5%), high computer access (58.3%), and gender parity (1.09) in higher education.
- Low dropout rate (5%) and a healthy pupil-teacher ratio (11:1) reflect strong education delivery.

Areas to Improve:

- Basic infrastructure (84.06%) lags behind top-performing states.
- Needs better Gross Enrolment Ratio in higher education (41.8%).

2. West Bengal

SDG-4 Index Score: 68

Strengths:

- High literacy rate (80.6%) and strong basic infrastructure access (97.06%).
- Learning outcomes (77.5%) comparable with Uttarakhand.
- High trained teacher ratio (97.2%) ensures teaching quality.

Areas to Improve:

- High dropout rate (18%) at the secondary level.
- Very low access to computers (18.4%) in schools and lower higher education enrolment (26.3%).

3. Telangana

SDG-4 Index Score: 64

Strengths:

- 100% enrolment in elementary education and strong teacher training (97.8%).
- Low pupil-teacher ratio (10:1) and reasonable access to computers (42.9%).

Areas to Improve:

- High dropout rate (13.7%), moderate literacy (75.7%), and lower higher education enrolment (40%).
- Lower learning outcome proficiency (69.5%) than northern peers.

4. Uttar Pradesh

SDG-4 Index Score: 64 (Tied with Telangana)

Strengths:

- Reasonable basic infrastructure (89.43%) and trained teachers (88.4%).
- Gender parity in higher education is healthy (1.02).

Areas to Improve:

- Lowest higher education enrolment (24.1%) and learning outcomes (68%).
- High pupil-teacher ratio (27:1) and limited computer access (27%) affect classroom engagement.

SDG-5 (Gender Equality)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
Sex ratio at birth	894.00	941.00	984.00	973.00	**920.00**
Ration of female to male average wage/ salary earnings received among regular wage/ salaried employees	0.69	0.85	0.88	0.65	**0.76**
% of ever married women aged 18-19 years who have ever experience spousal violence (physical/ sexual)	37.20	34.90	15.30	26.90	**29.20**
Ratio of the female to male Labour Force Participantions Rate (15-19 years)	0.62	0.39	0.52	0.42	**0.48**
Proportion of women in managerial positions including women in board of directors, in listed companies (per 1,000 persons)	208.60	192.92	155.74	218.57	**210.24**
% of currently married women aged 15-49 years who have their demand for family palning satisfied by any modern method	89.40	59.10	72.60	74.50	**74.10**
% of female operated operatinal land holdings	23.00	7.56	11.93	3.17	**13.96**

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
% of women (aged 15-49 years) who owns a mobile phone that they themselves use	60.00	46.50	60.90	50.10	**53.90**
% of curretly married women (aged 15-49 years) who usually paticipate in three household decisions	87.20	87.50	91.00	88.90	**88.70**
SDG-5 Index score	49.00	42.00	56.00	45.00	61.00

Performance:

1. **Uttarakhand (Index 56 – Highest)**

- Strengths:
  - Best sex ratio at birth (984), reflecting minimal gender bias.
  - Lowest spousal violence (15.3%) among young married women.
  - Strong female labour participation (0.52) and high decisionmaking power (91%).
- Weaknesses:
  - Lowest managerial representation (155.7 women per 1,000), indicating underrepresentation in corporate leadership.

2. **Telangana (Index 49)**

- Strengths:
  - High female land ownership (23%), signaling economic empowerment.
  - Excellent family planning coverage (89.4%) and strong household decisionmaking (87.2%).
- Weaknesses:
  - Poor sex ratio at birth (894) and highest spousal violence (37.2%).
  - Wage gap remains large (women earn 69% of male salaries).

3. **West Bengal (Index 45)**

- Strengths:
  - Good sex ratio (973) and high decisionmaking participation (88.9%).
  - Strong managerial presence (218.6 women per 1,000).
- Weaknesses:
  - Low land ownership (3.2%) and poor wage parity (women earn 65% of male salaries).
  - Spousal violence (26.9%) remains significant.

4. Uttar Pradesh (Index 42 – Lowest)

- Strengths:
  - Decent sex ratio (941) and family planning access (59.1%).
  - High managerial participation (192.9 per 1,000).
- Weaknesses:
  - Lowest labour force participation (0.39) and poor wage parity (85% but skewed by male incomes).
  - High spousal violence (34.9%) and low land ownership (7.6%).

SDG-6 (Clean Water and Sanitation)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
% of rural household getting safe and adequate drinking water within premises thorugh PWS	100.00	81.07	93.83	46.67	**75.75**
% of rural population having improved source of drinking water	100.00	99.71	100.00	99.83	**99.29**
% of individual household toilets constructed against target	100.00	100.00	100.00	100.00	**100.00**
% of districts verified to be ODF	100.00	100.00	100.00	100.00	**100.00**
% of schools with functinal girls toilets	78.80	97.10	90.80	99.90	**94.70**
Stage of ground Water extraction (%)	38.65	70.76	51.69	44.81	**50.30**
% of block/ mandals/ taluka over-exploited	1.80	7.42	–	–	**11.23**
SDG-6 Index score	90.00	92.00	94.00	86.00	88.00

Performance:

1. Uttarakhand (Index Score: 94 – Highest)

- Strengths:
  - Achieved 100% coverage in improved water source, household toilets, and ODF verification.
  - 93.8% rural households access safe drinking water via PWS.
  - Functional girls' toilets in 90.8% of schools.
- Challenges:
  - Moderate groundwater extraction (51.69%)—should be monitored to prevent stress.

2. Uttar Pradesh (Index Score: 92)

- Strengths:
  - 100% targets achieved in toilets, ODF status, and nearly complete improved water source (99.7%).
  - High functionality of girls' toilets (97.1%).
- Challenges:
  - Low PWS access (81.07%).
  - High groundwater extraction (70.76%) and 7.42% areas over-exploited, indicating long-term risk.

3. Telangana (Index Score: 90)

- Strengths:
  - Universal coverage in key sanitation indicators: toilets, ODF, improved water access.
  - Lowest groundwater extraction rate (38.65%) and only 1.8% over-exploited blocks—a positive for water sustainability.
- Challenges:
  - Lowest percentage of schools with functional girls' toilets (78.8%) among the states.

4. **West Bengal (Index Score: 86 – Lowest)**

- Strengths:
  - 100% toilet coverage and ODF status.
  - Excellent girls' toilet functionality (99.9%).
- Challenges:
  - Only 46.7% rural households access safe drinking water through PWS—the weakest among peers.
  - Limited data on over-exploited areas and slightly elevated groundwater use (44.81%).

SDG-7 (Affordable and Clean Energy)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
% of Household Electrification	100.00	100.00	100.00	100.00	**100.00**
% of LPG/ PNG Connectins against no. of Households	118.49	107.37	119.70	107.78	**96.35**
SDG-7 Index score	109.00	100.00	100.00	100.00	100.00

Performance:

1. **Telangana (Index Score: 109 – Highest)**

- Highlights:
  - Achieved 100% household electrification.
  - LPG/PNG connections exceed total households (118.49%), indicating excellent energy penetration, possibly due to double connections (e.g., commercial + domestic).
- Edge: Overperformance in clean cooking energy access drives its score above 100.

2. **Uttarakhand (Index Score: 100)**

- Strengths:
  - 100% electrification and highest LPG/PNG coverage (119.70%) among all states.
- Observation: Despite highest LPG coverage, the index is capped at 100, possibly due to scoring methodology saturation.

3. **West Bengal (Index Score: 100)**

- Performance:
  - Achieved universal electrification and 107.78% LPG/PNG coverage, reflecting robust infrastructure and access.
- Comment: Stands strong, although LPG penetration is lower than Telangana and Uttarakhand.

4. **Uttar Pradesh (Index Score: 100)**

- Performance:
  - 100% electrification, 107.37% LPG/PNG coverage—very similar to West Bengal.
- Scope: Potential to further enhance clean energy efficiency and reliability.

SDG-8 (Decent Work and Economic Growth)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
Annual growth rate of GDP (constant prices) per capita (%)	6.52	7.80	6.57	5.62	**5.88**
Unemployment rate (%) (15-59 years)	4.60	1.50	4.90	2.40	**3.40**
LFPR (%) (15-59 years)	66.50	60.40	68.10	61.80	**61.60**
% of regualar wage/ salaried employees in non-agricultural sector without any social security	38.90	51.20	46.00	61.30	**53.90**
% of households with any unusual number with a bank or post office	96.90	96.60	96.90	95.00	**95.70**
Number of functioning brances of commercial banks 1,00,000 population	15.90	15.04	19.54	10.07	**11.75**
Automated Teller Machines per 1,00,000 population	28.27	15.97	25.93	13.36	**18.30**
% of woment account holders in PMJOY	58.04	55.92	52.09	57.42	**55.63**
SDG-8 Index score	84.00	74.00	80.00	63.00	68.00

Performance:

1. **Telangana (Index Score: 84 – Highest Performer)**

- Strengths:
  - Robust labour force participation rate (66.5%) and low unemployment (4.6%).
  - Strong banking access: highest number of ATMs (28.27) and good branch density.
  - Better social security coverage (only 38.9% without it) compared to other states.
- Note: Higher proportion of women PMJDY account holders (58.04%) adds to financial inclusion.

2. **Uttarakhand (Index Score: 80)**

- Highlights:
  - Highest LFPR (68.1%) among all states.
  - Best bank branch density (19.54 per 1 lakh) and solid ATM presence (25.93).
- Areas to watch: High percentage (46%) of workers without social security and relatively lower % of women account holders (52.09%).

3. **Uttar Pradesh (Index Score: 74)**

- Strengths:
  - Highest GDP per capita growth rate (7.80%) and lowest unemployment (1.5%).
- Challenges:
  - Weak banking infrastructure (ATMs: 15.97), and 51.2% of workers lack social security.
  - Lower financial inclusion for women (PMJDY: 55.92%).

4. West Bengal (Index Score: 63 – Lowest)

- Challenges:
  - Lowest GDP growth rate (5.62%), fewer bank branches (10.07) and lowest ATM density (13.36).
  - Highest exclusion from social security (61.3%) among salaried non-agri workers.
- Positives: LFPR is fair (61.8%), and PMJDY women account holders (57.42%) are relatively high.

SDG- 9 (Industry, Innovation, and Infrastructure)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
% of targated habitations connected by all-weather raods under PMGSY	100.00	99.99	98.98	100.00	**99.70**
% of Share of GVA in Manufacturing to total GVA (current price)	9.76	12.98	31.91	14.40	**14.34**
Manufacturing employment as a % of total employment	10.34	9.20	9.89	18.75	**11.42**
% of Share of GVA in Services to total GVA (current price)	64.18	46.35	43.86	55.13	**54.18**
Services employment as a % of total employment	31.68	22.59	31.11	31.91	**27.75**
Innovation score as per the India Innovation Index	17.66	14.22	17.67	12.98	**36.40**
% of households that own at least one mobile phone	92.50	94.90	96.50	93.30	**93.30**
% of inhabited villages with 3G/4G mobile internet coverage	97.25	99.70	88.87	99.89	**95.08**
SDG-9 Index score	60.00	53.00	62.00	66.00	61.00

Performance:

1. West Bengal (Index Score: 66 – Top Performer)

- Strengths:
  - Highest manufacturing employment share (18.75%) among all states.
  - Good balance of GVA from manufacturing (14.4%) and services (55.13%).
  - Near-universal 4G coverage (99.89%) and high mobile phone ownership (93.3%).
- Areas to Improve:
  - Low innovation score (12.98) — lowest among the four.

2. Uttarakhand (Index Score: 62)

- Strengths:
  - Highest manufacturing GVA share (31.91%).
  - Good service sector employment (31.11%) and respectable innovation score (17.67).
  - Highest mobile phone ownership (96.5%).
- Challenges:
  - Weak 4G mobile internet coverage (88.87%) — lowest among the states.
  - Slightly lower services GVA share (43.86%).

3. Telangana (Index Score: 60)

- Strengths:
  - Strong services sector (64.18% of GVA), and high employment in services (31.68%).
  - Strong innovation score (17.66).
  - Good mobile connectivity and infrastructure (97.25% 4G coverage).
- Weaknesses:
  - Lowest manufacturing GVA share (9.76%) and moderate manufacturing employment (10.34%).

4. Uttar Pradesh (Index Score: 53 – Lowest)

- Positives:
  - Excellent infrastructure: 99.99% PMGSY road connectivity and 99.7% 4G village coverage.
  - High mobile phone ownership (94.9%).
- Major Gaps:
  - Lowest services GVA share (46.35%) and employment (22.59%).
  - Weak innovation score (14.22) and lowest manufacturing employment share (9.2%).Bottom of Form

SDG-10 (Reducing Inequalities)

States	Gini coefficient	% of seats held by women in PRIs		Ration of % of female workers to male workers working as professionals and Technical Workers	Rate of total crimes against SCs (per 1,00,000 SC population)	Rate of total crimes against STs (per 1,00,000 ST population)	SDG-10 Index score
Telangana	0.10	50.35	26.05	41.80	32.90	16.60	65.00
Uttar Pradesh	0.21	33.34	21.34	40.70	37.20	0.40	66.00
Uttarakhand	0.17	56.02	21.43	35.90	6.00	0.30	68.00
West Bengal	0.25	51.42	28.57	63.20	0.50	1.70	70.00
India	0.20	45.61	28.57	50.40	28.60	9.60	86.00

Performance:

1. West Bengal (Index Score: 70 – Top Performer)

- Strengths:
  - Highest ratio of female-to-male professional/technical workers (28.57).
  - High women's representation in PRIs (51.42%).
  - Lowest crime rates against SCs (0.50) and very low against STs (1.70).
- Concerns:
  - Highest Gini coefficient (0.25) indicating more income inequality.

2. Uttarakhand (Index Score: 68)

- Strengths:
  - Highest women's representation in PRIs (56.02%).
  - Lowest crime rates against both SCs (6.00) and STs (0.30).
  - Moderately low Gini coefficient (0.17).
- Concerns:
  - Low female participation in professional/technical jobs (21.43%).

3. Uttar Pradesh (Index Score: 66)

- Strengths:
  - Decent female-to-male professional worker ratio (21.34%).
  - Low crime rate against STs (0.40).
- Concerns:
  - Low female representation in PRIs (33.34%) – the lowest.
  - High crimes against SCs (37.20).
  - Relatively high Gini coefficient (0.21).

4. Telangana (Index Score: 65 – Lowest)

- Strengths:
  - Best income equality (lowest Gini: 0.10).
  - Good women's representation in PRIs (50.35%).
- Concerns:
  - Highest crime rate against STs (16.60).
  - Moderate female participation in technical professions (26.05%).

SDG-11 (Sustainable Cities and Communities)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
% of urban households living in kachha house	0.20	1.00	0.90	0.80	0.90
% of individual household toilets constructed against target SBM (U)	96.12	108.66	100.94	54.86	95.29
Deaths due to raod accedents in urban areas (per 1,00,000 population)	15.12	18.02	12.06	5.09	12.68
% of wards with 100% door to door waste collection (SBM(U))	99.81	95.59	94.74	84.52	97.00
% of MSW processed to total MSW generated (SBM(U))	98.20	94.09	90.20	9.98	78.46
% of wards with 100% source segrigation (SBM(U))	99.01	91.84	86.93	56.82	90.00

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
Installed sewage treatment capacity as a % of sewage generated in urban area	33.87	40.83	82.14	22.03	51.00
SDG-11 Index score	86.00	82.00	89.00	53.00	83.00

Performance:

1. Uttarakhand (Score: 89) – Top Performer

Strengths:

- Highest sewage treatment capacity (82.14%)
- Strong in door-to-door waste collection (94.74%) and kachha housing minimal (0.90%)
- Lowest urban accident rate among top 3 (12.06)

Improvement Areas:

- Source segregation (86.93%) slightly behind Telangana

2. Telangana (Score: 86)

Strengths:

- Highest MSW processing (98.20%) and source segregation (99.01%)
- Best in minimizing kachha housing (0.20%)
- High individual toilet coverage (96.12%)

Improvement Areas:

- Low sewage treatment capacity (33.87%) is a concern.

3. Uttar Pradesh (Score: 82)

Strengths:

- Over-achievement in household toilet construction (108.66%)
- Strong waste management infrastructure

Improvement Areas:

- High accident rate (18.02 per lakh)
- Lower sewage treatment (40.83%) compared to top performers

4. West Bengal (Score: 53) – Lowest Performer

Strengths:

- Low kachha housing (0.80%)
- Lowest urban accident rate (5.09 per lakh)

Serious Concerns:

- Very poor waste processing (only 9.98%)
- Low source segregation (56.82%)
- Sewage treatment capacity extremely low (22.03%)
- Only 54.86% toilets constructed against target

SDG-12 (Responsible Consumption & Production) Performance:

States	Per capita fossil fuel consumption (in kg)	% use of Nitrogeneous fertiliser out of total NPK	Quality of hazardous waste recycled/ utilised to total hazardous waste generated (%)	Plastic waste generated per 1,000 population (MT/Annum)	% of Bio Medical Waste (BMW) treated to total quantitiy of BMW generated	SDG-12 Index score
Telangana	197.49	67.51	86.48	12.57	100.00	75.00
Uttar Pradesh	86.13	72.46	71.40	1.64	100.00	85.00
Uttarakhand	158.56	77.05	132.29	1.64	99.83	86.00
West Bengal	96.25	51.62	96.02	4.27	100.00	94.00
India	166.43	65.24	54.90	3.04	91.52	78.00

Performance:

1. **West Bengal – Index Score: 94 (Top Performer)**

- Strengths:
  - Perfect BMW treatment (100%)
  - Low plastic waste (4.27)
  - Strong hazardous waste recycling (96.02%)
- Scope to Improve:
  - High nitrogenous fertilizer use (only 51.62%)

2. **Uttarakhand – Index Score: 86**

- Strengths:
  - Highest in hazardous waste recycling (132.29%)
  - Low plastic waste, strong fertilizer balance
- Minor Concern:
  - Slight shortfall in BMW treatment (99.83%)

3. **Uttar Pradesh – Index Score: 85**

- Strengths:
  - Lowest fossil fuel consumption (86.13 kg)
  - Minimal plastic waste generation
- Weakness:
  - Poor hazardous waste recycling (71.40%)

4. **Telangana – Index Score: 75 (Lowest)**

- Strengths:
  - Excellent BMW treatment (100%)
- Concerns:
  - Highest plastic waste (12.57)
  - Highest fossil fuel consumption (197.49 kg)

SDG-13 (Climate Action)

States	No. of human lives lost per 1 crore population due to extreme weather events	Disaster preparedness score as per Disaster Resilience Index	% of renewable energy out of total installed generation capacity (including allocated shares)	DALY rate attributable to air pollution (per 1,00,000 population)	% of industries complying with environmental standards	SDG-13 Index score
Telangana	Null	13.00	39.34	2,710.00	93.38	58.00
Uttar Pradesh	4.71	16.50	27.46	4,390.00	92.21	52.00
Uttarakhand	62.42	19.50	69.35	3,300.00	99.87	71.00
West Bengal	27.56	19.50	18.86	3,761.00	Null	44.00
India	15.44	19.20	43.28	3,469.00	94.86	67.00

Performance:

1. **Uttarakhand – Score: 71**

- Strengths:
  - Highest disaster preparedness
  - Best renewable energy share
  - Highest environmental compliance
- Concerns:
  - High air pollution DALY (3,300)
  - High death rate from weather events (62.42)

2. **Telangana – Score: 58**

- Strengths:
  - Best DALY rate (2,710)
  - High industry compliance (93.38%)

- Weaknesses:
  - Low disaster preparedness
  - Missing data on deaths due to weather events

3. Uttar Pradesh – Score: 52

- Strengths:
  - Lowest weather-related death rate (4.71)
  - Moderate disaster preparedness
- Weaknesses:
  - Worst air pollution impact (DALY: 4,390)
  - Lower renewable energy share

4. West Bengal – Score: 44 (Lowest)

- Weaknesses:
  - Lowest renewable energy share (18.86%)
  - No data on environmental compliance
  - Very high DALY (3,761)

SDG-14 - Life Below Water

Other than West Bengal all other states are land lock. Hence no comparison is made.

SDG-15 (Life on Land)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
Forest cover as a % of total geographical area	18.93	6.15	45.44	18.96	21.71
Tree covered as a & of total geographical area	2.54	3.08	1.87	2.65	2.91
Combine of las tow	21.47	9.23	47.31	21.61	24.62
% of area covered under afforestation schemes to the total geographical area	2.63	0.17	4.16	Null	0.40
% change in carbon stock in forest cover	6.68	1.34	1.95	5.12	1.11
% of degrated land over total land area	28.85	11.86	17.68	5.56	27.77
% of increase in area of desertification	1.10	1.35	3.96	2.91	1.50
No. of cases under Wild life protectin Act per million hectares of protected area	Null	7.00	104.00	99.00	16.00
SDG-15 Index score	82.00	78.00	94.00	91.00	75.00

Performance:

1. Uttarakhand – Score: 94

- Strengths:
  - Highest forest cover (45.44%) and afforestation (4.16%)
  - Most combined forest+tree cover
- Weaknesses:
  - High wildlife violation rate (104)
  - High desertification increase (3.96%)

2. West Bengal – Score: 91

- Strengths:
  - Low degraded land % (5.56%)
  - High carbon stock gain (5.12%)
- Concerns:
  - Missing afforestation data
  - High wildlife act violation cases (99)

3. Telangana – Score: 82

- Strengths:
  - High carbon stock increase
  - Lowest desertification growth (1.10%)

- Weaknesses:
  - Highest degraded land % (28.85%)
  - No data on wildlife act violations

4. Uttar Pradesh – Score: 78 (Lowest)

- Weaknesses:
  - Lowest forest cover (6.15%)
  - Least afforestation (0.17%)
  - Lowest carbon stock growth (1.34%)

SDG-16 (Peace, Justice, and Strong Institutions)

Indicators	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	India
Murder per 1 lakh population	2.50	1.50	1.60	1.70	2.10
Cognizable crimes against children per 1 lakh population	49.70	21.90	44.90	29.80	36.60
No. of victims of human trafficking per 10 lakh population	18.65	0.60	2.60	0.94	4.37
No. of mission children per 1,00,000 child population	30.25	3.98	17.11	41.53	18.77
No. of courts per 1,00,000 population	1.58	1.63	2.64	1.09	1.01
Cases under prevention of Corruption Act and related sections of IPC per 10 lakhs population	2.82	0.38	1.64	0.25	3.00
Charge sheeting rates of IPC crime	79.10	76.10	71.50	90.60	71.30
% of children under 5 years whose birth was registered	90.00	79.50	91.90	98.20	89.10
% of population covered under Aadhar	103.55	94.42	101.17	99.83	95.47
SDG-16 Index score	67.00	77.00	81.00	82.00	74.00

Performance:

West Bengal – Score: 82

- Strengths:
  - Highest charge sheeting rate (90.6%)
  - Best child birth registration (98.2%)
  - Lowest corruption reporting (0.25 cases)
- Concerns:
  - Low court density (1.09 per 1L)

Uttarakhand – Score: 81

- Strengths:
  - Highest court availability
  - Good performance on child birth registration and Aadhaar coverage
- Concerns:
  - Low charge sheeting rate
  - Higher crimes against children (44.9)

Uttar Pradesh – Score: 77

- Strengths:
  - Best on murder, child crimes, and trafficking
- Concerns:
  - Lowest birth registration (79.5%)
  - Poor performance on missing children and corruption reporting

Telangana – Score: 67

- Strengths:
  - Strong Aadhaar coverage and corruption detection
- Weaknesses:
  - Highest rates of child crimes and trafficking
  - High murder rate

Composite Performance:

	2023-24				2020-21			
	Telangana	Uttar Pradesh	Uttarakhand	West Bengal	Telangana	Uttar Pradesh	Uttarakhand	West Bengal
SDG-1	81	57	83	63	68	44	74	59
SDG-2	63	63	86	56	50	41	61	46
SDG-3	73	61	84	79	67	60	77	76
SDG-4	64	64	73	68	63	51	70	54
SDG-5	49	42	56	45	41	50	46	41
SDG-6	90	92	94	86	96	83	85	81
SDG-7	109	100	100	100	100	100	100	98
SDG-8	84	74	80	63	73	53	63	57
SDG-9	60	53	62	66	59	42	56	53
SDG-10	65	66	68	70	67	41	77	71
SDG-11	86	82	89	53	76	77	76	45
SDG-12	75	85	86	94	73	79	82	79
SDG-13	58	52	71	44	43	39	60	39
SDG-15	82	78	94	91	81	60	64	53
SDG-16	67	77	81	82	71	79	86	81

SDG-1: No Poverty

- Uttarakhand continues to lead (83), with significant gains from 74.
- U.P. improved to 57 but still lags; Telangana and West Bengal show modest progress.

SDG-2: Zero Hunger

- Uttarakhand jumped to 86 (from 61).
- West Bengal declined from 46 to 56.
- U.P. improved from 41 to 63.

SDG-3: Good Health & Well-being

- All states improved.
- Uttarakhand leads with 84, West Bengal close at 79.
- U.P. lowest at 61 but better than 2020–21.

SDG-4: Quality Education

- Stable to slight improvements across all.
- Uttarakhand leads (73), others remain in the 60s.

SDG-5: Gender Equality

- All states weak, no state crosses 60.
- Uttarakhand improved from 46 → 56.
- Telangana (49) and U.P. (42) show alarming low performance.

SDG-6: Clean Water & Sanitation

- Consistently high across all states.
- Uttarakhand leads (94), marginal improvements across others.

SDG-7: Affordable & Clean Energy

- Telangana now shows 109 (perhaps renewable excess).
- All others stable at 100, except W.B., which improved from 98.

SDG-8: Decent Work & Economic Growth

- Uttarakhand improved from 63 → 80.
- U.P. jumped from 53 → 74.
- W.B. weak (63), Telangana strong (84).

SDG-9: Industry, Innovation, Infra

- Minor improvements in Telangana, Uttarakhand and U.P.
- West Bengal leads at 66.

SDG-10: Reduced Inequalities

- Huge improvement for U.P. (41 → 66).
- W.B. now leads at 70.
- Telangana and Uttarakhand stable.

SDG-11: Sustainable Cities

- Uttarakhand improved from 76 → 89.
- W.B. performance dropped to 53 from 45.
- Telangana now at 86.

SDG-12: Responsible Consumption

- Best performer: W.B. (94).
- All states improved, Telangana slowest at 75.

SDG-13: Climate Action

- Uttarakhand leads with 71.
- Telangana improved slightly (58), still behind.
- W.B. and U.P. poor (44 and 52).

SDG-15: Life on Land

- Uttarakhand dominant at 94.
- W.B. close behind at 91.
- U.P. impressive jump from 60 → 78.

SDG-16: Peace, Justice & Institutions

- All states improved.
- W.B. at 82, Uttarakhand 81, U.P. 77.
- Telangana trails at 67.

Final Comments:

- Uttarakhand leads in environmental sustainability and basic services.
- West Bengal has built strong institutional performance but needs urban and climate reforms.
- Telangana remains a high-potential state needing deeper work in gender and environment.
- Uttar Pradesh is the fastest climber, showing potential with the right policy attention.

Conclusion:

Uttarakhand emerges as the top performer with strong gains in health, environment, and renewable energy. West Bengal shows balanced progress with institutional strength but needs urgent focus on urban and climate resilience. Telangana maintains solid infrastructure and digital access but must improve gender equality and environmental sustainability. Uttar Pradesh, though still facing challenges, is the fastest improver with notable strides in poverty reduction and governance.

Sustainability – A Global Outlook

1. SBTi introduces new guidance for five-year target reviews, status updates

The London-based Science Based Targets initiative launched new guidance on Friday for companies to review their validated climate targets every five years, alongside an expanded framework for classifying company climate commitments. The announcement follows a 30 percent year-on-year rise in science-based target submissions, after a record number of validations in 2024.

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2. Study finds third-party audits fail to guarantee Carbon Offset Credibility

Only 16 percent of carbon offset credits issued to date represent actual emissions reductions, a new study warns, raising serious doubts about the integrity of voluntary carbon markets and the effectiveness of third-party auditing, the system meant to safeguard them.

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3. Global Climate Risk reporting improves, but vulnerabilities persist, FSB says

Basel-based Financial Stability Board warned in its 2025 progress update released on Monday that while strides have been made in climate-related disclosures, global vulnerabilities persist due to inconsistent data, regulatory fragmentation and insurance protection shortfalls.

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4. Global consultation begins on sustainability reporting for textiles and apparel

The Global Reporting Initiative opened a public consultation for its proposed Textiles & Apparel Sector Standard, a new sustainability reporting framework designed to improve accountability in one of the world's most environmentally and socially impactful industries. The global consultation will run until Sept. 28, 2025, and seeks feedback from stakeholders across the sector, including manufacturers, retailers, civil society groups and investors.

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5. Prometheus becomes World's 1st to make Carbon-Neutral e-fuel from Air at scale

California-based Prometheus Fuels said on Thursday it has achieved commercial readiness for its carbon-neutral synthetic fuel production system, becoming the first company to generate electrofuel, or e-fuel, from direct air capture and off-grid renewable energy at scale.

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6. Researchers call for social sciences to lead shift in Global Blue Economy

A consortium of European researchers has issued a call to overhaul the global Blue Economy paradigm, warning that current approaches are failing to deliver on sustainability and equity.

In a report published Friday in NPJ Ocean Sustainability, the authors argue that integrating social sciences into ocean policy is crucial to reversing ecological degradation

and social injustice linked to maritime industries.

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7. CEA sets new standards for Automatic Weather Stations at Renewable Energy sites

The Central Electricity Authority released comprehensive new guidelines for the installation and operation of automatic weather stations at solar and wind power plants, seeking to enhance forecasting accuracy, grid reliability and the overall efficiency of renewable energy generation. The guidelines, published on July 7, set mandatory technical specifications and siting standards for AWS at renewable energy sites with a capacity of 50 MW and above.

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8. WMO warns of rising health and economic toll from sand and dust storms

Sand and dust storms are posing mounting threats to human health, economies and ecosystems, the World Meteorological Organization warned on Wednesday, citing new data showing escalating impacts and calling for strengthened global monitoring and early-warning systems. The WMO's annual Airborne Dust Bulletin estimates that around 330 million people in more than 150 countries are affected by sand and dust storms each year. The findings were released ahead of the International Day of Combating Sand and Dust Storms on July 12.

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9. Microsoft Teams up with Novata to boost sustainability tech for SMEs globally

Microsoft Corp. has entered into a strategic collaboration with sustainability technology provider Novata to expand access to ESG solutions for small and mid-sized enterprises globally, the companies said in a joint statement. Under the partnership, Novata will leverage Microsoft's Azure AI Foundry, Azure AI Search and Microsoft Fabric to scale its sustainability data management and reporting tools, aiming to improve how SMEs collect, manage and disclose climate-related information.

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10 Canada invests $21.5M in Alberta Carbon Capture projects to cut emissions

Canada will invest more than C$21.5 million ($15.7 million) in a series of carbon capture, utilization and storage projects in Alberta, aiming to cut emissions, create jobs and accelerate the transition to a low-carbon economy, the federal government.

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MONTHLY NEWS

Sustainability – Indian Context

1. SAEL to invest $954M in major solar manufacturing facility in India

Indian renewable energy company SAEL Industries Ltd announced plans to invest ₹82 billion ($954 million) in constructing a 5-gigawatt-per-year integrated solar cell and module manufacturing facility in Greater Noida, Uttar Pradesh.The facility will mark one of India's largest investments in domestic solar manufacturing and will expand SAEL's total module production capacity to 8.5 GW, reinforcing India's broader effort to reduce reliance on Chinese solar imports.

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2. HPCL commits $231M to build 24 compressed biogas plants across India

Hindustan Petroleum Corp Ltd (HPCL) will invest ₹20 billion ($231 million) over the next two to three years to construct 24 compressed biogas (CBG) plants through its subsidiary, HPCL Renewable and Green Energy Ltd. This initiative is part of India's broader push to curb carbon emissions and meet its 2070 net-zero target. CBG, derived from organic waste, is central to that strategy.

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3. India opens one of its largest battery storage plants, eyes global energy role

India inaugurated one of its largest battery energy storage system manufacturing facilities on Friday in the southern city of Bengaluru, marking a significant step in the country's transition to clean energy. The facility, located in the Bidadi Industrial Area, was inaugurated by Union Minister for New and Renewable Energy. With an annual manufacturing capacity of 5 gigawatt-hours, the fully automated plant is among the most advanced of its kind in the country.

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4. AI-Powered, Multilingual Chatbot to deliver drought warnings to Indian farmers

India is set to roll out its first artificial intelligence-powered chatbot aimed at improving drought preparedness, offering real-time, multilingual advisories to farmers and government officials, the International Water Management Institute said early this month. Dubbed SukhaRakshak AI, or "the drought protector," the chatbot is designed to bridge the gap between data-heavy drought monitoring systems and actionable advice on the ground.

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5. ADB approves $101M loan to expand rural water access in West Bengal

The Asian Development Bank has approved a $101 million loan to boost access to safe drinking water in rural West Bengal, supplementing an existing project aimed at reducing reliance on contaminated groundwater sources in the Indian state. The additional financing supports the ongoing West Bengal Drinking Water Sector Improvement Project, which initially launched in 2018 with a $240 million

investment. The new funds will scale up efforts in districts affected by arsenic, fluoride and salinity, ADB said in a statement on Monday.

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6. President Murmu backs circular economy at Swachh Bharat Awards ceremony

President Droupadi Murmu presented the Swachh Survekshan awards at a function hosted by the Ministry of Housing and Urban Affairs in New Delhi, reaffirming the government's commitment to cleanliness and sustainable urban development. Calling Swachh Survekshan "a successful experiment," Murmu praised the 2024 edition as the world's largest cleanliness survey, with participation from over 140 million citizens, state and urban bodies, and civil society.

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7. Government approves $2.4B NTPC push for renewable energy expansion

The Union Cabinet approved enhanced delegation of financial powers to state-run NTPC Ltd., allowing it to invest up to ₹20,000 crore ($2.4 billion) in its renewable energy subsidiaries, more than doubling the previous cap, to help accelerate the country's shift to clean energy.

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8. India reaches 50% non-fossil power capacity, beating 2030 target by 5 Years

India has achieved a significant milestone in its clean energy transition, with non-fossil fuel sources now accounting for 50 percent of the country's installed electricity capacity, five years ahead of its 2030 target under the Paris Agreement. The Ministry of New and Renewable Energy said that India's installed non-fossil capacity — comprising renewable energy, large hydro and nuclear — stood at 242.78 gigawatts as of June 30, out of a total capacity of 484.82 GW. Thermal power, largely coal-based, accounted for 49.92 percent.

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9. NITI Aayog report finds 85% of North-East districts now SDG front runners

India's Northeastern Region has shown significant progress in achieving the United Nations Sustainable Development Goals, with 85 percent of assessed districts now classified under the Front Runner category, reported the latest NER District SDG Index 2023–24. According to the report, a Front Runner category is defined as a district with a score between 65 and 99.99 on the District SDG Index.

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10. AIIB commits $100M to IIFL Home Finance to boost green housing in India

The Asian Infrastructure Investment Bank has signed a $100 million debt facility with IIFL Home Finance Ltd. to expand access to affordable housing finance for economically weaker sections and low-income groups in India, the multilateral lender. The funding, provided in Indian rupees, will also support the development of green-certified housing projects, aligning with India's climate goals and government initiatives such as the Pradhan Mantri Awas Yojana – Urban 2.0.

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ACTIVITY REPORT OF SSB

SSB conducted the following activities during the year 2024-25

1. Webinars

i) The SSB has done the following activities from the year 2024-25 till date under the *Vasudhaiva Kutumbakam* Webinar series.

Sl. No.	Date	Topic	Speaker
1.	April 12 2024	Fostering Social Economy through Social Stock Exchange	**Shri Syam Kumar R** Insolvency Professional
2.	April 26 2024	Sustainability Report Preparation	**CMA Siddhartha Pal** Member, SSB of ICMAI
3.	May 10 2024	Social Stock Exchange: Exchange Perspectives (Listing and Post Listing Compliances)	**Shri Ashok Kumar Singh** DGM (Listing Compliance) BSE Limited
4.	May 24 2024	AI & Sustainability	**Ms. Anju Panicker,** Director, SEP Learning and Corporate Solutions Private Limited
5.	June 14 2024	Ensuring Sustainable Economy through SMEs	Shri Suresh Viswanathan, Director, Finteglaw Business Integrators Private Limited
6.	June 21 2024	International Day for Yoga Edition a) Yoga-The Sustainable way of Visualizing life b) Setting up Sustainability Governance in Companies	a) **Ms. Vidya H. Pawar** Yoga Practitioner, London b) **CMA Shivangi Praful Rajpopat** General Manager Apraava Renewable Energy Private Limited, Mumbai
7.	July 12 2024	Funding Sustainability Measures through bonds	**Ms. Usha Ganapathy** Subramanian Practising Company Secretary
8.	July 26 2024	IFSCA & Sustainability	a) **Shri Pradeep Ramakrishnan** Executive Director International Financial Services Centres Authority b) **Shri Chintan Panchal** Manager International Financial Services Centres Authority
9.	August 9 2024	Investing in Sustainable Projects	**Shri Atul Juvle** TEDx Speaker and General Counsel
10.	August 23 2024	Learn to live a Sustainable Professional life	**CMA (Dr.) Joffy George** Company Secretary, Kerala State Industrial Development Corporation
11.	Septem-ber13 2024	Green Costing	**CMA Subhasish Ghosh** General Manager, ITC Ltd

Sl. No.	Date	Topic	Speaker
12.	September27 2024	ESG and PSUs	**CMA Ram Ganesh R.** Company Secretary, Kerala State Beverages (M&M) Corporation Limited
13.	October 11 2024	Corporate Social Responsibility: Regulatory Provisions	**Shri Naman Shah** Director, Deloitte Haskins & Sells LLP.
14.	October 25 2024	Overview of the Green Battery Concept and its Future in Enhancing Sustainability in India (with Case Studies)	**CMA Chandrashekhar Chincholkar** Consultant
15.	November 8 2024	Independence through financial literacy- A route to achieve UN's Sustainable Development Goals	**Ms. Priya Subbaraman** Co-Founder and Director of Dhiraa Skilldev Foundation
16.	November 22 2024	Achieving Sustainability in BFSI Sector	**Shri Aditya Vyas** Chief Economist, Fixed Income & Macroeconomic Research, STCI Primary Dealer Limited
17.	December 6 2024	Sustainability viewed from the lens of Economics	**CMA A. Sekar** Practising Company Secretary
18.	December 20 2024	Carbon Accounting: Role of CMAs	**Ms. Jyothi G.H.** Assistant Professor, PES Institute of Technology and Management
19.	January 3 2025	CMAs: The Strategists of Sustainability	**CMA Amit A. Apte** Director - Levare Consultants Private Limited and Former President, ICMAI
20.	January 24 2025	How Leasing can help companies achieve Circular economy & Sustainability?	**Shri Paresh Upasani** Partner Business Manager, Hewlett Packard Enterprise Financial Services
21.	February 14 2025	BRSR Reporting: Some Anomalies	**Shri Kishor M Parekh** Chartered Accountant
22.	February 28 2025	Renewable Energy in Germany: Key takeaways	**Shri Mahesh Krishnan** Project Developer, Solar Energy Berlin, Germany
23.	March 14 2025	Integrating sustainability and technology in supply chain operations	**Dr. Joji Chandran** Professor, School of Business and Management CHRIST (Deemed to be University)
24.	March 28 2025	Solar Projects-Demystifying Myths	**Shri Devendra Kulai** Cold & Supply Chain Expert
25.	April 11 2025	Bamboo and Sustainability: Key Takeaways for CMAs	**CMA Jyotsna Rajpal** Practising Cost Accountant

Sl. No.	Date	Topic	Speaker
26.	April 25 2025	Mandala for Professionals" (A soft skills session)	**Ms. Geeta Joshi Brahme** Certified Mandala Therapist
27.	May 9 2025	Holistic Health -The key to Sustainable Happiness	**Dr. Alpa Dalal** HoD Pulmonology, Jupiter Hospital
28.	May 30 2025	Sustainability Practices in Corporates-The Middle East Perspective	**CMA Dattatraya Ghadge** Financial Controller, Awal Gulf Manufacturing
29.	June 14 2025	Bond and Equity Listing in the IFSC: The Route to Sustainable Economic Growth	**Shri Saurabh Kumar** Manager, IFSCA **Shri Akash Boddeda** Assistant Manager, IFSCA
30.	June 28 2025	E- waste and Environment-sustainability in Accounting	**CA. (Dr.) Bharat Patel** Faculty Member in Accountancy Mithibai College, Mumbai

ii) ***Parinayati***

Sl. No.	Date	Particulars	Resource Persons
1.	July 1 2025	*Parinayati* Webinar Series-1 Global Sustainability Opportunities – Gulf Perspective Topic: 1. Understanding the Gulf business environment and framework segment-wise business avenues 2. Need & Scope for Sustainability	1. **CMA A.Sekar** Practising Company Secretary 2. **Dr. Ranjith Krishnan** Sustainability Consultant
2.	July 2 2025	*Parinayati* Webinar Series-1 Global Sustainability Opportunities – Gulf Perspective Topic: 1. Is Climate Change & global warming issues ringing alarm bells in the Gulf? 2. SDG – parameterwise / country-wise performance	
3.	July 16 2025	*Parinayati* Webinar Series-1 Global Sustainability Opportunities – Gulf Perspective Topic: 1. Overview of Regulatory framework of Sustainability 2. Role of professionals in implementing sustainable practices 3. Relevance of ISS1 and ISS2	
4.	July 17 2025	*Parinayati* Webinar Series-1 Global Sustainability Opportunities – Gulf Perspective Topic: 1. Key Lessons from BRSR for the Gulf 2. ESG Assurance	

iii) Other Webinars hosted by SSB, ICMAI during the year are as follows:

The SSB has done the following other Webinars.

Sl. No.	Date	Topic	Speaker
1.	December 11 2024	Understanding IFRS: S1 and S2	**Ms. Priya Doogal** Chartered Accountant
2.	April 4 2025	Draft ICMAI Sustainability Standard (ISS 1) on General requirements for disclosure of Sustainability related information	**CMA (Dr.) S.K.Gupta** MD, ICMAI Registered Valuers Organization CEO, ICMAI Social Auditors Organization COO, ICMAI International ADR Chamber
3.	May 2 2025	Draft ICMAI Sustainability Standard (ISS 2) on Climate Related Disclosures	**CMA (Dr.) S.K.Gupta** MD, ICMAI Registered Valuers Organization CEO, ICMAI Social Auditors Organization COO, ICMAI International ADR Chamber
4.	May 15 2025	Climate Finance Taxonomy	**CMA Siddhartha Pal** Member, Sustainability Consultant and Member,SSB of ICMAI

2. Monthly Newsletter titled *Sukhinobhavantu*

The Sustainability Standards Board(SSB) of ICMAI comes out with a monthly newsletter - "*Sukhinobhavantu*" which is released on 25th of every month. It covers various segments viz. Sustainability updates, both from Indian and global front, sustainability musings, sustainability lessons from ancient scriptures, Quiz, Mandala, Ask your psychologist, Vriksh Series, Professional Etiquettes – Time to Untangle and many others. Details of various webinars organised by SSB is also covered in the newsletter. Apart from the above the newsletter carries various scholarly articles on Sustainability. *Sukhinobhavantu* is a worthy reading material for both professionals and students who are keen to keep track of the happenings in the arena of sustainability. As on date the SSB released Volume XXIII till June, 2025.

The links for the issues are as follows: https://icmai.in/icmai/SSB/SSB_Newsletter.php

3. Certificate Course on ESG

The Sustainability Standards Board has launched the 50 hours' online course on ESG and have completed three batches. The 4th batch syllabus is revised and updated. The course has already trained more than 200 professionals and the course is attended by CMAs, students of CMAs, working professionals on ESG and Sustainability and other professionals from India and abroad.

4. Sustainability Month Observance in January 2025

a) Sustainability Standards Board, ICMAI in collaboration with India INX under the aegis of IFSCA organized a colloquium on « Driving sustainability through GIFT IFSC « on 24th January, 2025 at Grand Mercure, Gift City, Gandhinagar. It was attended by more than 150 professionals and the whole day deliberations had various technical sessions.

b) The Sustainability Standards Board celebrated the Sustainability Month in the month of January, 2025 with various events and programmes. SSB, ICMAI and Thane Chapter, ICMAI jointly organized the Tree Plantation on 12th January, 2025 and also the Green Walk on 19th January, 2025. The Pune Chapter of ICMAI organized the tree plantation and green walk on 27th January, 2025 along with other Chapters conducted activities namely Patiala Chapter, Kanpur Chapter, Bengaluru Chapter and many others.

c) Sustainability Summit

The SSB organized the Sustainability Summit at the Taj Mahal, Mansingh-I, New Delhi on 30th January, 2025. Mr.Jean Bouquot, President, IFAC graced the occasion as the Chief Guest.

Mr. Lakshman R.Watawala, Former President, SAFA and President, CMA Srilanka graced the occasion as Guest of Honour. Mr. Ashfaq Tola, President, SAFA and Mr. H.M. Hennayake Bandara, CMA Srilanka also graced the event. It was a daylong event with various technical sessions.

5. ICMAI Sustainability Standards

SSB, ICMAI pleased to announce that the following ICMAI Sustainability Standards have been finalized after stakeholders opinion, members comments from the exposure draft and are now available and can be downloaded from on the SSB portal:

- ICMAI Sustainability Standard (ISS 1) – General Requirements for Disclosure of Sustainability-related Information
- ICMAI Sustainability Standard (ISS 2) – Climate Related Disclosures

Access them here: https://icmai.in/icmai/SSB/ISS1_ISS2.php

Additionally, Exposure Drafts of the Guidance Notes related to ISS 1 and ISS 2 have been published and it is under finalization based on the comments received.

6. E library in SSB Portal

The Sustainability Standards Board started the elibrary in the SSB portal which includes all relevant updates and content on Sustainability. The elibrary is continuously updated for knowledge dissemination of the members and others.

7. Sustainability Calendar

SSB, ICMAI released the Sustainability Calendar in a soft copy and distributed to the members and students. It was a 12 pages ecalendar exhibiting the important dates pertaining to the sustainability and related matters.

8. Brand Image of *Vasudhaiva Kutumbakam* webinar series

The brand image designed for the *Vasudhaiva Kutumbakam* webinar series (VK Webinar Series) of the Sustainability Standards Board was unveiled on 31st October, 2024 at the auspicious day of Diwali. The brand image is a powerful visual representation of the Sanskrit concept "*Vasudhaiva Kutumbakam*," meaning "The World is One Family."

9. Formation of Sustainability Guidance Cell

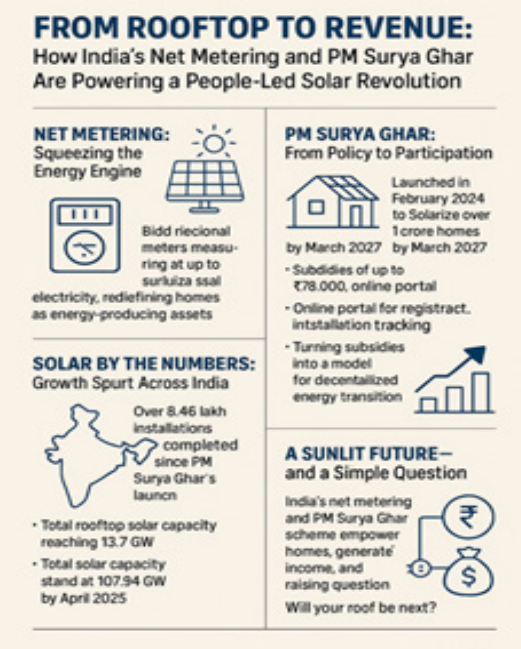
The objective of the formation of the Sustainability Guidance Cell which was released by SSB in the Sustainability Summit held in January, 2025 was to resolve the various queries of members in areas of Sustainability.

10. Annual Best Article Award of *Sukhinobhavanthu*, monthly newsletter of SSB,ICMAI (October 2023 till September 2024)

The Sustainability Standards Board (SSB) started the annual "Best Articles Award" for the articles published in *Sukhinobhavanthu* monthly newsletter between October 2023 to September 2024. The panel of experts after diligent screening process adjudged the article titled "-Navigating Sustainability: An Evaluation of the Environmental, Social and Governance Framework" published in January 2024 issue of *Sukhinobhavanthu* newsletter as the "BEST ARTICLE". CMA Arunabha Saha, Practising Cost Accountant was the author of the article. The article titled "The Pitfalls of Greenwashing: Why organisations must refrain and focus on genuine sustainability" published in August 2024 issue of *Sukhinobhavanthu* newsletter was adjudged as the "SECOND BEST ARTICLE". Shri Rakesh Chandra Sharma, Company Secretary, Lumas World was the author of the article. The awards were presented to the authors in the Sustainability Summit organized by the SSB, ICMAI in January, 2025 by Mr.Jeon Bouquot, President, IFAC. SB

From Rooftop to Revenue: How India's Net Metering and PM Surya Ghar Are Powering a People-Led Solar Revolution

CMA (Dr.) Aditi Dasgupta
Joint Director
The Institute of Cost Accountants of India
Kolkata



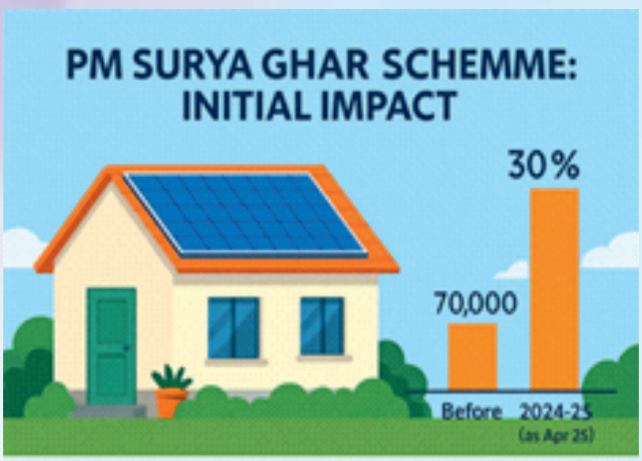
As the world undergoes the transition to clean energy, India's rooftops are emerging as the surprising allies of the transition to clean electricity. It wasn't long ago when the notion of solar power in India was limited to large solar farms on the sprawling arid desert. Now, enabled by a supportive policy environment that has legitimized rooftop solar and enabled citizens to become micro-power producers, households are harvesting the sun from rooftops, from Jaipur to Nashik to Kochi. At the center of this revolution are two pillars: net metering (the ability to return surplus solar electricity to the grid for credit) and the PM Surya Ghar: Muft Bijli Yojana central government scheme that launched in 2024, providing both incentives and simplified government and financing processes.

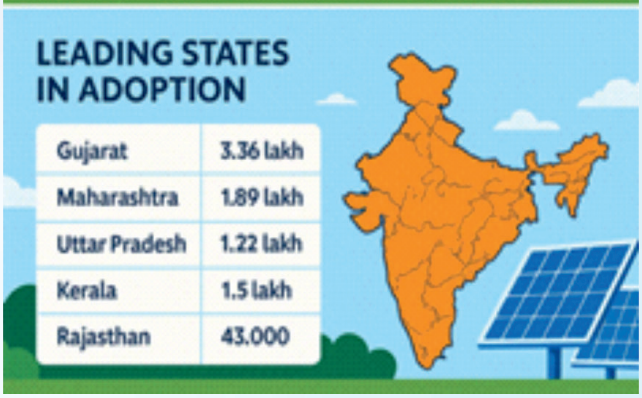
Net Metering: Squeezing the Energy Engine

Net metering is not just a smart meter, but a paradigm that stabilizes the relationship between citizens and electricity. When a household's rooftop solar panel produces excess electricity that the home does not consume, that surplus footprint is exported to the local grid. A bi-directional (net) meter measures this flow in both directions; when it produces more than we consume the meter runs backward from the grid to the solar PV array and when we consume more than we produce the meter runs forward from the array to the grid. In some regions, especially for larger capacity installations, gross metering is adopted instead. Here, all generated electricity is sold to the grid at a fixed rate, while consumption from the grid is billed separately. Both systems empower homeowners to become producers as well as consumers—redefining homes as revenue-generating energy assets.

PM Surya Ghar: From Policy to Participation

PM Surya Ghar: Muft Bijli Yojana was launched in February 2024, with a vision and budget of ₹75,021 crore and plans to solarize over 1 crore homes across urban and rural India by March 2027. The plan provides subsidies directly to the beneficiary of up to ₹78,000 for systems of approximately 2 kilowatts, as well as grants of up





to 300 units for household use of free electricity each month as a beneficiary of the scheme. The scheme provides accommodation for all middle-class households in urban and rural India, and has special incentives for economically weaker sections, particularly SC/ST families. To make this scheme easier, the scheme also introduced an on-line portal, pmsuryaghar.gov.in. Users can register on the on-line portal, choose from empaneled vendors, to track the installation of their new rooftop installation and receive subsidy amounts paid directly to their bank account. What began as a basic subsidy scheme, has changed into a model scheme for decentralized, citizen-led energy transitions. Solar by the Numbers: Growth Spurt Across India Since the program launch of PM Surya Ghar, India has experienced meteoric growth in rooftop solar installations. Prior to the launch of a PM Surya Ghar scheme, average monthly installation were approximately 7,000 homes, with almost 1.9 gigawatts of new capacity installed across the country. Average monthly installations since the launch have increased to over 70,000 homes, for approximately 44 gigawatts of capacity installed over a one-year period. During this short time there have been over 846,000 installations completed, totaling over an incredible 2.3 gigawatts (GW) of new capacity. By December 2024, India´s total cumulative rooftop solar has reached **13.7 GW**, and by April 2025, the total solar capacity (rooftop plus utility-scale) stood at **107.94 GW**. These figures signal not just a policy success but a behavioral shift—households are increasingly seeing solar not only as an environmental choice but as a **financially savvy investment**.

The Power of Place: Stories of Impact

The value of solar rooftops is not theoretical. For instance, the Sharma family in Jaipur, Rajasthan purchased a 3 kw rooftop solar system for their home. Their monthly electricity bill of ₹1,800 was reduced to zero. In addition they started to receive a payment of ₹400 per month for exporting additional energy to the grid. The system had a payback time of three years and was then generating income or 15-20 years of essentially free electricity. In Nashik, the story is similar for farmer Ramesh Jadhav. After struggling to pump water consistently for irrigation with rocky relationship with the local electricity board, Ramesh now utilizes solar energy for both irrigation and earns a monthly income from selling surplus electricity back to the electricity board. The story of Ramesh demonstrates the power that solar has to transform rural livelihoods along with reducing urban energy loads.

Gujarat Shows the Way, But India Is Following

Gujarat has taken the lead in the rooftop solar movement and the stats reflect that—over 3.36 lakh installations and 1,232 MW of capacity as of May 2025. Maharashtra follows in a distant second with 1.89 lakh homes solarized and states like Kerala, Uttar Pradesh and Rajasthan are joining the ranks of states that are getting serious about solar. Andhra Pradesh will solarize 3 lakh homes by mid 2025 including offering a free system of 2 kW contracted to eligible SC/ST applicants—proof of social equity being powered by solar equity.

Quality: The Downside of Rapid Growth

The growth story of rooftop solar has some caveats. In Madhya Pradesh for example, panels were damaged during the summer monsoon winds raising questions of a lack of structural integrity and quality installation. Many installations were deficient in the structural anchoring, component resilience, or safety standards were not met. As solar starts moving to more homes, quality control will be as important as speed of deployment. Without good post-installations checks, certified components, and trained installation technicians the long-term credibility of rooftop solar will be in jeopardy.

Where Do We Go from Here?

The rooftop solar movement is no longer confined to early adopters and pilot projects; it is now a mainstream energy transition that includes the participation of every stakeholder. Households must become educated about their state's metering policy as well as use the PM Surya Ghar platform for secure, subsidized installation. At the same time, policymakers must begin to focus on quality assurance, standards, and accountability as the scale of market activity accelerates. As EPC companies and investors take action, they should consider this the opening phase of a stable and expanding market, where quality service will differentiate the winners from the rest.

A Sunlit Future—and a Simple Question

India is harnessing its most abundant resource—the sun—to not only power its cities, but to pursue its goals of self-reliance, sustainability, and economic empowerment. The PM Surya Ghar scheme, combined with net metering, is providing power to homes, income to livelihoods, and is putting a personal face to climate action. So, here's the real question that is resonating from rooftops all over the country: Will your roof be next?

Under tomorrow's India, power is not merely a service you pay for, it is something you produce, its value is protected, and it is something you earn. Let the sun work for you. SB

ARTICLE-I

Pearl of Life and Sustainability

CMA Arunabha Saha
Practicing Cost Accountant
Thane

The "Pearl of Life" indicates the beauty and value of life on Earth, like the pearl formed through time, patience and harmony with nature. Sustainability, too, is a slow, continuous and planned process that requires respect for natural cycles, compassion for living being with responsibility. This article is a comparative study between a pearl's creation and the sustainable path to ensure a brighter future.

Introduction

A pearl does not form in a day. It is a result of nature's resilience—layer upon layer of care laid over adversity. Similarly, our Earth is faced with environmental and social challenges which needs caring to become a thriving, sustainable home for all. As the poet John Keats once said, *"A thing of beauty is a joy forever,"* and the pearl of life, when safeguarded through sustainable living, becomes our collective joy and legacy.

Nature's Wisdom in a Pearl

A pearl forms when an oyster responds to irritation by wrapping it in nacre—a natural, gentle reaction to discomfort. This process teaches us to respond to challenges not with force, but with grace and balance. Nature shows us that growth and healing can go together. Just as the pearl grows within the oyster, sustainable development must grow from within our systems—through planned, layered actions that do not disturb the environment.

Sustainability: Learning from the Oyster

The oyster does not pollute or damage its surroundings to create the pearl. It works quietly within its ecosystem, in harmony with all living beings. Similarly, human progress must not be about conquering nature but about collaborating with it. As Mahatma Gandhi wisely said, *"The world has enough for everyone's need, but not for everyone's greed."* Sustainability asks us to restrain greed and act with purpose.

Economic Sustainability: Prosperity Without Plunder

Economic sustainability revolves around creating systems that support long-term prosperity without exploiting people and the planet. In

pursuit of GDP growth, many economies have overlooked the environmental and social costs of their actions.

A sustainable economy under the Pearl of Life framework would:

- Internalise Environmental Costs: Incorporate ecological damage into pricing models (e.g., carbon pricing).
- Promote Green Jobs: Develop employment in sectors like renewable energy, organic farming, and green construction.
- Support SMEs and Local Economies: Reduce dependence on global supply chains and build community resilience.
- Ethical Investments: Redirect capital into ESG (Environmental, Social, Governance) compliant enterprises.

True prosperity is not in the hoarding of wealth but its fair and responsible distribution. Economic sustainability ensures the pearl remains polished—not through extraction, but regeneration.

Cultural and Ethical Dimensions

The Pearl of Life invites reflection on cultural values and ethical responsibilities. Many indigenous communities have long upheld sustainability as a way of life, guided by traditions that honour the land and future generations.

A global shift toward planetary ethics—one that respects ecological limits, intergenerational equity, and animal welfare—is essential. This can be guided by:

- Eco spirituality: Understanding our role in nature through spiritual and moral lenses.
- Sustainable Consumption: Aligning consumer choices with minimalism and ecological awareness.
- Global Citizenship: Embracing responsibilities beyond national borders.

Cultural narratives, art, literature and religion can all serve as field for engraving sustainability deeply into societal consciousness.

The Pearl of Life Represents...

1. Environmental Harmony

   We get clean air, fresh water, and fertile soil from nature. But non-ethical and rampant industrial establishment, plastic waste and deforestation are threat to nature. Sustainability means respecting these resources and using them mindfully.

   "Look deep into nature, and then you will understand everything better." – Albert Einstein

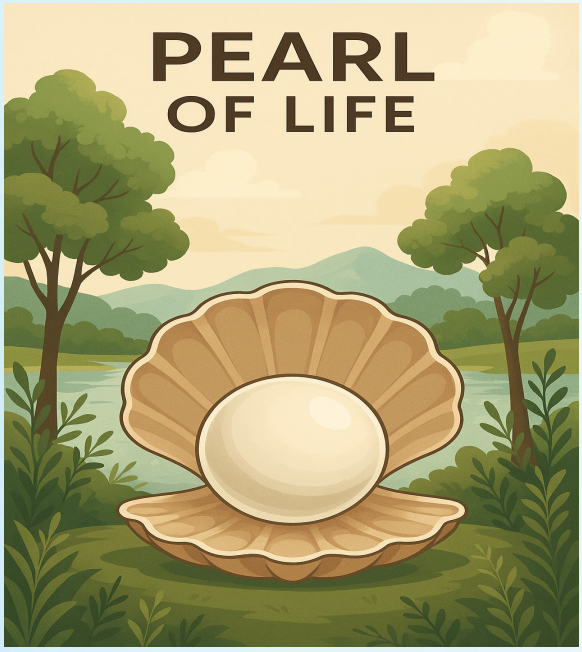
2. Social Equity

   Just as a pearl needs time and space to form, people need equal access to education, healthcare, and opportunity. A sustainable world must uplift the poor, empower women, and honour cultural diversity.

3. Economic Balance

   A true economy is one that supports life—not one that grows at the cost of nature or people. Green jobs, circular economies, and ethical investments are the new pearls that can build lasting value.

   "Sustainability is not a goal to be reached but a way of thinking, a way of being, a way of doing." – Gert van der Veer



Technology and Tradition Together

Clean energy, smart agriculture, and sustainable urban planning—can accelerate our journey towards sustainability. But technology alone is not enough. We must also honour traditional wisdom, such as indigenous practices that conserve forests and water. The pearl of life grows best when ancient roots and modern tools work together.

Challenges on the Path

Short-term political interests, greenwashing by corporations, lack of funding for poor communities and limited public participation are the challenges faced in the path of sustainability. These barriers are like grains of sand under the shell, but with collective effort, we can still coat them with purpose and transform adversity into resilience.

United Nations and the 17 SDGs: Our Modern Pearls

The 17 Sustainable Development Goals (SDGs) offered by the United Nations serve as guiding lights on our journey. Each goal—be it clean water, gender equality, climate action, or responsible consumption—is like a layer of pearl. Together, they form the complete pearl of life. It is only when we address all aspects—social, environmental, and economic—that we truly live sustainably.

Youth: Carriers of the Pearl Forward

Young people today are not just the leaders of tomorrow—they are the change-makers of today. Their energy, creativity, and compassion can redefine our world. They need platforms, mentorship, and education focused on sustainability so that they can shape the pearl of life for future generations.

"We do not inherit the Earth from our ancestors; we borrow it from our children."

Conclusion

The pearl of life reminds us that beauty, strength, and resilience come through patient and thoughtful growth. Like an oyster, we must respond to the world's wounds not with aggression but with healing. Sustainability is not a destination—it is the way we live, work, and relate to the Earth and each other. Let us embrace this path with empathy and intention.

Call to Action

- Individuals: Live simply, waste less, care more.
- Educators: Teach sustainability as a way of life.
- Businesses: Build responsibly and ethically.
- Governments: Create policies that balance growth with conservation.

Together, we can polish the pearl of life—layer by layer—into a shining symbol of hope, harmony, and humanity. SB

Governance for Effective Sustainability Efforts from the Perspective of Indian Businesses

CMA Anuradha M. Dhavalikar
Practicing Cost Accountant
Pune

India is a significant player in the world's sustainability. To quote from PM Narendra Modi's speech at the UN Sustainable Development Summit in 2015, "Sustainable development of one-sixth of humanity will be of great consequence to the world and our beautiful planet. It will be a world of fewer challenges and greater hope; and, more confident of its success."

The Importance of Indian Business in Sustainability:

The Government of India has taken several steps in bringing cohesion, transparency, and accountability in the sustainability efforts of the country through the agencies such as the NITI Aayog, the Reserve Bank of India (RBI), Securities Exchange Board of India (SEBI), Ministry of Corporate Affairs (MCA), the Ministry of Forest, Environment and Climate Change, and so on. There are several laws, rules, and regulations in place to ensure that businesses respect and preserve the environment, nurture the society, and follow good governance practices. The reporting and audit of the activities of businesses from the sustainability perspective is in a nascent stage. The BRSR, for example, is still evolving and has limited applicability. The RBI's green financing norms are gradually impacting the businesses of the MSME segment, with compliances being demanded in return for better credit ratings or lower finance costs.

The Effectiveness of Sustainability Efforts

The scepticism of the green financiers, lenders, and NGOs regarding the tendency of businesses to greenwash is not unfounded. A review of the voluntary disclosures in the BRSR reports of some of the major companies reveals that they prefer to give descriptive answers to the governance-related questions. Stating facts and figures is kept to a bare minimum. This makes the disclosure quite cumbersome and makes comparisons nearly impossible. It is understandable that most Governance related questions in the BRSR tend to emphasise the existence of a governance framework, such as policies, ethics, standards, and others, rather than analyse the quality of the governance area. These matters are hard to state in terms of quantitative or numerical units.

To make this report more effective, a broad standard governance framework can be developed as a yardstick. A ranking or rating system can be created to measure the effectiveness and conformance of the governance framework of the reporting entity against the expected outcome of the given standard. Whether several such standards need to be developed for different industries, business sizes, geographies, levels of automation, etc., is a question that needs to be addressed by the policy-makers, in consultation with industry associations.

While designing a standard governance framework for ensuring that the sustainability efforts of businesses are genuine, focussed, and honestly reported, a deep understanding of the psyche of the boardrooms, the average retail investors, lenders, the community, and the concerned government departments is necessary.

Issues of Governance and Sustainability Efforts

The most common governance issues that hinder the sustainability efforts of businesses and their possible solutions are discussed below:

Lack of Visible Linkage between Sustainability Efforts and Profits

Most business owners and investors feel that the main objective of the business is to earn profits. Sustainability expenditure and efforts are generally considered a compliance matter rather than a tool to optimise profits. Thus, we see a conflict of interest while preparing the business Vision and Mission statements, the strategic business plans, and defining the KRAs of the key managerial personnel. The immediate impact of unsustainable business practices needs to be measured, forecasted and a cumulative estimate be prepared to make them visible to the decision-makers. They need to understand that if these unsustainable practices continue, the business will be impacted in terms of profitability, and perhaps its very existence. Mere regulatory compliance is not the sole objective of sustainability action.

Greenwashing Pays and Transparency Punishes:

While applying for factory licences, environmental, labour, and zonal clearances are obtained, and periodic reporting of the conformance with the State's pollution control norms, waste management regulations, pay parity and gender related laws are followed. Most businesses find that the honest reporting of adverse incidents leads to disproportionately heavy penalties, bad publicity, and a damage to the public image of the company. If the levels of corruption in the concerned regulator's personnel are high, the financial losses to control such damage exceeds the real sustainability costs. So, businesses tend to sweep such information under the carpet. There is a need to understand the difference between wilful damage to the environment or society and accidental damage. The corresponding costs, damages, fines, penalties etc. should be proportionate to the harm caused. The regulatory framework should focus on corrective action, future preventive measures, and fair compensation to the aggrieved.

A purely Top-Down approach

Most businesses that claim to have a robust sustainability program, usually take the top-down approach. The top management defines the areas of action, the way the issues will be addressed and the outlay for such programs. The monitoring and review mechanisms usually involve a one-way traffic of information. The functional heads report on their actionable areas independently and the superiors review each in isolation. A thorough integrated plan with the involvement of all stakeholders in the value chain where the overall objectives of the program are clear to every participant will ensure engagement and yield effective and focussed sustainability action. A top-down approach should not lead to the distancing of the doers from the deciders.

Gaps in Alignment

The modern boardroom has many players with diverse backgrounds, aspirations, and areas of expertise. When the Boar discusses sustainability programs, assessing the level of understanding of the underlying issues is necessary to make sure that all the members are on the same page. The gaps in the alignment of sustainability actions with their KRAs need to be addressed. This is necessary to arrive at a consensus on the integration of the sustainability activities in each core business process.

Weak Will

When meeting the sustainability requirements does not materially impact the stakeholders, they tend to ignore the work, or perhaps resort to greenwashing. For example, a cleaner who is expected to segregate the dry waste from the wet waste in an industrial canteen may resort to occasional neglect of duty, The impact of such occasional dereliction of duty may not be felt immediately, as it may simply transfer the burden of work to the gardening staff who may be responsible for composting the wet waste.

Such a lack of will power in adherence to SOPs at the working level may result in a domino effect that might ultimately derail the entire program. A weak will at the top level might manifest in the poor attention to reports, weak review mechanisms, and inaction.

Impracticability of Integration

In certain industries, the integration of sustainability actions with the core business operations may be impracticable. For example, a high-precision aircraft component manufacturer might want to create more employment opportunities in the geography of its operations. However, due to quality requirements, it might be advisable to perform many f the manufacturing operations on integrated robotic lines. A cement manufacturer may not find it economical to employ solar power in its manufacturing plant. Boards must aim to integrate the sustainability efforts to an optimal level in the business processes and resort to post-facto damage control or remedial action where feasible.

A Clear Authority-Responsibility-Reporting Matrix

The role of the Chief Sustainability Officer is still evolving in the large corporate sector. Small and mid-sized businesses usually do not have a dedicated sustainability team and a person leading it. It is both, unviable and impractical. Where the business operations and sustainability programs are reasonably well-integrated, it is possible to build in the sustainability goals into the KRAs and monitored through a performance review mechanism. The units of measure, the methods of evaluation and the periodicity of review need to be clearly defined. Most operational level sustainability reports are tied to the financial reports and operational reports. It is advisable to carve out a separate section for sustainability performance in each report, where the qualitative, quantitative, and financial dimensions of sustainability action can be reported in one place.

The Time Dimension

The duration of a sustainability program from ideation, to investment, to implementation, to outlay, and to output- outcome- impact spreads across several business cycles and financial reporting periods. This feature causes a mismatch in the reported expenditure and impact generated in a financial year. Therefore, it is important for the Board to make sure that the sustainability reports cut across time periods and show the status if the programs alongside the expenses made and the impacts observed in the current reporting period.

An Uncharted Territory

For most small and medium Indian businesses, venturing into sustainability programs with the given financial constraints is akin to sailing into the unknown uncharted ocean. Resistance to change and the fear of the unknown are human tendencies. If business and industry leaders could set the path for the smaller business to follow, some of the resistance and fear could be allayed. Sensitising the community, investors, employees, and managers at a deep personal level towards the need for positive sustainability action at every level, building faith and confidence in the sustainability programs of the government and public recognition of positive action are some of the remedies to this issue.

Conclusion:

A strong governance of the sustainability efforts is necessary for the success of the business. It goes beyond the current financial performance. It drives innovation, stakeholder engagement, long-term business continuity, and a higher growth trajectory. The concept of integrating sustainability in business vision, mission and day-to-day operations can be found in the ancient Indian texts such as the Artha Shastra by Chanakya, and the Vedas. It is just a matter of going back to our roots and making India, that is Bharat, sustainable again. SB

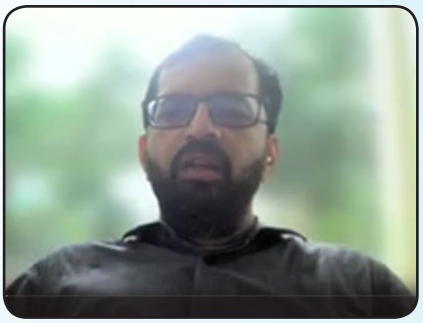
Vasudhaiva Kutumbakam

VK Webinar Series of the Sustainability Standards Board

35rd Webinar

E-waste and Environment- Sustainability in Accounting

June 27, 2025 from 4 to 5:15 p.m.



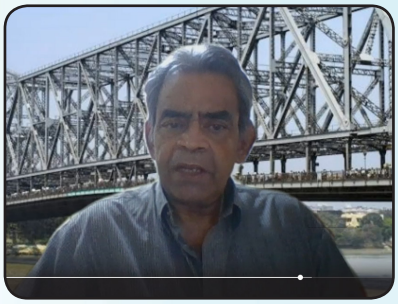
CMA (Dr.) Ashish P.Thatte

CMA Dibbendu Roy

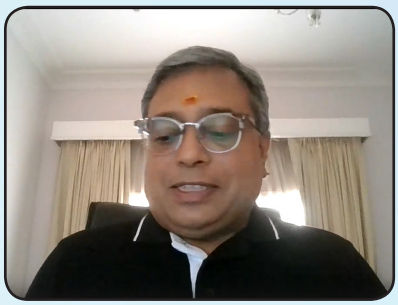
Dr. Bharat Patel

The Sustainability Standards Board (SSB) of the Institute of Cost Accountants of India (ICMAI) successfully organized an insightful and timely webinar on the theme "E-waste and Environment – Sustainability in Accounting" on June 27, 2025. The session commenced with opening remarks by CMA (Dr.) Ashish P. Thatte, Chairman, SSB, ICMAI, who contextualized the importance of the topic in light of the current global sustainability challenges. He emphasized the need for a holistic approach to managing e-waste and integrating sustainability into accounting practices. The keynote speaker, Dr. Bharat Patel, Faculty Member in Accountancy at Mithibai College, delivered a comprehensive presentation that covered various dimensions of e-waste management and its accounting implications. Dr. Patel highlighted the rapid increase in e-waste due to evolving technology and increased consumer demand. He noted that India is the second-largest generator of e-waste after China, with the manufacturing sector contributing nearly 70% of the total e-waste generated. He provided valuable insights into the state-wise performance in e-waste generation, best practices and challenges in e-waste management, regulatory framework governing e-waste in India, applicability of the Business Responsibility and Sustainability Report (BRSR) framework, Central Pollution Control Board (CPCB) norms and compliance requirements and finally the government initiatives and tax incentives supporting e-waste management. Dr. Patel also presented case studies to illustrate practical approaches to managing e-waste effectively and emphasized the importance of green accounting and environmental accounting. He outlined the necessary skill sets for accountants in this domain and stressed the role of CMAs in environmental management, cost optimization, and promoting practices such as paperless offices and the use of digital signatures. The webinar concluded with a thought-provoking Q&A session, reflecting the active engagement of the participants. Dr. Ranjith Krishnan, Member, SSB, delivered the closing remarks, emphasizing the hazardous impact of e-waste on public health and environmental well-being, urging collective responsibility and strategic action. The session concluded with a vote of thanks by CMA Dibbendu Roy, Additional Director and Secretary, SSB, ICMAI. He expressed gratitude to the speaker for the enlightening session and to all participants for their enthusiastic involvement. The webinar served as a significant platform to advance awareness, foster dialogue, and encourage sustainable practices within the accounting profession in alignment with environmental goals.

Parinayati Webinar Series-1
Global Sustainability Opportunities – Gulf Perspective



CMA A. Sekar

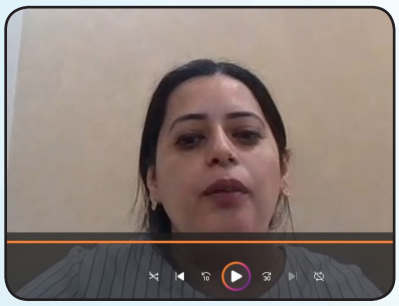


Dr. Ranjith Krishnan

CMA (Dr.) Ashish P.Thatte

CMA Dibbendu Roy

CMA Yoginder Pal Singh



Dr. Kimi Thareja

The Sustainability Standards Board (SSB) in collaboration with the International Affairs Committee of the Institute of Cost Accountants of India (ICMAI) have started a webinar series titled *"Parinayati" (परिनयति)* with the objective of orienting the members and other professionals interested in the subject to explore the possibilities in the field of ESG and Sustainability across the globe.

The first Webinar of the said series was held over four days on July 1,2, 16 and 17, 2025 on the topic "***Global Sustainability Opportunities – Gulf Perspective"*.** The resource persons for the webinar were CMA A Sekar, Practising Company Secretary and Dr. Ranjith Krishnan, Sustainability Consultant.

On the first day, July 1, 2025, the resource persons spoke on the topics "Understanding the business environment in the gulf countries and framework including segment-wise business avenues and the need & Scope for Sustainability".

While delivering the opening remarks, Dr. Ranjith Krishnan gave an overview of the abundant and emerging opportunities in the ESG space within the GCC nations. He touched upon the business and economic dynamics in the region and highlighted the need for adopting sustainable practices in the light of global and regional developments, specifically covering the shift from non-renewable energy economy to renewable energy economy.

Thereafter CMA A. Sekar delivered a detailed presentation on the core strengths and risks of the GCC member countries—Bahrain, Saudi Arabia, UAE, Qatar, Oman, and Kuwait. He highlighted the serious thrust on the efforts of the GCC in reducing their dependencies on oil-based businesses. He presented an analytical view of the employment trends, GDP contribution, manufacturing and industrial growth, and services sector performance of the individual GCC nations and how these factors intertwine with sustainability goals.

On the second day, July 2, 2025, they broadly covered the issues relating to Climate Change & Global Warming and performance of the individual GCC nations with respect to Sustainable Development Goals.

Dr. Ranjith Krishnan opened the session by discussing the catastrophic effects of climate change, highlighting erratic weather patterns such as excessive or insufficient rainfall, and drew parallels with environmental changes in the Gulf region. He explained how the Millennium Development Goals (MDGs) have evolved to the present form of SDGs.

CMA A. Sekar delivered a presentation on the SDG performance of the GCC countries—Bahrain, Saudi Arabia, the UAE, Qatar, Oman, and Kuwait and outlined the key initiatives undertaken for climate protection and sustainability. He also touched upon the gap required to be covered by these nations in achieving the SDGS and how the challenges can be converted into opportunities for positively addressing climate change.

The session concluded with a summing-up by Dr. Ranjith Krishnan, who provided an integrated perspective on the discussions and charted a way forward for the SDG journey in the GCC region.

On the third day, July 16, 2025, the webinar focussed on an Overview of Regulatory framework of Sustainability, Role of professionals in implementing sustainable practices and the Relevance of ISS1 and ISS2

Dr. Ranjith Krishnan during his talk spoke on various international reporting frameworks which are widely followed in the GCC nations. Drawing analogy from the Indian context, he spoke about the cardinal role of Securities and Exchange Board of India (SEBI) in designing the sustainability reporting framework in India through Business Responsibility and Sustainability Reporting (BRSR). He also briefly covered how BRSR is different and elaborate as compared to the erstwhile Business Responsibility Report (BRR). He explained how and why a thorough understanding of the domestic regulations is inevitably crucial for Indian professionals to take up international assignments.

CMA A. Sekar then delivered a comprehensive presentation on the regulatory provisions, beginning with an overview of GRI standards, Value Reporting Foundation (VRF) and Integrated Reporting (IR) framework, highlighting their guiding principles and content elements. He also touched upon global initiatives such as the Carbon Disclosure Project (CDP) and Science Based Targets (SBTi). Further, he provided an analytical comparison between the International Sustainability Standards Board (ISSB) standards, namely IFRS S1 and S2, and India's ISS1 and ISS2 issued by ICMAI. The features of ISS1 and ISS2 were discussed to provide clarity on their role in strengthening sustainability reporting in India.

On the fourth day, July 17, 2025, the nuances of ESG Assurance, key components of BRSR and use of management accounting techniques were covered by the webinar.

CMA (Dr.) Ashish P. Thatte, Chairman of the Sustainability Standards Board (SSB) and the International Affairs Committee, delivered the opening remarks and highlighted the evolving scope of professionals to cross seven seas to take up sustainability related assignments. He stated that SSB is ever committed to groom and guide professionals in the field of ESG and Sustainability. He appealed to the audience to actively participate in various knowledge enrichment drives organised by SSB.

During the technical session, Dr. Krishnan spoke on the lead role taken by ICMAI in developing ISS1 and ISS2 with the objective of equipping the professionals to undertake sustainability related assignments with confidence both in India and abroad. He stressed the need of staying updated and keep tracking the regulatory changes from time to time.

CMA A. Sekar presented about the background of BRSR and its nine principles. He elaborated on the data points in the BRSR and explained the concept of BRSR Core as a sub-set of BRSR consisting of key KPIs. He then explained how the BRSR framework is sector agnostic and how as a regulatory reporting framework is different from GRI which is a reporting standard. His presentation delved into ESG assurance and BRSR Core assessment and assurance**,** explaining the salient differences between assurance and assessment in substance, content and intent. He further explained the difference between limited and reasonable assurance. The highlight of his presentation was with respect to application of management accounting techniques in ESG management and reporting. Various techniques, including activity-based costing, life cycle costing, and balanced scorecard**,** were discussed in the context of ESG management. CMA Sekar also touched upon ESG KPIs and carbon accounting, highlighting their integration with management accounting practices. He concluded by emphasizing the scope and opportunities for Indian professionals in this emerging field.

Both the resource persons made the sessions highly interactive with relevant anecdotes and practical examples. The queries raised by the participants were appropriately responded.

The webinar was effectively co-ordinated by a team comprising of CMA Dibbendu Roy, Additional Director and Secretary of the Sustainability Standards Board, ICMAI**,** CMA Yogender Pal Singh, Joint Director and Dr. Kimi Thareja,Joint Director representing International Affairs Committee.

Upcoming webinars of the *Parinayati (परिनयति)* will cover countries like Kenya, Tanzania, Malaysia and Indonesia. The announcement about the same is given in this newsletter. Stay tuned for further updates.

ICMAI

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
(Statutory body under an Act of Parliament)

Webinar Series on

GLOBAL SUSTAINABILITY OPPORTUNITIES– AFRICA PERSPECTIVE

Sustainability Standards Board and the International Affairs Committee of ICMAI are jointly coming out with an International Webinar Series titled – ***Parinayati***

Global Sustainability Opportunities
-Africa Series 1 - Kenya & Tanzania

The coverage is as follows: -

Day 01

Wednesday, September 3 - 5:00 PM to 6.30 PM

- Overview of Economy
- Overview of SDG Performance
- Overview of ESG Reporting Framework

Day 02

Thursday September 4 - 5:00 PM to 6.30 PM

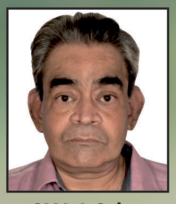
- Sustainable Finance
- Challenges and Opportunities
- Role of Professionals

CMA T C A Srinivasa Prasad
President, ICMAI

CMA Neeraj D. Joshi
Vice President, ICMAI

CMA (Dr.) Ashish P. Thatte
Chairman
Sustainability Standards Board & International Affairs Committee, ICMAI

Resource Persons



CMA A.Sekar
Practising Company Secretary

Dr. Ranjith Krishnan
Sustainability Consultant

For queries, email to ssb@icmai.in

CPE Credit 2 Hour

Web Link: https://eicmai.in/Webinar_Portal/Members/Memberlogin.aspx

Organised by: Sustainability Standards Board and International Affairs Committee

Behind every successful business decision, there is always a CMA

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(Statutory body under an Act of Parliament)

iCMA

Webinar Series on

GLOBAL SUSTAINABILITY OPPORTUNITIES– SOUTH EAST ASIA PERSPECTIVE

Sustainability Standards Board and the International Affairs Committee of ICMAI are jointly coming out with an International Webinar Series titled – *Parinayati*

Global Sustainability Opportunities

South East Asia Series 1 – Indonesia & Malaysia

The coverage is as follows: -

Day 01

Wednesday, October 8 - 5 PM to 6.30 PM

- Overview of Economy
- Overview of SDG Performance
- Overview of ESG Reporting & Regulatory Framework

Day 02

Thursday, October 9 - 5 PM to 6.30 PM

- Overview of ESG Reporting & Regulatory Framework (continued)
- Sustainable Finance
- Challenges and Opportunities
- Role of Professionals

CMA T C A Srinivasa Prasad
President, ICMAI

CMA Neeraj D. Joshi
Vice President, ICMAI

CMA (Dr.) Ashish P. Thatte
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FORTHCOMING *VASUDHAIVA KUTUMBAKAM* SERIES

CPE Credit
1 Hour

Web Link:
https://eicmai.in/Webinar_Portal/Members/Memberlogin.aspx

Notice of Rescheduling – *Vasudhaiva Kutumbakam* Webinar Series

Due to unforeseen circumstances, the 36th webinar of the *Vasudhaiva Kutumbakam* series had to be cancelled. We sincerely regret the inconvenience caused.

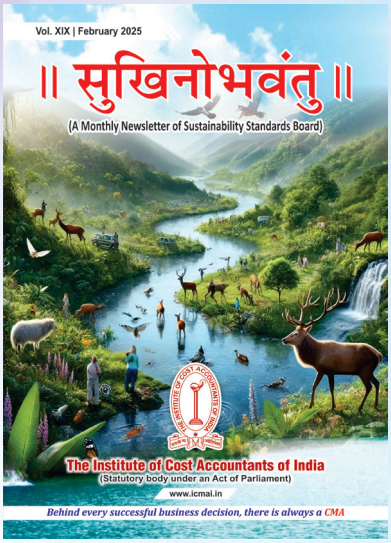
We are pleased to inform you that the webinar has been rescheduled to 25th July 2025.

Thank you for your understanding and continued support.

CPE Credit
1 Hour

Web Link:
https://eicmai.in/Webinar_Portal/Members/Memberlogin.aspx

Past Issues of *Sukhinobhavantu*



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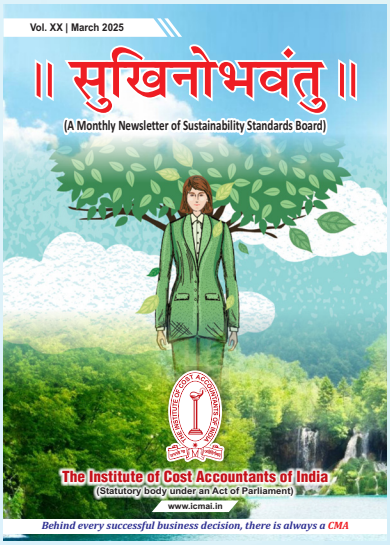

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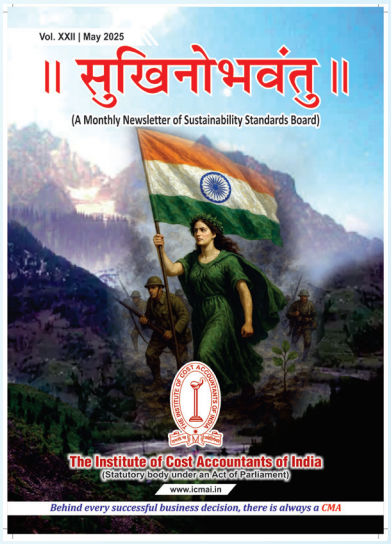

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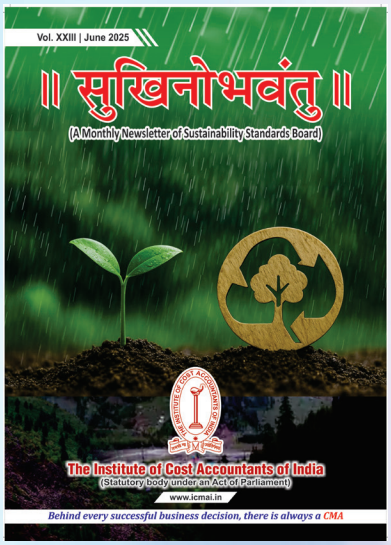

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Traditional Water Management Systems: Lessons for Modern Sustainability

Usha Ganapathy Subramanian
Practicing Company Secretary
Chennai

Sacred Groves: Nature's Sanctuaries in India

A unique way in which communities have been preserving forest fragments in India is in the form of Sacred Groves, also known variedly as *Devarakadu, Kavu, Devrai, Devban, Kovil Kadu, Garamthan, Law Kyntang,* in various Indian languages. These are sanctuaries protected by faith, folklore, and traditions. The sacred groves are thought to be the abodes of deities or ancestral spirits or nature Gods. The groves remain untouched by agriculture or logging, due to religious taboos and socio-cultural norms that prohibit extraction. Preserved through centuries or even millennia, these groves serve as timeless examples of community-led ecological preservation and biodiversity conservation.

The documented number of such sacred groves is about 13,720 as noted by the Paper Malhotra, K. C., Ghokhale, Y., Chatterjee, S. and Srivastava, S., Cultural and Ecological Dimensions of Sacred Groves in India, INSA, New Delhi, 2001.[1] However, the experts believe that the actual number could even be upwards of 1 lakh. The Study notes, "According to Kosambi (1962) the institution in India is very ancient and dates back to the pre-agrarian hunting-gathering stage, before humans had settled down to raise livestock or till the land."

Ancient Guardians of Biodiversity

These sacred groves are home to rare and endemic species of flora and fauna, serving as pockets of refuge to biodiversity amidst mindless concrete expansion. The *Kavus* of Kerala are sacred forests rich with medicinal plants. Some Kavus are called as *Sarpa Kavu*, meaning snake groves, and are known for snake worship. This shows that reverence for other biological life forms and recognition of their role in the ecosystem is embedded deep in our culture and traditions. In Maharashtra, for instance, species like the Indian Giant Squirrel find refuge. The *Orans* of Rajasthan serve as grazing ground for camels and other local livestock. These also serve as water catchments. Cutting of trees is prohibited here just like in other sacred groves.

Culture Meets Conservation

It must be noted that the preservation of the sacred groves has not been the result of any environmental laws or ESG movements. They have been preserved through history as a result of our ancient ecological ethics entrenched deep in our spirituality, faith and culture. They are believed to be the dwelling places of village deities and ancestral spirits. Entry is restricted, trees cannot be felled, and disturbing the grove is considered sacrilege.

Festivals, rituals, and folklore reinforce and enhance the sanctity of the sacred groves. For example, Kerala's *Kavu* are known for *Theyyam*, the ritualistic dance art form.[2] The groves become sites of community gathering, story-telling, communal harmony and cultural transmission. We can safely say that these practices, though spiritual in form, are ecological in consequence.

1 https://wgbis.ces.iisc.ac.in/biodiversity/sahyadri_enews/newsletter/issue4/Yogesh_CEdimensions.pdf

2 https://en.wikipedia.org/wiki/Sacred_groves_of_India#cite_note-mal-12

Ecosystem Services and Climate Resilience

Going beyond biodiversity conservation, sacred groves also provide many ecosystem services and aid in climate resilience. Many groves are homes to sacred ponds and natural springs, recharging groundwater and thus provide water conservation and water security. The dense canopy double up as effective carbon sinks and enable carbon sequestration.

They also serve as habitats for bees and birds, thus helping in pollination and seed dispersal. They act as climate buffers by maintaining humidity levels and regulating local climate. During extreme weathers and climatic events, these groves often serve as safety nets for both humans and wildlife.

Challenges: From Sacred to Shrinking

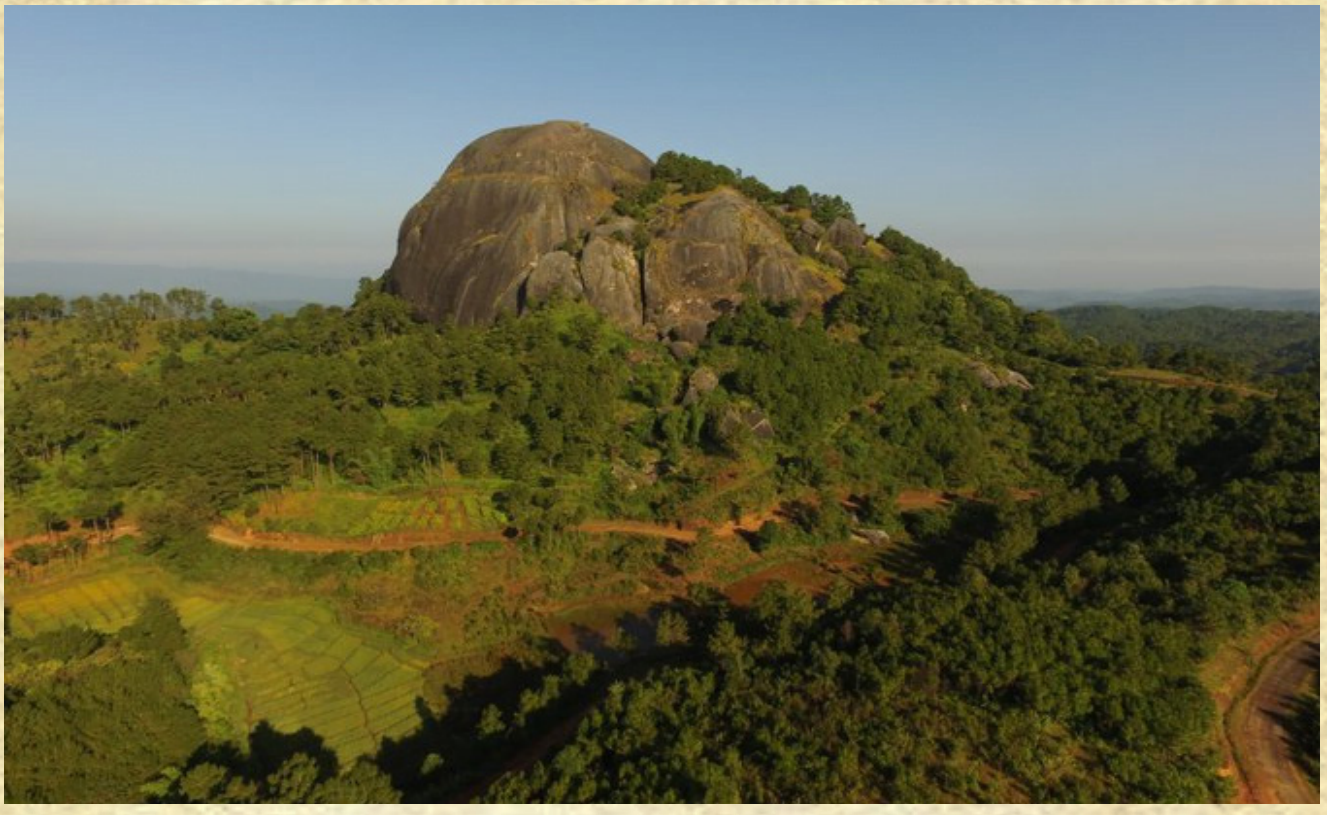
Despite their ecological and cultural importance, sacred groves in India face multiple threats:

- **Encroachments and Urbanisation:** Sacred groves face encroachments and illegal logging and felling of trees. Grazing also causes new saplings to be eaten by livestock – a phenomenon noticed even in the Church Forests of Ethiopia. They are also mistakenly viewed as "wastelands" and are converted into commercial or residential places.
- **Erosion of Traditional Beliefs**: As younger generations migrate to cities, the spiritual and cultural ties that once protected these groves are weakening. The storytelling that was passed on from generation to generation gets forgotten along the lines, and the meaning and significance of the traditions gets diluted and diminished in practice.
- **Lack of Legal Recognition**: While some groves are part of Reserved or Protected Forests, many exist outside formal conservation regimes. Though the legal framework offers some protection, implementation is often inadequate.

Reviving the Roots: Initiatives and Way Forward

Several NGOs, forest departments, and community leaders are working to document and revive sacred groves. The Indian Government has launched the scheme of "Protection and Conservation of Sacred Groves". The Kerala Forest and Wildlife Department has also taken up the cause through its Biodiversity Cell. [3] The C.P.R.

3 https://forest.kerala.gov.in/en/sacred-grove-conservation/#:~:text=The%20Indian%20government%20recognised%20the,field%20visits%20and%20community%20meetings.



Environmental Education Centre[4] established jointly by the Ministry of Environment, Forest and Climate Change and The C.P. Ramaswami Aiyar Foundation is one such organisation working towards restoring sacred groves, successfully restoring 53 sacred groves so far in the southern States. Foundation for Revitalization of Local Health Traditions, Bangalore, work towards creating databases of sacred groves and/or the plant species in them.[5] INTACH, the Indian National Trust for Art and Cultural Heritage, also has worked towards documenting the groves, and the customs and the intangible heritage embedded in them.[6] The United Nations Development Programme, UNDP, also has supported the conservation and augmentation of sacred groves.[7]

To truly revive these sanctuaries, there is a need to:

- Augment implementation of legal provisions protecting forest areas and biodiversity hotspots like the Wildlife (Protection) Act, 1972 and the Indian Forest Act, 1927.
- Impart the significance of groves by integrating them into school and college curricula.
- Promote youth engagement in the living heritage through storytelling, festivals, and nature walks.

Conclusion: Sacred is Sustainable

This indigenous conservation ethic has parallels across the world — from Japan's *Chinju no Mori* (sacred shrine forests)[8] to the Church Forests of Ethiopia.[9] In an age where top-down efforts like laws and regulations drive conservation of nature, India's sacred groves remind us that conservation must really be bottom-up, decentralized, people-centred and grassroots in spirit. The sacred groves represent the undying harmony between humans and nature and to preserve them is to honour both the nature and the culture of India.

SB

4 https://cpreec.org
5 https://www.frlht.org/
6 https://icharchive.intach.org/Detail/collections/166
7 https://www.sgp.undp.org/spacial-itemid-projects-landing-page/spacial-itemid-project-search-results/spacial-itemid-project-detailpage.html?view=projectdetail&id=33368
8 https://en.wikipedia.org/wiki/Chinju_no_Mori
9 https://en.wikipedia.org/wiki/Church_forests_of_Ethiopia

FEATURE

Rainwater Harvesting: Panacea for the Water Crisis

CMA Dibbendu Roy
Additional Director
The Institute of Cost Accountants of India
Kolkata

"Water is a precious gift of nature. We must conserve every drop of rainwater and store it for the future." ***Dr. A.P.J. Abdul Kalam****, Former President of India*

India receives enough rain each year to meet every citizen's water needs — only if we store it wisely as every year we see a part of the country in drought and another part in submerged due to floods.

We know that 71 percent of the total area of the world has water but still we have shortage for usage. The problem lies in proper management of the resources for our wellbeing. Our nation is an agrarian state and preserving rainwater sustainably in India is essential for addressing water scarcity, supporting agriculture, and recharging groundwater.

Several Indian states have taken significant strides in promoting and implementing rainwater harvesting (RWH) to combat water scarcity and enhance groundwater levels. Some of the leading states known for their strong initiatives, policies, and community participation in rainwater harvesting are as follows- Tamil Nadu who are pioneer in rainwater harvesting followed by Rajasthan and Maharashtra. We have seen states like Karnataka, Gujarat, Himachal Pradesh and Uttarakhand are also encouraging residents with proper plans, policies and programmes for better rainwater management.

We know that Tamil Nadu is the first state who had made the rainwater harvesting compulsory since 2003 for all it's upcoming buildings and Chennai being the capital of the state is having the true benefit with such strict compliance norms. It has enhanced the water level by 6 metres across the city. Campaigns for awareness included school campaigns and Tamil Nadu's early adoption of rainwater harvesting has made it a model state for sustainable water governance. It not only alleviated water scarcity but also built long-term water security and ecological resilience. During drought months we get to see that the state has the access to dry wells. The water table has increased substantially and in complaint with the United Nations Sustainability Developments Goals (SDG-6) which speaks of Clean water and Sanitation. The Government policies like *Jal Shakti Abhiyan* – A water conservation campaign focused on rainwater harvesting and groundwater recharge and MGNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme) was made wonders in the urban lives by reducing dependency on the municipal water and dependency on the water tankers.

As Dr. Rajendra Singh who was called the Waterman of India said that "Rainwater is the purest form of water — we must catch it where it falls, when it falls." The state like Rajasthan has revitalized rivers using traditional rainwater harvesting techniques. In Rajasthan we have seen that traditional wisdom meets modern methods. The state has revitalized rainwater harvesting like *kunds, johads, and baoris*. The state has initiated successful community-driven initiatives in drought-prone areas especially in the Alwar district. Many initiatives have improved water availability in arid zones. We have observed that support comes from various traditional techniques of water conservation.

Save water today, survive tomorrow as the saying goes. In state like Maharashtra we have seen that *Watershed Development and Check Dams has been formalized for* Large-scale adoption of check dams, farm ponds and percolation tanks. We have seen that scheme like *Jalyukt Shivar Abhiyan* which has targeted to make villages drought-free. The Rain Water Scheme has enabled the revival of rivers and increase in irrigation coverage. The Central Ground Water Board (CWWB) is an awareness campaign which is the catch the rain campaign. We know that we should protect and we should know that we don't waste rainwater – harvest it, recharge it, and secure your future. Many innovative mechanisms like the modular rainwater storage units which is a stackable tanks or underground chambers in urban homes and offices is the solution for this crisis of water shortage. It is space-efficient and easy to maintain and install. Maharashtra has also practised this as per the Urban Development Department Rule which started in 2005. The Rainwater harvesting is mandatory for new buildings for the 1000 square metres.

In state like Karnataka as per the Urban Rainwater Harvesting Mandate *provides that* for new buildings in Bengaluru over 60 square meters to have Rain Water Harvesting. It has insured that revival of lake systems and tanks and impacted the Groundwater recharge in urban areas and control of flooding and Bangalore Water Supply and Sewerage Board (BWSSB) provides incentives, guidance and support.

The above states exhibit that Sustainability Development Goals like SDG 6 in form of Clean Water and Sanitation have been contributed through this rainwater harvesting. It has enabled in form of clean and safe water and incase of rural and semi-urban areas and has reduced dependence on contaminated for depleting groundwater. It also helps to recharge aquifers and enable groundwater levels**.** Rainwater harvesting has contributed to Climate Action which is SDG 13 and it has yielded resilience against droughts and waste related climate shocks, reduced energy consumption and emissions from water pumping and treatment. It has also enhanced local climate adaptability through community level water storage. Rainwater Harvesting also has addressed the SDG 2 which caters to the zero hunger. The rainwater harvesting has supplementary irrigation in rain fed agriculture and enhances productivity and reduces crop failure during dry spells. This SDG enables in supporting small and marginal famers in arid and semi-arid zones. The SDG 3 which stands has good health and wellbeing as the focus area by rainwater harvesting which reduces waterborne diseases in preventing contamination through surface runoff and enables hygiene through availability of water in arid areas.

Further, incase of SDG 12 for the responsible consumption and production the rainwater conservation encourages efficient water usage and reduction of wastage. It has also promoted sustainable water sourcing in households, industries and agriculture.

Incase of SDG 15 for life on land and rainwater harvesting prevents land degradation by reducing runoff and erosion and recharges soil moisture and supports vegetation cover. It also helps in ecological restoration of degraded land.

There are various innovative mechanism of rainwater harvesting like rooftop rainwater harvesting, check dams including nala bunds and percolation tanks are few examples. There are various government schemes of rainwater harvesting like *Jal Shakti Abhiyan*, Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), *Atal Bhujal Yojana* (Atal Jal), Atal Mission for Rejuvenation and Urban Transformation (AMRIT), Smart Cities Mission, Central Public Health and Environmental Engineering Organisation (CPHEEO) Guidelines and many others.

It all proves that if there is water, there is a tomorrow. India receives enough rain each year to meet every citizen's water needs — only if we store it wisely and rainwater harvesting is not an option, it's the solution.

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Feedback Etiquette: Fostering Growth through Constructive Feedback

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In any environment, be it professional or personal, feedback plays an important factor in course correction and growth. It builds better understanding among the persons involved and fosters trust. Whether it takes the form of praise and compliments that reinforce effective behaviour or constructive suggestions that highlight areas for improvement, feedback, when done in good faith and in a gentle, graceful way, becomes a powerful tool for development, building trust and nurturing relationships.

However, despite its usefulness, we often shy away from giving or seeking feedback. This is because feedback often triggers anxiety and discomfort. This is because the mind remembers the times it was delivered too bluntly or received too defensively or perhaps, completely ignored by the other person. The memory of the discomfort of those experiences discourages us from seeking or giving feedback. However, to cultivate a positive workplace culture that feels enjoyable and productive and that does not give rise to resentments or guilt, feedback-seeking and receiving should be used as a safe and neutral tool, without any stigma attached to giving or receiving constructive suggestions for improvement.

Feedback as a Tool for Improvement Instead of a Personal Attack

The first step is fostering a healthy mindset around giving and receiving feedback. Feedback must be approached as an opportunity to grow, and not as a criticism of the person receiving it. The intention of the person giving it must be to help and not to hurt. The persons giving feedback must refrain from making it personal or using the words "always" or "never". Instead, it must ideally be framed around observable behaviour, like: "When the report was submitted late, the review got delayed, and the next review cycle got shortened. Let us ensure that we meet deadlines going forward. I welcome you to bring to the fore any foreseeable factors resulting in delay." This shift in tone ensures that feedback stays professional and actionable.

Those receiving feedback must also remember that any criticism or constructive feedback is not about personal worth, but about refining and improving one's work or approach.

Empathy and Actionability in Giving Feedback

Empathetic feedback is effective feedback. Feedback in general, and sensitive topics in particular, must be dealt with understanding, gentleness and patience. Before offering it, one must consider the receiver's personality and working style, whether the environment where feedback is given would make them feel safe, and most importantly, whether the person giving feedback is doing so to support and improve the situation or simply to vent.

Constructive feedback should be delivered with care and timing. Offering feedback in public settings or when the recipient is visibly stressed or distracted should be avoided. Instead, a one-on-one, non-confrontational setting like during a casual catch-up or review usually works best.

Most importantly, feedback should be actionable. It is not enough to say, "This presentation could have been more effective." The person giving the feedback must specify what could be improved. For example, something like: "The content was informative, but the slides felt like they were loaded with text. Adding visuals and limiting bullet points may help the audience connect better."

This way, feedback does not feel judgmental and feels genuine and safe.

The Praise–Critique–Praise Model

A recommended way for giving feedback is the "Praise–Critique–Praise" or "Feedback Sandwich" model. While it may sound formulaic, when done sincerely, it ensures that the feedback does not demoralise the receiver but instead motivates him. This involves starting with a positive aspect of what the person did like: "Your research was very thorough, and the client appreciated the detailed insights." Then inserting the constructive feedback like: "Just a heads-up! The formatting didn't align with the organisation's template, and so we had to make a few last-minute changes." Then ending with an encouragement or appreciation: "Your insights and research are always a strength to the team. With a few formatting tweaks next time, your presentations will be even more impactful."

Sandwiching the constructive feedback in between positive notes ensures that the feedback is absorbed without defensiveness or discouragement.

Receiving Feedback with Grace and Gratitude

Just as giving feedback well is a skill, receiving it gracefully is a mark of professionalism. Too often, people respond to feedback with defensiveness. But those who listen attentively, reflect, and act on suggestions have more opportunities to learn new things and refine their approach. Firstly, the receiver must listen without interrupting. Active listening should be practised to ensure that the points raised are absorbed well. One must avoid rushing to justify or defend. Explanations may be given later, if appropriate. If the feedback is vague, one may politely ask the person offering feedback to clarify it. Lastly, it is graceful to thank the person giving the feedback. This is to appreciate the effort they took to share it, and for giving the opportunity to refine and improve. Receiving feedback gracefully builds trust and opens up more opportunities for collaboration and mentorship.

Closing the Loop

Real growth comes with what we do after we receive the feedback. One may reflect on the key points discussed. Sometimes, feedback given in a hurtful tone too could contain gems of wisdom. On the other hand, positive feedback and praise given may not always be genuine, and may simply have been to flatter and win one's favour. Hence, it is always necessary to discern, and take what is good for one's growth.

Acting on the feedback and updating the action taken to the person giving feedback, wherever appropriate, reflects professionalism and intent to grow. A simple note like, "Thank you for your input last week. I have started using the updated slide format and I find that it fits the management's expectations better," can go a long way. Feedback that leads to visible improvement motivates the giver to invest in the receiver's growth and strengthens their trust and bond.

Creating a Positive and Safe Workplace Culture around Feedback

A culture that makes giving and receiving feedback feel safe and effective begins with leaders modelling open, respectful feedback, and encouraging it across all levels. This must not just be during appraisals, but must be part of everyday work.

Feedback should not be treated as a one-way street flowing top-down always. Junior employees should feel comfortable offering upward feedback, just as senior leaders should welcome peer input. People should feel safe to express observations or suggestions without fear of retribution or ridicule.

Organisations can also normalise regular sessions like "retrospectives" after projects or presentations, where all members could share what worked and what could improve, focusing on processes, and not people.

Conclusion

Giving and receiving feedback is not just a skill, it is a way to extend professional courtesy in a way that cultivates growth and results in shared success. When approached with empathy and humility, feedback creates the right environment for both organizational and personal growth. The most respected professionals are not the ones who never make mistakes; they are the ones who learn from them, improve continuously and help others do the same.

Reproduced with suitable modifications from the personal writings and posts of Ms. Usha Ganapathy Subramanian. SB

Chhatrapati Shivaji Maharaj: A Visionary in Sustainability and Environmental Consciousness

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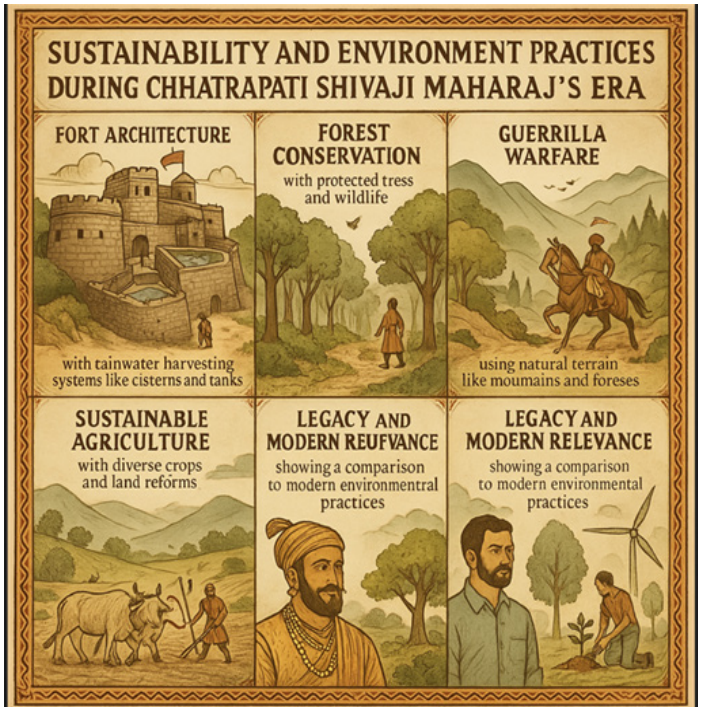

Chhatrapati Shivaji Maharaj, the illustrious 17th-century founder of the Maratha Empire, is widely revered for his military genius, administrative acumen, and nation-building efforts. Yet, one of the lesser-explored aspects of his legacy is his remarkable environmental consciousness. At a time when the concept of "sustainability" was not part of formal discourse, Shivaji Maharaj's practices in governance, infrastructure, agriculture, and military strategy reflected a profound respect for nature and natural resources. His model of ecological stewardship holds valuable lessons for addressing today's environmental challenges.

Eco-Sensitive Fort Architecture and Design

Shivaji Maharaj's forts such as Raigad, Pratapgad, Rajgad, and Sinhagad were not just military strongholds but also marvels of sustainable engineering. Forts were integrated into the natural topography, avoiding large-scale deforestation or terrain destruction. Local materials like stone, lime, and wood were used in construction, reducing environmental impact and promoting resource efficiency. Hill forts were equipped with rock-cut cisterns, artificial lakes, and underground tanks that harvested and stored rainwater, ensuring water self-sufficiency even during prolonged sieges. The Gangasagar lake on Raigad Fort and over 30 cisterns reflect a sophisticated understanding of geography, monsoon cycles, and evaporation control.

Forest Conservation and Biodiversity Protection

Shivaji Maharaj issued several royal edicts that emphasized the preservation of forests and biodiversity, Deforestation was regulated; only deadwood was to be used for construction and

fuel, and live trees could not be felled without permission. Afforestation around forts and settlements was encouraged to prevent soil erosion and support micro-ecosystems. The Adnyapatra (royal charter) highlighted the value of green cover and is still referenced by modern environmental groups. He also ensured wildlife corridors remained undisturbed, and folklore recounts his empathy toward elephants and other animals, reflecting an early ethic of coexistence.

Water Management and Conservation

Water security was a strategic and civic priority for Shivaji Maharaj. Forts were outfitted with rainwater harvesting systems, stepwells (*bawdis*), and reservoirs, minimizing reliance on rivers. These measures provided year-round water availability in arid zones and fortified areas, demonstrating foresight in climate-resilient infrastructure. This decentralized and climate-adaptive approach to water management is increasingly relevant in today's era of water scarcity.

Eco-Adaptive Warfare and Terrain Respect

Shivaji's famous Ganimi Kava (guerrilla warfare) was not just militarily effective but also environmentally responsible: He leveraged the Sahyadri mountain ranges, forests, and valleys for tactical advantage without damaging them. Military routes and outposts were chosen to minimize ecological disruption, showing an awareness of the long-term consequences of war on nature. His strategy blended geography with minimalism, proving that defensive strength and environmental respect could go hand in hand.

Sustainable Agriculture and Rural Economy

Shivaji Maharaj actively promoted agrarian sustainability and rural self-sufficiency His policies encouraged crop rotation, use of natural fertilizers, and community-based cattle rearing.Villages were designed to be economically and ecologically self-reliant, with localized grain storage and reduced dependency on imported goods. His land revenue system rewarded productivity without encouraging overexploitation of soil or water. This village-centric model resonates with modern-day principles of circular economies and food sovereignty.

Governance Rooted in Environmental Ethics

Inspired by Dharmashastra and local traditions, Shivaji's rule was characterized by an ethical approach to ecological stewardship. Taxes and land-use regulations were structured to promote balance between development and conservation. Policies aimed at long-term resource preservation, not just short-term gains. His administration recognized nature not as a commodity, but as a partner in governance — a mindset modern policymakers strive to rekindle.

Contemporary Relevance and Legacy

Shivaji Maharaj's environmental philosophy is not just of historical interest — it offers practical insights for modern sustainable development, Universities like the University of Mumbai now include his environmental policies in academic curricula. His legacy supports climate-resilient governance, biodiversity protection, decentralized water systems, and community-led conservation.

A Timeless Eco-Warrior

Chhatrapati Shivaji Maharaj's governance fused strategic brilliance with a visionary ecological ethic. From eco-sensitive architecture and rainwater harvesting to forest conservation and community resilience, his practices provide a timeless template for environmental leadership.

His life reminds us that sustainability is not a modern invention — it is a perennial principle, rooted deeply in wise governance, cultural values, and ethical responsibility. In today's climate-challenged world, Shivaji Maharaj stands not just as a military icon but as a pioneer of sustainable statecraft. SB

Insight Series: I

CMA Arunabha Saha
Practicing Cost Accountant
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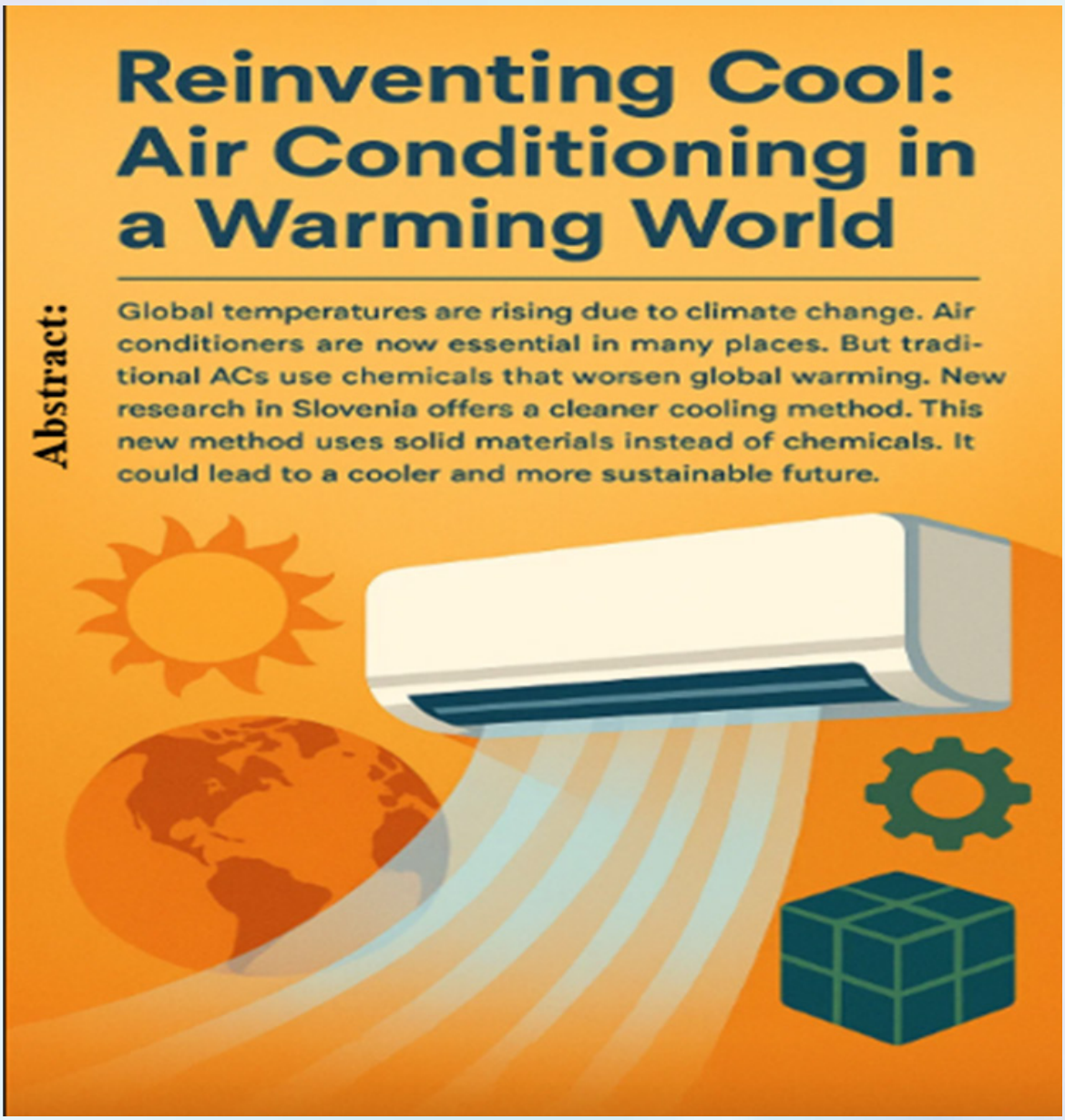
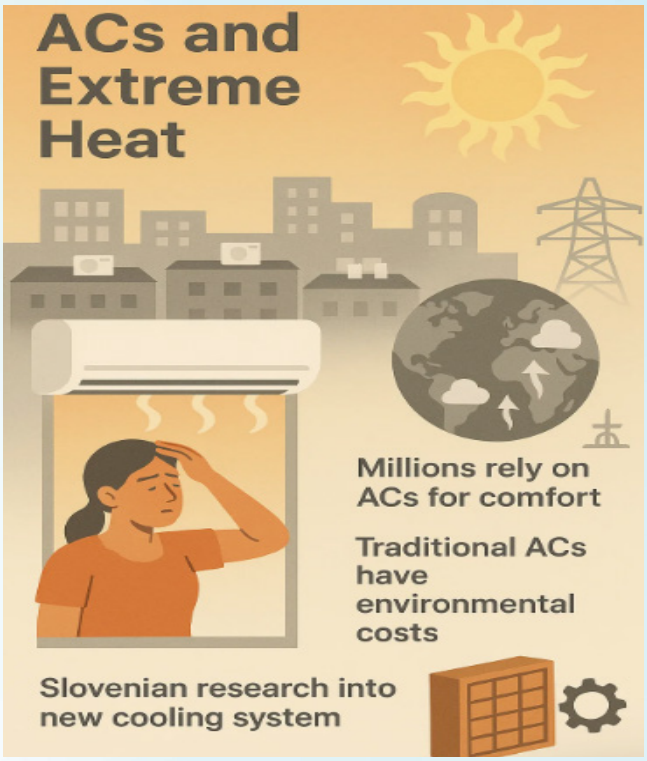


Introduction

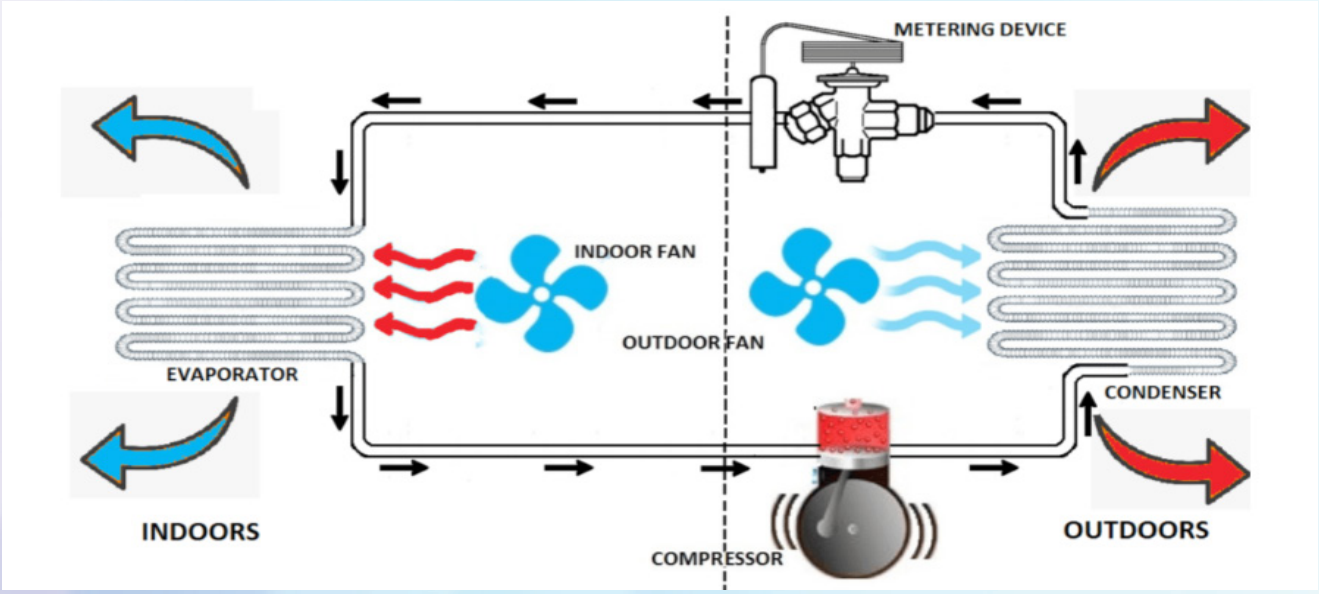
Extreme heat is becoming normal. ACs are now vital for survival and comfort. Millions rely on ACs to stay cool indoors. This is especially true during hot summer months. However, traditional ACs have sustainability issues. They use a lot of energy. They also release gases that increase global warming. The need for cooling is growing fast worldwide. This puts a strain on energy and the environment. This article explains how ACs work. It discusses their role in comfort and their environmental costs. It also highlights new research in Slovenia. Slovenian scientists are creating a cooling system without harmful chemicals. This new system uses solid materials.



How Air Conditioning Works: A Thermodynamic Perspective

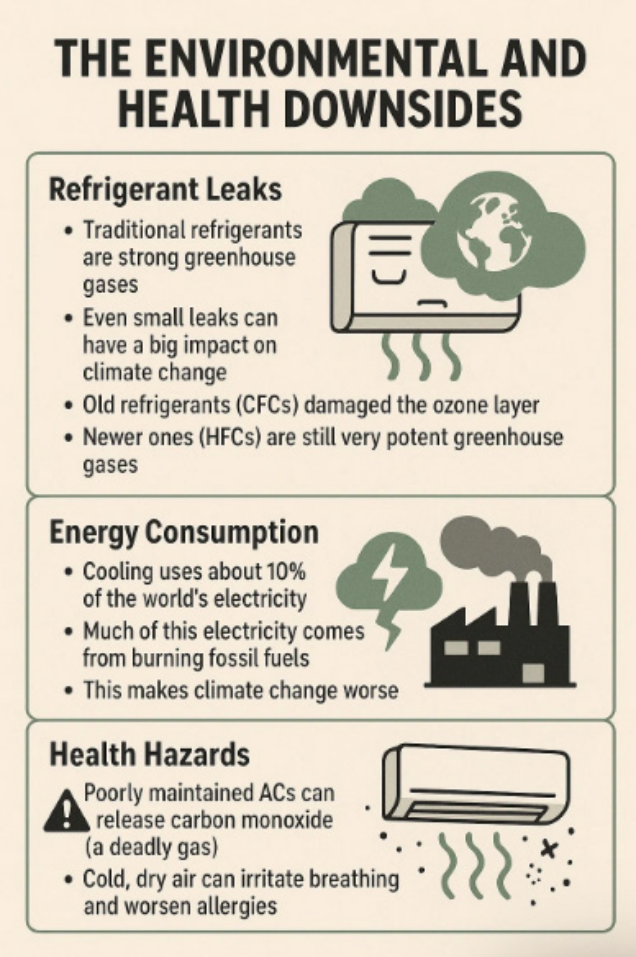
ACs use a process called vapor-compression. This process uses scientific laws to move heat. It moves heat from inside to the outside. Here's a simple explanation:

1. **Absorption of Heat**
   - Warm air from inside enters the AC.
   - It passes over a coil with a special liquid (refrigerant).
   - The refrigerant boils and turns into a gas.
   - This process absorbs heat from the air.
   - The cooled air goes back into the room.
2. **Refrigerant Gas Compression**
   - The gas refrigerant goes to a compressor.
   - The compressor squeezes the gas.
   - This makes the gas hotter and increases its pressure.
3. **Heat Rejection**
   - The hot, high-pressure gas goes to the outdoor coil (condenser).
   - A fan blows air over this coil.
   - The heat from the gas is released into the outside air.
   - As it cools, the gas turns back into a liquid.
4. **Cycle Continuation**
   - The high-pressure liquid goes through an expansion valve.
   - This reduces its pressure and temperature.
   - The cold liquid returns to the indoor coil.
   - It absorbs heat again, and the cycle repeats.



Why Air Conditioning Is a Necessity

In today's climate, ACs are very important. They prevent heatstroke and dehydration. This is especially true for vulnerable people. They keep safe temperatures in important places. This includes hospitals, homes, offices, and data centres. They can improve indoor air quality (if maintained). They help the economy by making comfortable workplaces. However, this comfort has a significant cost.



The Slovenian Breakthrough: A Refrigerant-Free Future

Scientists in Slovenia are working on a new cooling method. This method does not use harmful refrigerants.

Research Led by Jaka Tušek

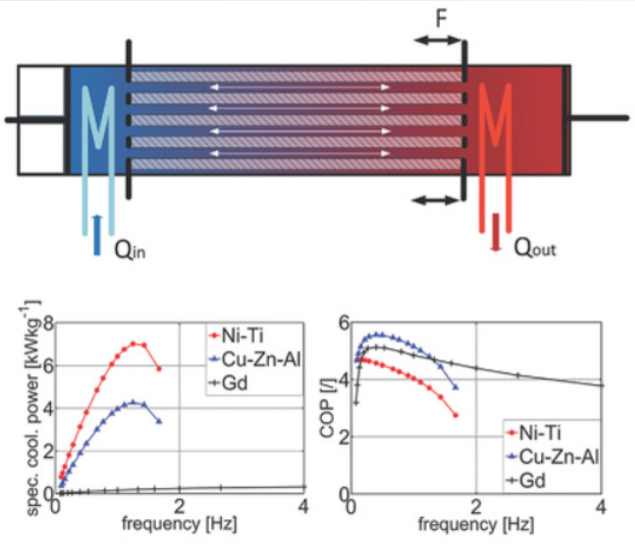
Professor Jaka Tušek leads this research at the University of Ljubljana. His work built on a project called SUPERCOOL (2019-2023). It continues under a new project called E-CO-HEAT.

The Science Behind Solid-State Cooling

Tušek's research uses the elastocaloric effect. Some metals heat up when squeezed. They cool down when the squeezing is released. This happens without the material changing from liquid to gas, i.e. without any change of state.

Enter Nickel-Titanium Alloys (Nitinol)

These are "smart materials." They can change their internal structure to absorb or release heat. When squeezed, they heat up. When the squeezing stops, they cool down. This solid-to-solid change is cleaner. It could also be more efficient than traditional cooling.



Advantages Over Vapor-Compression Systems

- No chemical refrigerants mean no pollution risk.
- Quieter operation because there are fewer moving parts.
- Potentially uses less energy (needs more testing).
- The materials used (like nitinol) are already safe for the body.

Challenges and the Road Ahead

This new technology is still being developed. Challenges include:

- Making enough of the materials.
- The cost of the smart materials.

- Fitting the new system into existing setups.
- Proving that it works well long-term.

Tušek's team is working on:

- Getting patents for their invention.
- Working with companies.
- Planning to launch the technology by 2026.

The European Union supports these kinds of innovations. This is part of their plan to fight climate change.

Implications for the Future

There are 2 billion AC units now. This could triple by 2050. We urgently need sustainable alternatives. Without change, ACs will worsen the warming they are meant to fight.

Switching to solid-state systems like the one in Slovenia could:

- Greatly reduce harmful emissions.
- Reduce the strain on power grids.
- Create safer indoor environments.
- Change how we think about cooling.

The Role of Cost and Management Accountants (CMAs) in Supporting Sustainable Cooling Innovations

CMAs are important for making new sustainable technologies successful. They do more than just control costs. They help with strategic decisions. For the Slovenian cooling research, CMAs can help by:

- **Cost-Benefit Analysis:** Comparing the costs and benefits of new ACs.
- **Life Cycle Costing:** Looking at all costs over the AC's lifetime.
- **Sustainability Reporting:** Showing the environmental benefits in financial reports.
- **Budgeting for R&D:** Managing money for research and development.
- **Carbon Accounting:** Measuring the carbon impact of different ACs.

CMAs help bridge the gap between new science and practical use. They ensure that cleaner cooling is also affordable.

Conclusion

ACs are now a necessity because of climate change. But they have environmental and health downsides. Traditional ACs are harmful due to their refrigerants. Researchers in Slovenia are developing a better way. It uses solid materials instead of harmful chemicals. This new technology can help us stay cool without warming the planet. Science shows that sustainability and comfort can go together. The cooling systems of the future are being developed now. It's up to us to use them. SB

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Mysteries of Mandala

Geeta Joshi Brahme
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Shree Yantra Mandala

The Sri Yantra, a revered sacred geometric diagram in Vedic and Tantric traditions, symbolizes the Divine Mother (Tripura Sundari) and serves as a cosmic microcosm embodying creation and transcendence. Its intricate design of nine interlocking triangles (four Shiva, five Shakti) radiating from a central Bindu represents the union of divine masculine and feminine energies and the non-dual nature of reality across nine symbolic layers. This powerful yantra is intimately related to the human body's seven chakras. As a microcosm of the cosmos, the Sri Yantra's energetic patterns are believed to resonate with and activate the individual's internal chakras, mirroring the journey of consciousness from the worldly (outer layers for lower chakras) to the divine (inner layers to the Bindu for higher chakras).

Worshipping the Sri Yantra is highly valued for its profound benefits: attracting prosperity and abundance, fostering deep spiritual growth and enlightenment, balancing internal energies, removing obstacles, harmonizing masculine and feminine principles, and aligning one with the universal blueprint of creation. It's 7 a potent tool for holistic well-being and spiritual realization.

The Shri Yantra, a complex geometrical symbol, is deeply connected to the 7 chakras, the energy centres in the human body. The Shri Yantra's structure mirrors the chakras, with each layer and triangle within it corresponding to a specific chakra and its associated qualities. The yantra's central Bindu (point) represents the Sahasrara (crown) chakra, the focal point of all creation and spiritual awakening.

Here's a breakdown of the connection:

1. Bindu:

   The central bindu, or point, in the Shri Yantra represents the Sahasrara chakra, which is located at the top of the head and is associated with spiritual consciousness and enlightenment.

2. Triangles and Layers:

   The Shri Yantra's triangles and layers are associated with different chakras and their functions.

3. Kundalini Energy:

   The yantra's structure is said to activate and elevate Kundalini energy, which is coiled in the Muladhara (root) chakra and ascends through the other chakras to reach Sahasrara.

4. Protection and Prosperity:

   The yantra's outer layers, like the Trailokya Chakra, are believed to provide protection and security, aligning with the function of the Muladhara and other lower chakras. Mental and Physical Well-being, Some layers are linked to mental and physical health, representing the connection between the chakras and overall well-being.

5. Purpose and Wealth:

   The yantra's layers are also associated with wealth, prosperity, and fulfilling one's purpose in life, reflecting the functions of chakras like Manipura (solar plexus) and Anahata (heart).

In essence, the Shri Yantra is a visual representation of the flow of energy through the chakras, guiding practitioners towards spiritual growth and enlightenment.

Sri Yantra also represents the union of Masculine and Feminine Divine. Because it is composed of nine triangles, it is known as the Navayoni Chakra.

The popular form is the Sri Chakra, or Sri Yantra, which represents the goddess in her form as Tripura Sundari. Sri Chakra also includes a representation of Shiva, and is designed to show the totality of creation and existence, along with the user's own unity with the cosmos. Sri Yantra, the most powerful of all yantras was created by Lord Shiva. The worship of Devi in Sri Chakra is regarded as the highest form of the Devi worship. It is said originally that Lord Shiva gave *64 chakras* and their mantras to the world, to attain various spiritual and material benefits.

Srichakra divine symbol is also known as Sri Yantra, widely worshiped in many countries. It helps obtain the 16 auspicious things in their lives and finally attains salvation and the other cosmic energy secrets, including the "Brahma Gnana and Brahma Vidya." "Brahma" means cosmic energy. Sri Yantra is supposed to represent this process of manifestation where life, names, forms, time, all of space and the different dimensions have been evolving. This yantra has been taken as a symbol of our unconscious mind.

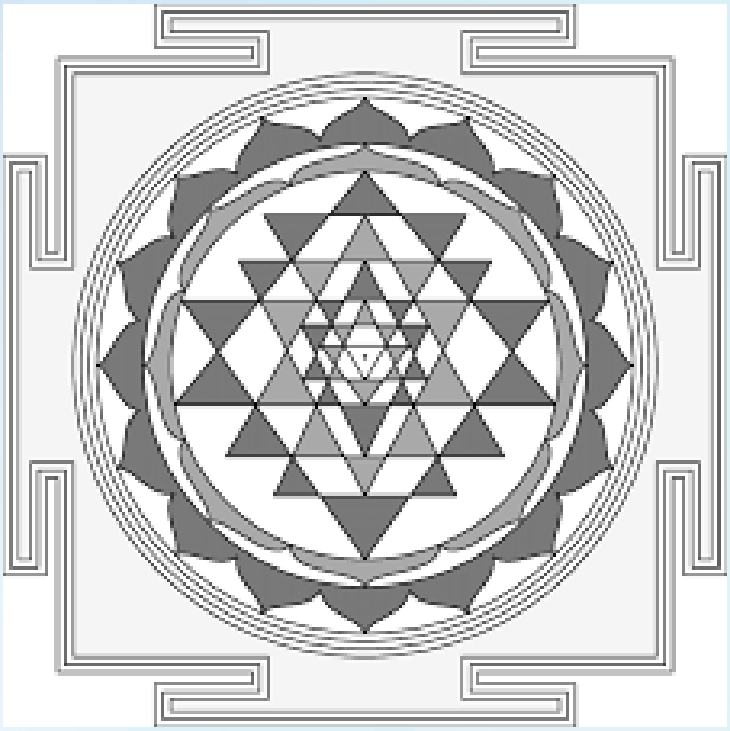
The Sri Yantra can be incorporated into various spiritual practices to work on concentration, energy healing. Its conscious use with clear intention and respect, allows its sacred geometry to serve as a channel for inner alignment and spiritual growth.

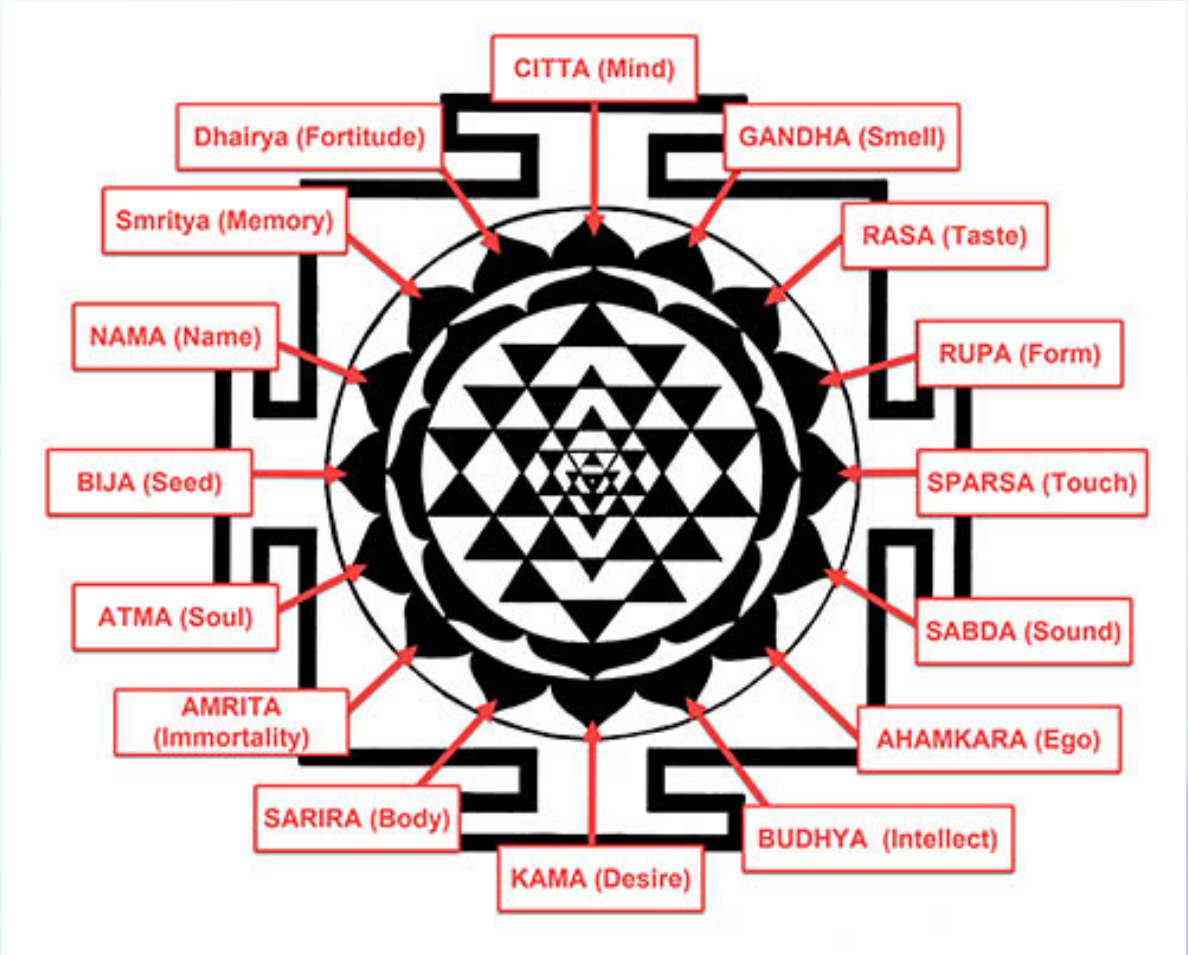
- **Meditative gazing:** Placing the Sri Yantra in front of you and softly fixing your gaze on its centre naturally calms the mind. This practice facilitates a deep and sustained meditative state.
- **Guided visualization:** Visualizing the Sri Yantra while engaging in conscious breathing activates the subtle energetic field of the body. This technique raises vibration and enhances inner clarity.
- **Placing in space:** Positioning the Sri Yantra on an altar, in a meditation space, or in a workspace generates an atmosphere of harmony and protection. Its presence acts as a stabilizer of environmental energies.
- **Chanting with mantras:** Recite mantras such as "Om" in front of the Sri Yantra improves its vibrational capacity. The sound interacts with the symbol's geometry and activates its energetic qualities.
- **Intention and manifestation:** Using the Sri Yantra as a support to focus intentions doubles the power of conscious thought. This practice is ideal for manifestation rituals and spiritual focus work.

Working consistently with the Sri Yantra can bring about deep transformation on the physical, mental, and spiritual levels, which helps to generate sustainable attitude in us humans. Its geometry functions as an energetic map that guides the practitioner toward inner harmony, clarity, and connection with the universal order. Those are the benefits of practicing Shree Yantra meditation:

- **Energy balance:** Helps align the body's energy centres. Supports emotional stability and mental clarity.
- **Concentration and focus:** Enhance attention span during meditation.
- **Spiritual connection:** Opens the door to experiences of unity and consciousness.
- **Environmental protection:** Cleanses and stabilizes the energy of the space where it is placed. Brings a sense of calm and safety.
- **Conscious manifestation:** Amplifies intention and positive thinking. It is a useful tool for attracting abundance and well-being from a place of alignment.

Every conscious human being will always work in the way to support environment and factors involved into making it better place to stay.





How much effort do we put in growing trees?

Do we really care about our nature or our surroundings to bring them to life for our next generation?

Let us pledge to grow 10 trees (rain trees) a month.

If even a few of us start working on this plan, many changes will start reflecting on the environment.

If you want to grow trees with minimum maintenance then start now and the trees will hold root by September.

Today's topic of discussion is Ardra Nakshatra which is the 6th Nakshatra or the 6th Lunar Mansion in Vedic Astrology.

Rahu is the lord of Ardra Nakshatra.

What are the qualities of RAHU? - Illusion, Sudden Changes, Challenges, Desires, High Ambition, Materialism etc.

Someone who belongs to this Nakshatra may experience sudden changes or challenges and they must be dealt with to learn their lesson and these are considered to be an important part of their purification and evolution.

The 4 Padas or Charans of Ardra Nakshatra is

1. **Rahu - Jupiter (From Sagittarius)**

   These personalities are willing to explore and expand but Rahu tends to exaggerate and hence they may have to work with caution in life.

2. **Rahu- Saturn (from Capricon)**

   This phase is daunting and Rahu and Saturn are out to teach you your karmic lessons and hence this phase can be a bit daunting.

   Tread carefully for those belonging to this pada.

3. **Rahu - Saturn (From Aquarius)**

   This phase is more stormy but such a person will like to detail it out & be scientific in nature.They will think a lot and try to be thorough.

4. **Rahu Jupiter (from Pisces)**

   This ruling attitude here is caring, love and sensitivity towards the needy.Such people will be wise and extremely upbeat and positive.

This describes the 4 personalities of Ardra Nakshatra and its 4 charans.

The trees belonging to this Nakshatra are Agarwood.

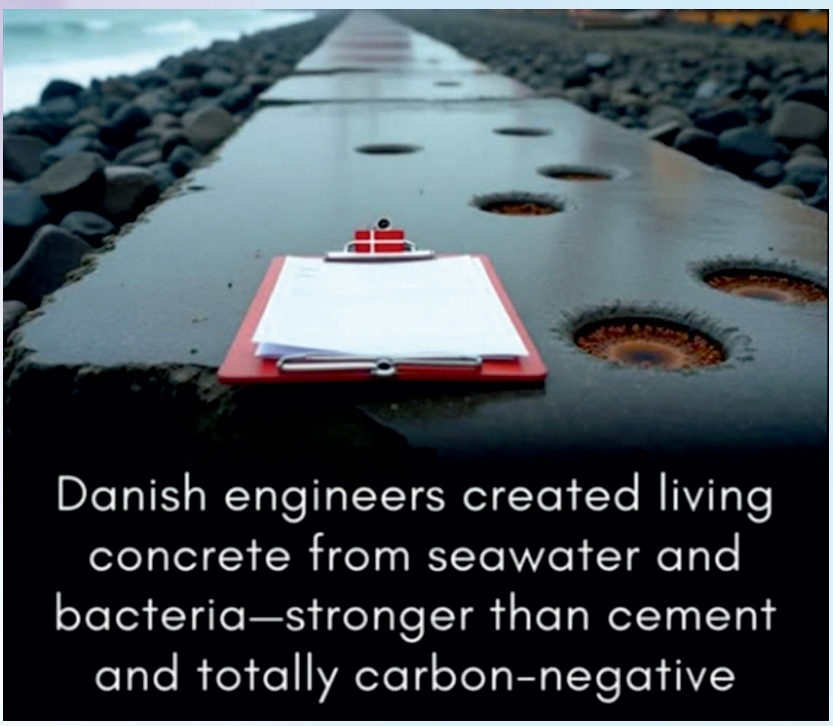
Like the Nakshatra this is a unique wood which is very expensive and has a lot of value as the trees age. These trees can create dense forests and can be very important

Sustainability Tree too.

So plant them in your vicinity to experience a sense of calm and balance and to invite prosperity in your life if you belong to Ardra Nakshtra. SB

–Purvi Dalal
Industrial Designer

DO YOU KNOW?



A carbon-negative concrete made from seawater and bacteria just outperformed cement in strength tests.

In a coastal materials lab in Denmark, engineers have created a concrete that doesn't emit CO_2 — it absorbs it. Made with marine bacteria, crushed seashells, and seawater, this living concrete hardens through biological mineralization instead of chemical heating, making it truly carbon-negative.

The process begins by mixing sand, powdered shell calcium, and a strain of calcifying bacteria. Once the mixture is poured, the bacteria activate in seawater-rich conditions, secreting enzymes that trigger calcium carbonate formation. This natural cementation strengthens over time without emitting greenhouse gases.

Unlike Portland cement — which releases over 1.5 billion tons of CO_2 annually — this formula actually locks carbon into its structure. In strength tests, it exceeded conventional concrete's load-bearing capacity after 21 days, with better crack resistance and water durability.

The raw materials are abundant and renewable. The system works best in coastal regions, where seawater and marine calcium are easy to source. It's already being trialed in sea walls, walkways, and low-rise buildings. With the construction industry responsible for nearly 8% of global emissions, this could be the most sustainable building material ever made.

SUSTAINABILITY GUIDANCE CELL

Announcement

SSB is happy to commence an exclusive section called Sustainability Guidance Cell from March 2025. The objective of the cell is resolving various queries of members in areas of sustainability. The responses would be replied with respect to various queries within 14 days in response to the queries. We request you write to us at ssb@icmai.in. The queries will be selected on "First Come; First Serve Basis".

Five questions on sustainability

The National Climate Change Action Plan (2021) aims to reduce GHG emissions by ___% by 2030

2. Amongst the GCC countries,___ has the lowest unemployment rates.
3. As of July 2025, ___ countries have committed Net Zero targets.
4. _____ are basically debt securities issued by companies operating in sectors where Carbonisation is "Hard to Abate"
5. _____ are bonds whereby the proceeds from the issuance are not ring-fenced to green or sustainable purposes

NO WINNERS FOR THE QUIZ OF JUNE 2025 EDITION

CORRECT ANSWERS OF PREVIOUS QUIZ

1.	Succession
2.	Sustainability Performance Targets
3.	110
4.	Artificial Intelligence (AI)
5.	1500

The names of first 5 participants giving correct responses will be declared in the ensuing newsletter.

The responses may be sent to ssb.newsletters@icmai.in

Call for articles

Sukhinobhavantu is inviting articles on the theme ESG/ Sustainability or related themes for publishing in August'2025 edition. The articles should be relevant and original. The article should clearly cover/depict the scope, opportunity and potential for cost accountants. It should not exceed 2200 words and references/ sources are to be given wherever required. It should reach us latest by August 14, 2025, by email to ssb.newsletters@icmai.in The right for selection of articles vests with SSB. Decision of SSB will be final and binding.

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