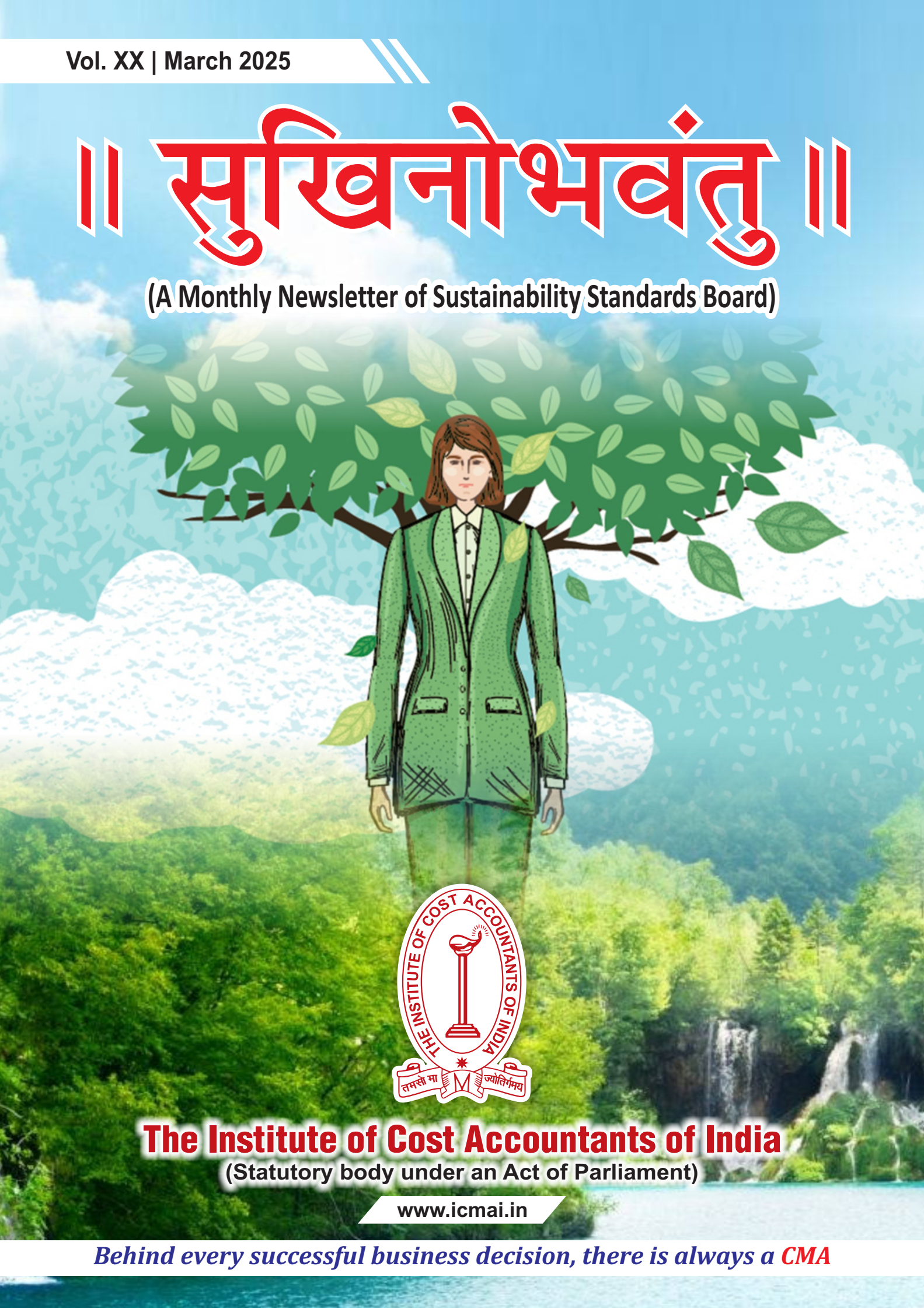
Vol. XX | March 2025

॥ सुखिनोभवंतु ॥

(A Monthly Newsletter of Sustainability Standards Board)



The Institute of Cost Accountants of India

(Statutory body under an Act of Parliament)

www.icmai.in

Behind every successful business decision, there is always a CMA

॥ सुखिनोभवंतु ॥

CONTENTS

Message From Chairman, SSB

"Summer is a period of luxurious growth. To be in harmony with the atmosphere of summer, awaken early in the morning and reach to the sun for nourishment to flourish as the gardens do. Work, play, travel, be joyful, and grow into selfless service. The bounty of the outside world enters and enlivens us." -Paul Pitchford

Dear Professional Colleagues,

We are happy to announce the month of March, 2025 as the financial year meanders to an end, there is a hope and fruition of a new beginning-the start of the financial year 2025-26.

We started with the launch of the Certificate Course on ESG and we would be soon completing the 3rd batch. I am happy to inform ypu that we have already started with the process of "Best Article Award" for the next year.

We started with the sustainability month with activities, summit, green walk this January, 2025 and it will a yearly exercise. We have also had approved the ISS1 and ISS2 which was finalized in this financial year and we have received good number of opinions from experts and members on the exposure drafts. We are hoping to finalise the draft ICMAI Sustainability Standards and releasing it for our members in practice to comply such standards.

We are presently working also for the application standards and soon the exposure drafts will be launched. This year we got the approval from the Council of the commencement of Green Awards. I am confident that the corporates are going to participate in large numbers.

We have already completed 28 webinars as a part of Vasudhaiva Kutumbakam series and this year we got the VK series logo launched through the hands of Vice president of ICMAI. The Handbook on Value Chain implementation and Assurance were also released during the year along with the commencement of Sustainability Guidance Cell.

Our Sukhinovabhantu newsletter is completing 20th edition with continuous innovation and upgradation. I am given to understand that members and readers eagerly look forward to 25th of every month to see and read the newsletter. The newsletter is ever evolving you all might have observed many columns viz. 'Ask your psychologist', 'Mandala and Sustainability', 'Vruksh series' etc.

Heat is in at its peak and trees are considered to be the natural air coolers. I am sure that you will think planting a sapling during this summer.

Take care of yourself and family, Stay Hydrated, Enjoy the ongoing IPL too.

CMA (Dr.) Ashish P. Thatte
March 25, 2025

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

CMA Arunabha Saha
Practicing Cost Accountant
Thane

In this series, we will review the goal-wise performance along with individual Indicators to determine the performance of Indian states based on NITI Aayog's index (2023-24). The SDG wise status of three states Maharashtra, Madhya Pradesh and Manipur and comparison of India's stand on index creation.

Critical Review: Performance Indicators of SDG:

SDG-1 (No Poverty)

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
Head Count ratio as per the Multi-dimensional Poverty Index (%)	7.81	20.63	8.10	14.96
% of households with any unusual member covered by a health scheme or health Insurance	22.40	38.10	16.40	41.00
Persons offered employment as a % of person who demanded employment under- MENREGA	99.76	99.55	98.92	99.74
% of population (out of total eligible) receiving social protection benefits under PMMVY	27.91	61.44	62.40	46.29
% of household living in kachha houses	1.70	7.20	1.50	4.60
SDG-1 Index score	**68.00**	**67.00**	**74.00**	**72.00**

Key Highlights:

1. Multidimensional Poverty (Head Count Ratio %):
   - Madhya Pradesh (20.63%) has the highest poverty level.
   - Maharashtra (7.81%) and Manipur (8.10%) have much lower poverty levels, better than the national average (14.96%).
2. Health Insurance Coverage:
   - Madhya Pradesh (38.10%) has the best coverage among the three states but is still below India's average (41.00%).
   - Maharashtra (22.40%) and Manipur (16.40%) have significantly lower coverage.
3. Employment under MGNREGA:
   - All three states show excellent performance, close to India's 99.74%.
   - Maharashtra (99.76%) leads slightly, followed by Madhya Pradesh (99.55%) and Manipur (98.92%).

4. Social Protection Benefits under PMMVY:
   - Manipur (62.40%) and Madhya Pradesh (61.44%) perform better than India's average (46.29%).
   - Maharashtra lags significantly (27.91%).
5. Households in Kachha Houses:
   - Manipur (1.50%) and Maharashtra (1.70%) perform well, much better than India's 4.60%.
   - Madhya Pradesh (7.20%) has the highest percentage, indicating weaker housing conditions.
6. SDG-1 Index Score:
   - Manipur (74.00) outperforms the national average (72.00).
   - Maharashtra (68.00) and Madhya Pradesh (67.00) are below India's average.

SDG-2 (Zero Hunger)

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
% of beneficiaries covered under NFSA, 2013	100.00	97.87	80.15	99.01
% of children under 5 years who are underweight	36.10	33.00	13.30	32.10
% of children under 5 years who are stunted	35.20	35.70	23.40	35.50
% of pregnant women aged 15-49 years who are anaemic	45.70	52.80	32.40	52.20
% of women (aged 15-49 years) whose BMI below 18.5	20.80	23.00	7.20	18.70
Rice and wheat produced per unit area (3 years average) (kg/ha)	1,954.84	2,946.62	2,584.66	3,052.30
Gross value Added (constant price) in agriculture per worker (in lakhs/worker)	Null	0.92	Null	0.86
SDG-2 Index score	**45.00**	**48.00**	**77.00**	**57.00**

Key Highlights:

1. NFSA Beneficiary Coverage:
   - Maharashtra (100%) leads, slightly above India's average (99.01%).
   - Madhya Pradesh (97.87%) is also close, while Manipur (80.15%) lags significantly.
2. Malnutrition Indicators (Children Under 5):
   - Underweight: Maharashtra (36.10%) and Madhya Pradesh (33.00%) have higher rates than India's average (32.10%), while Manipur (13.30%) performs significantly better.
   - Stunting: Madhya Pradesh (35.70%) and Maharashtra (35.20%) are near India's average (35.50%). Manipur (23.40%) has the best performance.
3. Health of Women (15-49 years):
   - Anaemia in Pregnant Women: Madhya Pradesh (52.80%) is the worst performer, exceeding the national average (52.20%). Maharashtra (45.70%) is slightly better, while Manipur (32.40%) has the lowest anaemia rates.
   - Low BMI (<18.5): Manipur (7.20%) is the best performer, well below India's 18.70%. Maharashtra (20.80%) and Madhya Pradesh (23.00%) show higher malnutrition levels.

4. Agricultural Productivity:
   - Rice & Wheat Yield: Madhya Pradesh (2,946.62 kg/ha) performs well but remains below India's average (3,052.30 kg/ha). Maharashtra (1,954.84 kg/ha) lags behind.
   - Gross Value Added per Worker: Only Madhya Pradesh (0.92 lakhs/worker) has data, slightly above India's 0.86. Maharashtra and Manipur lack reported values.
5. SDG-2 Index Score:
   - Manipur (77.00) significantly outperforms India's average (57.00).
   - Maharashtra (45.00) and Madhya Pradesh (48.00) lag behind.

SDG-3 (Good Health & Well-being)

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
Maternal Mortality Ratio (per 100,000 live birth)	33.00	173.00	Null	97.00
Under 5 Mortality Rate (per 1,000 live births)	18.00	51.00	Null	32.00
% of children in the age group 9-11 months fully immunised	101.04	93.19	82.93	93.22
Tuberculosis case notification against target in %	86.71	76.04	85.13	87.13
HIV incidence per 1,000 uninfected population	0.04	0.02	0.27	0.05
Life expetance	72.90	67.40	Null	70.00
Suicide rate (per 100,000 population)	18.10	17.90	0.80	12.40
Death rate due to road traffic accidents (per 100,000 population)	12.52	16.20	3.97	12.40
% of institutional deliveries out of the total deliveries reported	99.66	98.48	87.23	97.18
Monthly per capita out-of-pocket expenditure on health as a share of MPCE	14.50	12.20	14.40	13.00
Health worker density per 1,00,000 population	69.93	36.72	53.13	49.45
SDG-3 Index score	**84.00**	**58.00**	**75.00**	**77.00**

Key Highlights:

1. Maternal & Child Health:
   - Maternal Mortality Ratio: Maharashtra (33) performs best, far better than India's average (97), while Madhya Pradesh (173) is the worst.
   - Under-5 Mortality Rate: Maharashtra (18) is significantly lower than the national average (32), whereas Madhya Pradesh (51) performs poorly.

2. Immunization & Disease Control:
   - Full Immunization: Maharashtra (101.04%) exceeds the national average (93.22%), while Manipur (82.93%) lags behind.
   - Tuberculosis Case Notification: Maharashtra (86.71%) and Manipur (85.13%) are close to India's average (87.13%), whereas Madhya Pradesh (76.04%) is below the target.
3. HIV & Life Expectancy:
   - HIV Incidence: Manipur (0.27) has the highest rate, exceeding India's average (0.05). Maharashtra (0.04) and Madhya Pradesh (0.02) perform well.
   - Life Expectancy: Maharashtra (72.90 years) is above India's average (70), while Madhya Pradesh (67.40 years) is lower.
4. Mental Health & Accidents:
   - Suicide Rate: Maharashtra (18.10) and Madhya Pradesh (17.90) are significantly higher than the national average (12.40), while Manipur (0.80) has the lowest rate.
   - Road Accident Death Rate: Madhya Pradesh (16.20) has the worst figures, while Manipur (3.97) has the lowest risk.
5. Healthcare Access & Spending:
   - Institutional Deliveries: Maharashtra (99.66%) and Madhya Pradesh (98.48%) exceed India's average (97.18%), while Manipur (87.23%) lags.
   - Health Worker Density: Maharashtra (69.93 per 100,000) is the highest, surpassing India's average (49.45), while Madhya Pradesh (36.72) is the lowest.
6. Overall SDG-3 Performance:
   - Maharashtra (84.00) leads, outperforming India's average (77.00).
   - Manipur (75.00) follows, while Madhya Pradesh (58.00) struggles.

SDG-4 (Quality Education)

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
Adjusted Net Enrolment Rate in elementary education (clss 1-8) (%)	100.00	81.50	100.00	96.50
Average annual dropout rate at secondary level (class 9-10)	10.70	10.10	1.30	12.60
Gross Enrolment Ratio in higher secondary (class 11-12) (%)	71.50	51.30	69.90	57.60
% 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	78.50	81.00	81.00	77.23
Gross enrolment Ratio in higher education (18-23 years)	35.50	28.90	35.40	28.40

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
% of persons with disability (15 years and above) who have completed at least secondary education	25.70	17.20	28.90	19.30
Gender Parity Index for higher education (18-23 years)	0.90	0.94	1.01	1.01
% of persons 15 years and above who are literate	85.10	72.60	88.60	76.70
% of schools with access to basic infrastucture (electricity and drinking water both)	94.61	76.26	66.04	88.65
% of Schools with computers	81.40	26.00	37.00	47.50
% of trained teacher at secondary level (class 9-10)	98.00	89.90	77.40	92.20
Pupil Teacher ratio at secondary level (clss 9-10)	21.00	23.00	9.00	18.00
SDG-4 Index score	**67.00**	**49.00**	**65.00**	**61.00**

Key Highlights:

1. Elementary & Secondary Education:
   - Net Enrolment in Elementary Education: Maharashtra (100%) and Manipur (100%) outperform India's average (96.50%), while Madhya Pradesh (81.50%) lags significantly.
   - Dropout Rate at Secondary Level: Manipur (1.30%) is the best, much lower than India's (12.60%), while Maharashtra (10.70%) and Madhya Pradesh (10.10%) are close to the national average.
2. Higher Education Enrolment & Learning Outcomes:
   - Gross Enrolment in Higher Secondary: Maharashtra (71.50%) and Manipur (69.90%) are much higher than India's (57.60%), while Madhya Pradesh (51.30%) lags behind.
   - Gross Enrolment in Higher Education: Maharashtra (35.50%) and Manipur (35.40%) surpass the national average (28.40%), while Madhya Pradesh (28.90%) is just above the average.
3. Education Accessibility for Special Groups:
   - Persons with Disabilities Completing Secondary Education: Manipur (28.90%) performs best, much above India (19.30%), while Madhya Pradesh (17.20%) is the lowest.
   - Gender Parity in Higher Education: Manipur (1.01) meets the national benchmark, while Maharashtra (0.90) is slightly below.
4. Literacy & School Infrastructure:
   - Literacy Rate (15+ years): Manipur (88.60%) leads, well above India's (76.70%), while Madhya Pradesh (72.60%) is the lowest.
   - Schools with Basic Infrastructure (Electricity & Water): Maharashtra (94.61%) is well above the national average (88.65%), while Manipur (66.04%) is significantly behind.
   - Schools with Computers: Maharashtra (81.40%) is the highest, much above India's (47.50%), while Madhya Pradesh (26.00%) is the worst.

5. Teacher Training & Pupil-Teacher Ratio:
   - Trained Teachers at Secondary Level: Maharashtra (98.00%) is better than India (92.20%), while Manipur (77.40%) lags.
   - Pupil-Teacher Ratio (Lower is Better): Manipur (9.00) is the best, much better than India's (18.00), while Maharashtra (21.00) and Madhya Pradesh (23.00) are slightly above the average.
6. Overall SDG-4 Performance:
   - Maharashtra (67.00) and Manipur (65.00) perform above India's (61.00), while Madhya Pradesh (49.00) struggles significantly.

SDG-5 (Gender Equality)

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
Sex ratio at birth	913.00	956.00	967.00	920.00
Ration of female to male average wage/ salary earnings received among regular wage/ salaried employees	0.76	0.83	0.81	0.76
% of ever married women aged 18-19 years who have ever experience spousal violence (physical/ sexual)	25.20	28.00	39.60	29.20
Ratio of the female to male Labour Force Participantions Rate (15-19 years)	0.54	0.55	0.45	0.48
Proportion of women in managerial positions including women in board of directors, in listed companies (per 1,000 persons)	212.28	196.61	Null	210.24
% of currently married women aged 15-49 years who have their demand for family palning satisfied by any modern method	84.20	82.50	24.70	74.10
% of female operated operatinal land holdings	15.46	11.88	6.80	13.96
% of women (aged 15-49 years) who owns a mobile phone that they themselves use	54.80	38.50	72.20	53.90
% of curretly married women (aged 15-49 years) who usually paticipate in three household decisions	89.80	86.00	94.80	88.70
SDG-5 Index score	**54.00**	**48.00**	**58.00**	**49.00**

Key Highlights

1. Sex Ratio at Birth:
   - Manipur (967) has the best sex ratio, above India's average (920).
   - Maharashtra (913) is below the national average, while Madhya Pradesh (956) is better but still below Manipur.
2. Wage Equality (Female to Male Salary Ratio):
   - Madhya Pradesh (0.83) leads, surpassing India (0.76).
   - Manipur (0.81) is slightly below MP, while Maharashtra (0.76) matches the national average.
3. Spousal Violence (Ever Married Women 18-19 Years):
   - Manipur (39.60%) has the highest spousal violence cases, far exceeding India's (29.20%).
   - Madhya Pradesh (28.00%) and Maharashtra (25.20%) perform better than the national average.
4. Female Labour Force Participation (15-19 Years):
   - Madhya Pradesh (0.55) is slightly above Maharashtra (0.54) and the national average (0.48).
   - Manipur (0.45) has the lowest participation rate.
5. Women in Managerial Positions:
   - Maharashtra (212.28 per 1,000) performs best, surpassing India (210.24).
   - Madhya Pradesh (196.61) is slightly below the national average, while data for Manipur is unavailable.
6. Family Planning (Demand Met by Modern Methods):
   - Maharashtra (84.20%) and Madhya Pradesh (82.50%) exceed the national average (74.10%).
   - Manipur (24.70%) is significantly behind, showing major gaps in reproductive health access.
7. Women-Owned Land Holdings:
   - Maharashtra (15.46%) and Madhya Pradesh (11.88%) perform above the national average (13.96%).
   - Manipur (6.80%) has the lowest share of female land ownership.
8. Mobile Phone Ownership (Women 15-49 Years):
   - Manipur (72.20%) has the highest percentage, exceeding India's (53.90%).
   - Maharashtra (54.80%) is just above the national average, while Madhya Pradesh (38.50%) lags significantly.
9. Women's Participation in Household Decisions:
   - Manipur (94.80%) leads, exceeding India's (88.70%).
   - Maharashtra (89.80%) and Madhya Pradesh (86.00%) perform above the national benchmark.
10. Overall SDG-5 Index Score:
    - Manipur (58.00) leads, followed by Maharashtra (54.00).
    - India (49.00) and Madhya Pradesh (48.00) show weaker gender equality outcomes.

SDG-6 (Clean Water and Sanitation)

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
% of rural household getting safe and adequate drinking water within premises thorugh PWS	85.20	61.40	78.19	75.75
% of rural population having improved source of drinking water	99.82	99.99	100.00	99.29
% of individual husehold toilets constructed against target	100.00	100.00	100.00	100.00
% of districts verified to be ODF	100.00	100.00	100.00	100.00
% of schools with functinal girls toilets	94.60	95.90	75.40	94.70
Stage of ground Water extraction (%)	53.83	58.75	7.99	50.30
% of block/ mandals/ taluka over-exploited	2.55	8.20	-	11.23
SDG-6 Index score	**93.00**	**87.00**	**83.00**	**88.00**

Key Highlights:

1. Access to Safe Drinking Water (PWS):
   - Maharashtra (85.20%) performs best among the states and above the national average (75.75%).
   - Madhya Pradesh (61.40%) is significantly below the national average.
   - Manipur (78.19%) is better than India's but lower than Maharashtra.
2. Improved Drinking Water Source:
   - Manipur (100%) leads, followed closely by Madhya Pradesh (99.99%) and Maharashtra (99.82%).
   - All states perform above the national average (99.29%).
3. Household Toilet Construction and ODF Status:
   - All states have achieved 100% targets for individual household toilet construction and Open Defecation Free (ODF) status.
4. Schools with Functional Girls' Toilets:
   - Madhya Pradesh (95.90%) and Maharashtra (94.60%) are above the national average (94.70%).
   - Manipur (75.40%) has the lowest coverage, well below the national average.
5. Groundwater Extraction:
   - Madhya Pradesh (58.75%) has the highest groundwater extraction, exceeding the national average (50.30%).
   - Maharashtra (53.83%) is slightly above India's average.
   - Manipur (7.99%) has minimal groundwater extraction, indicating better conservation.
6. Over-Exploited Blocks/Mandals/Talukas:
   - Madhya Pradesh (8.20%) has a higher rate than Maharashtra (2.55%).
   - India's average (11.23%) is worse than both states.
   - Manipur's data is not available.

7. Overall SDG-6 Index Score:
   - Maharashtra (93.00) leads, followed by Madhya Pradesh (87.00).
   - Manipur (83.00) lags behind, but all states perform better than the national average (88.00).

SDG-7 (Affordable and Clean Energy)

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
% of Household Electrification	100.00	100.00	100.00	100.00
% of LPG/ PNG Connectins against no. of Households	116.84	91.73	90.12	96.35
SDG-7 Index score	**100.00**	**90.00**	**88.00**	**100.00**

Key Highlights:

1. Household Electrification:
   - All states have achieved 100% household electrification, matching the national target.
2. LPG/PNG Connections (as % of Households):
   - Maharashtra (116.84%) has the highest coverage, exceeding the number of households, possibly due to multiple connections per household.
   - Madhya Pradesh (91.73%) and Manipur (90.12%) are below the national average (96.35%), indicating a gap in clean energy access.
3. SDG-7 Index Score:
   - Maharashtra (100.00) matches the national target and leads among the states.
   - Madhya Pradesh (90.00) and Manipur (88.00) are lagging, reflecting lower LPG/PNG adoption.

SDG-8 (Decent Work and Economic Growth)

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
Annual growth rate of GDP (constant prices) per capita (%)	Null	5.34	Null	5.88
Unemployment rate (%) (15-59 years)	3.40	1.70	5.00	3.40
LFPR (%) (15-59 years)	64.20	67.80	55.70	61.60
% of regualar wage/ salaried employees in non-agricultural sector without any social security	48.00	59.50	31.60	53.90
% of households with any unusual number with a bank or post office	94.40	95.60	94.90	95.70
Number of functioning brances of commercial banks 1,00,000 population	11.47	9.00	7.64	11.75
Automated Teller Machines per 1,00,000 population	22.62	13.13	11.99	18.30
% of woment account holders in PMJOY	55.72	55.57	57.46	55.63
SDG-8 Index score	**73.00**	61.00	57.00	68.00

Key Highlights:

1. Economic Growth & Employment:
   - GDP Growth Data Missing for Maharashtra & Manipur. Madhya Pradesh (5.34%) is slightly below India's average (5.88%).
   - Unemployment Rate: Madhya Pradesh (1.70%) has the lowest unemployment, while Manipur (5.00%) is the highest. Maharashtra matches the national rate (3.40%).
   - Labour Force Participation Rate (LFPR): Madhya Pradesh (67.80%) leads, while Manipur (55.70%) is below the national average (61.60%).
2. Job Security & Financial Inclusion:
   - Social Security Gap: Madhya Pradesh (59.50%) has the highest percentage of workers without social security, while Manipur (31.60%) has the lowest. Maharashtra is better than the national average (53.90%) at 48.00%.
   - Financial Access: Maharashtra (94.40%) and Manipur (94.90%) are slightly below India's 95.70% in bank/post office access.
   - Banking Infrastructure: Maharashtra has more bank branches (11.47 per 1,00,000 people) than Madhya Pradesh (9.00) and Manipur (7.64). India's average is 11.75.
   - ATM Availability: Maharashtra (22.62) leads in ATMs per population, above the national average (18.30).
3. Women's Financial Inclusion:
   - Manipur (57.46%) has the highest percentage of women account holders in PMJOY, while Maharashtra (55.72%) and Madhya Pradesh (55.57%) are near the national average (55.63%).
4. Overall SDG-8 Score:
   - Maharashtra (73.00) is the best-performing state, ahead of the national average (68.00).
   - Madhya Pradesh (61.00) and Manipur (57.00) are below the national benchmark, indicating room for improvement in economic opportunities and financial infrastructure.

SDG-9 (Industry, Innovation, and Infrastructure)

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
% of targated habitations connected by all-weather raods under PMGSY	99.55	99.98	95.40	99.70
% of Share of GVA in Manufacturing to total GVA (current price)	Null	7.55	Null	14.34
Manufacturing employment as a % of total employment	12.42	6.27	14.72	11.42
% of Share of GVA in Services to total GVA (current price)	Null	35.90	Null	54.18
Services employment as a % of total employment	32.15	20.76	37.79	27.75
Innovation score as per the India Innovation Index	16.06	12.74	19.37	36.40
% of households that own at least one mobile phone	93.10	89.60	95.90	93.30
% of inhabited villages with 3G/4G mobile internet coverage	92.27	95.85	77.14	95.08
SDG-9 Index score	**54.00**	39.00	62.00	61.00

Key Highlights:

1. Infrastructure & Connectivity:
   - Rural Road Connectivity: Madhya Pradesh (99.98%) and Maharashtra (99.55%) are close to the national average (99.70%), while Manipur (95.40%) lags slightly.
   - Mobile Phone Ownership: Manipur (95.90%) leads, followed by Maharashtra (93.10%) and Madhya Pradesh (89.60%), all close to India's average (93.30%).
   - 3G/4G Mobile Internet Coverage: Madhya Pradesh (95.85%) is almost at par with India (95.08%), Maharashtra (92.27%) is slightly below, while Manipur (77.14%) lags significantly.
2. Manufacturing & Services Sector:
   - Manufacturing Employment: Manipur (14.72%) exceeds the national average (11.42%), while Maharashtra (12.42%) is slightly above, and Madhya Pradesh (6.27%) is significantly lower.
   - Services Employment: Manipur (37.79%) dominates, surpassing Maharashtra (32.15%), while Madhya Pradesh (20.76%) is below the national average (27.75%).
   - GVA in Manufacturing & Services: Data missing for Maharashtra and Manipur, but Madhya Pradesh (35.90% GVA from services) is lower than India's 54.18%.
3. Innovation & Industrial Growth:
   - Innovation Score: All three states perform significantly below the national average (36.40%). Manipur (19.37%) leads among the three, followed by Maharashtra (16.06%) and Madhya Pradesh (12.74%).
4. Overall SDG-9 Score:
   - Manipur (62.00) surpasses the national average (61.00), indicating a strong performance in employment and connectivity.
   - Maharashtra (54.00) is below average, despite good road and mobile connectivity.
   - Madhya Pradesh (39.00) has the weakest performance, indicating room for improvement in innovation, employment, and infrastructure.

SDG-10 (Reducing Inequalities)

States	Gini coefficient	% of seats held by women in PRIs	% of SC/ST seats in State Legislative Assembly	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
Maharashtra	0.17	53.47	18.75	42.80	20.70	7.10	**86.00**
Madhya Pradesh	0.22	50.00	35.65	43.90	68.20	19.40	**54.00**
Manipur	0.17	50.69	33.33	69.60	–	0.10	**70.00**
India	0.20	45.61	28.57	50.40	28.60	9.60	**86.00**

Key Highlights:

1. Income Inequality (Gini Coefficient):
   - Maharashtra and Manipur (both 0.17) have lower income inequality than India's average (0.20).
   - Madhya Pradesh (0.22) has the highest income disparity among the three states.
2. Political Representation:
   - Women's Representation in PRIs: Maharashtra (53.47%) leads, followed by Manipur (50.69%) and Madhya Pradesh (**50.00%), all above India's average (45.61%).
   - SC/ST Representation in State Legislative Assembly: Madhya Pradesh (35.65%) is the highest, followed by Manipur (33.33%), both above the national average (28.57%), while Maharashtra (18.75%) is significantly lower.
3. Gender Equality in Professional & Technical Jobs:
   - Manipur (69.60%) has the highest female-to-male ratio in technical professions, far above the national average (50.40%).
   - Maharashtra (42.80%) and Madhya Pradesh (43.90%) are below the national average.
4. Crime Rates Against SC/ST Communities:
   - Crimes Against SCs: Madhya Pradesh (68.20 per 1,00,000 SC population) has an alarmingly high rate, far exceeding the national average (28.60), while Maharashtra (20.70) is below average. Manipur's data is unavailable.
   - Crimes Against STs: Madhya Pradesh (19.40) has the highest rate, double the national average (9.60). Maharashtra (7.10) and Manipur (0.10) have much lower crime rates.
5. Overall SDG-10 Score:
   - Maharashtra (86.00) is at par with the national average, performing well in political representation and crime reduction.
   - Manipur (70.00) performs better than Madhya Pradesh, particularly in gender equality in employment and lower crime rates.
   - Madhya Pradesh (54.00) scores the lowest, primarily due to high crime rates against SC/ST communities despite strong SC/ST political representation.

SDG-11

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
% of urban households living in kachha house	0.20	2.00	0.40	0.90
% of individual household toilets constructed against target SBM (U)	114.63	113.13	93.20	95.29
Deaths due to raod accedents in urban areas (per 1,00,000 population)	9.98	20.11	4.55	12.68
% of wards with 100% door to door waste collection (SBM(U))	99.97	99.95	99.34	97.00
% of MSW processed to total MSW generated (SBM(U))	94.93	98.82	96.07	78.46

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
% of wards with 100% source segrigation (SBM(U))	99.46	99.29	97.06	90.00
Installed sewage treatment capacity as a % of sewage generated in urban area	107.82	52.77	–	51.00
SDG-11 Index score	**98.00**	86.00	83.00	83.00

Key Highlights:

1. Housing Quality:
   - Maharashtra (0.20%) and Manipur (0.40%) have very low percentages of urban households living in kachha houses, well below the national average (0.90%).
   - Madhya Pradesh (2.00%) has the highest proportion of kachha houses.
2. Sanitation (Toilets Construction under SBM-U):
   - Maharashtra (114.63%) and Madhya Pradesh (113.13%) have exceeded their individual toilet construction targets.
   - Manipur (93.20%) is below the national average (95.29%).
3. Urban Road Safety (Deaths Due to Road Accidents per 1,00,000 population):
   - Madhya Pradesh (20.11) has the highest road accident fatality rate, far exceeding the national average (12.68).
   - Manipur (4.55) has the lowest accident rate, followed by Maharashtra (9.98).
4. Waste Management (Door-to-Door Collection & Processing):
   - Door-to-door waste collection: Maharashtra (99.97%) and Madhya Pradesh (99.95%) outperform the national average (97.00%), while Manipur (99.34%) is slightly behind.
   - Municipal solid waste (MSW) processing: Madhya Pradesh (98.82%) is the highest, followed by Manipur (96.07%) and Maharashtra (94.93%), all significantly above the national average (78.46%).
5. Source Segregation of Waste:
   - Maharashtra (99.46%) and Madhya Pradesh (99.29%) have nearly universal source segregation, well above the national average (90.00%).
   - Manipur (97.06%) is slightly lower but still above India's average.
6. Sewage Treatment Capacity:
   - Maharashtra (107.82%) has exceeded its required sewage treatment capacity.
   - Madhya Pradesh (52.77%) and India (51.00%) are significantly below required levels.
   - Manipur's data is unavailable.
7. Overall SDG-11 Index Score:
   - Maharashtra (98.00) is the best performer, excelling in sanitation, waste management, and sewage treatment.
   - Madhya Pradesh (86.00) lags behind due to high road accident rates and lower sewage treatment capacity.
   - Manipur (83.00) is at par with the national average but needs improvement in sanitation coverage.

SDG-12 (Responsible Consumption & Production)Bottom of Form

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 popu-lation (MT/ Annum)	% of Bio Medical Waste (BMW) treated to total quantitiy of BMW generated	SDG-12 Index score
Maharashtra	172.54	50.84	13.52	2.51	100.00	**77.00**
Madhya Pradesh	100.01	61.42	83.76	1.65	98.84	**82.00**
Manipur	76.64	77.46	–	3.27	99.07	**67.00**
India	166.43	65.24	54.90	3.04	91.52	**78.00**

Key Highlights:

1. Fossil Fuel Consumption (kg per capita):
   - Maharashtra (172.54 kg) has the highest per capita fossil fuel consumption, exceeding the national average (166.43 kg).
   - Madhya Pradesh (100.01 kg) and Manipur (76.64 kg) have much lower consumption, indicating relatively lower dependency on fossil fuels.
2. Use of Nitrogenous Fertilizers (% of total NPK):
   - Manipur (77.46%) has the highest dependency on nitrogenous fertilizers, far exceeding the national average (65.24%).
   - Madhya Pradesh (61.42%) and Maharashtra (50.84%) are below the national average, suggesting a more balanced NPK usage.
3. Recycling/Utilization of Hazardous Waste (% of total hazardous waste generated):
   - Madhya Pradesh (83.76%) has the highest hazardous waste recycling rate, well above the national average (54.90%).
   - Maharashtra (13.52%) is significantly lower, indicating poor hazardous waste management.
   - Data for Manipur is unavailable.
4. Plastic Waste Generation (MT per 1,000 population per year):
   - Manipur (3.27 MT) has the highest per capita plastic waste generation, exceeding the national average (3.04 MT).
   - Maharashtra (2.51 MT) and Madhya Pradesh (1.65 MT) perform better in terms of lower plastic waste.
5. Biomedical Waste (BMW) Treatment (% of total generated BMW treated):
   - Maharashtra (100.00%) has perfect biomedical waste management, followed closely by Manipur (99.07%) and Madhya Pradesh (98.84%), all outperforming the national average (91.52%).

6. Overall SDG-12 Index Score:
   - Madhya Pradesh (82.00) is the best performer, excelling in hazardous waste recycling and low plastic waste generation.
   - Maharashtra (77.00) and India (78.00) are at similar levels, but Maharashtra needs improvement in hazardous waste recycling.
   - Manipur (67.00) has the lowest score, primarily due to high nitrogenous fertilizer use, high plastic waste generation, and lack of data on hazardous waste recycling.

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
Maharashtra	8.73	27.50	37.50	2,816.00	96.50	**73.00**
Madhya Pradesh	3.81	16.50	38.20	3,809.00	98.40	**63.00**
Manipur	81.17	11.00	39.10	1,822.00	100.00	**71.00**
India						

Key Highlights:

1. Human Lives Lost Due to Extreme Weather Events (per 1 crore population):
   - Manipur (81.17) has the highest vulnerability to extreme weather events.
   - Maharashtra (8.73) and Madhya Pradesh (3.81) perform significantly better.
2. Disaster Preparedness (Disaster Resilience Index Score):
   - Maharashtra (27.50) has the best disaster preparedness.
   - Madhya Pradesh (16.50) is moderately prepared, while Manipur (11.00) is the least prepared.
3. Renewable Energy Share in Total Installed Capacity:
   - Manipur (39.10%) has the highest share of renewable energy.
   - Madhya Pradesh (38.20%) and Maharashtra (37.50%) follow closely.
4. Air Pollution Impact (DALY Rate per 1,00,000 population):
   - Madhya Pradesh (3,809) has the highest air pollution impact, indicating poor air quality.
   - Maharashtra (2,816) is better but still has significant pollution-related health risks.
   - Manipur (1,822) has the lowest air pollution impact.

5. Environmental Compliance by Industries:
   - Manipur (100%) has the best industrial compliance with environmental standards.
   - Madhya Pradesh (98.40%) and Maharashtra (96.50%) also perform well.
6. Overall SDG-13 Index Score:
   - Maharashtra (73.00) leads, benefiting from strong disaster preparedness and good industrial compliance.
   - Manipur (71.00) is close behind but struggles with extreme weather vulnerability and weak disaster preparedness.
   - Madhya Pradesh (63.00) lags behind, primarily due to poor disaster preparedness and high air pollution impact.

SDG-15 (Life on Land)

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
Forest cover as a % of total geographical area	16.51	25.14	74.34	21.71
Tree covered as a & of total geographical area	3.93	2.61	0.76	2.91
Combine of las tow	20.44	27.75	75.10	24.62
% of area covered under afforestation schemes to the total geographical area	0.26	Null	Null	0.40
% change in carbon stock in forest cover	2.52	3.49	-1.00	1.11
% of degrated land over total land area	36.72	19.17	38.29	27.77
% of increase in area of desertification	3.47	1.46	1.76	1.50
No. of cases under Wild life protectin Act per million hectares of protected area	10.00	22.00	89.00	16.00
SDG-15 Index score	**68.00**	90.00	83.00	75.00

Key Highlights:

1. Forest & Tree Cover:
   - Manipur (74.34%) has the highest forest cover, far exceeding the national average (21.71%).
   - Madhya Pradesh (25.14%) is slightly above India's average, while Maharashtra (16.51%) is below average.
   - Tree cover: Maharashtra (3.93%) is above the national average (2.91%), while Madhya Pradesh (2.61%) and Manipur (0.76%) are lower.

2. Carbon Stock & Afforestation Efforts:
   - Carbon stock increase: Madhya Pradesh (3.49%) and Maharashtra (2.52%) are performing above the national average (1.11%), while Manipur (-1.00%) has lost carbon stock, indicating deforestation or degradation.
   - Afforestation: Maharashtra (0.26%) has some afforestation coverage, though below the national average (0.40%), while data for Madhya Pradesh and Manipur is missing.
3. Land Degradation & Desertification:
   - Degraded land: Manipur (38.29%) and Maharashtra (36.72%) have the highest proportion of degraded land, well above the national average (27.77%).
   - Desertification: Maharashtra (3.47%) has the worst rate of desertification increase, followed by Manipur (1.76%) and Madhya Pradesh (1.46%), all near the national average (1.50%).
4. Wildlife Protection & Enforcement:
   - Wildlife Protection Act Violations: Manipur (89 cases per million hectares) has the highest number of violations, followed by Madhya Pradesh (22 cases), both exceeding the national average (16 cases).
   - Maharashtra (10 cases) has fewer violations than the national average.
5. Overall SDG-15 Index Score:
   - Madhya Pradesh (90.00) leads, performing well in forest carbon stock increase and lower desertification.
   - Manipur (83.00) follows, with high forest cover but poor land degradation and wildlife violations.
   - Maharashtra (68.00) lags behind, with high land degradation and desertification rates.

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

Indicators	Maharashtra	Madhya Pradesh	Manipur	India
Murder per 1 lakh population	1.80	2.30	15.00	2.10
Cognizable crimes against children per 1 lakh population	57.50	71.00	11.60	36.60
No. of victims of human trafficking per 10 lakh population	6.40	1.84	–	4.37
No. of mission children per 1,00,000 child population	8.50	39.47	5.83	18.77
No. of courts per 1,00,000 population	1.80	2.39	1.98	1.01
Cases under prevention of Corruption Act and related sections of IPC per 10 lakhs population	5.96	3.42	3.75	3.00
Charge sheeting rates of IPC crime	75.30	86.60	10.40	71.30
% of children under 5 years whose birth was registered	96.30	94.10	87.40	89.10
% of population covered under Aadhar	95.14	92.01	82.54	95.47
SDG-16 Index score	**76.00**	73.00	69.00	74.00

Key Highlights:

1. Crime & Safety Indicators:
   - Murder rate: Manipur (15.00 per lakh population) is alarmingly high, much above the national average (2.10), while Maharashtra (1.80) and Madhya Pradesh (2.30) are close to the national rate.
   - Cognizable crimes against children: Madhya Pradesh (71.00 per lakh population) has the highest, Maharashtra (57.50) is also above the national average (36.60), while Manipur (11.60) is significantly lower.
   - Human trafficking victims: Maharashtra (6.40 per 10 lakh population) is above the national average (4.37), while Madhya Pradesh (1.84) is lower, and data for Manipur is unavailable.
2. Justice System & Law Enforcement:
   - Mission children (missing children cases): Madhya Pradesh (39.47 per lakh child population) has the highest rate, well above the national average (18.77), while Maharashtra (8.50) and Manipur (5.83) report much lower cases.
   - Courts per 1 lakh population: All three states have a higher number of courts than the national average (1.01), with Madhya Pradesh (2.39) leading, followed by Manipur (1.98) and Maharashtra (1.80).
3. Corruption & Crime Conviction:
   - Cases under Prevention of Corruption Act: Maharashtra (5.96 per 10 lakh population) is the highest, exceeding the national average (3.00), while Manipur (3.75) and Madhya Pradesh (3.42) are also above average.
   - Charge sheeting rate of IPC crimes: Madhya Pradesh (86.60%) has the best conviction rate, followed by Maharashtra (75.30%, above the national average of 71.30%). Manipur (10.40%) is drastically low, indicating weak law enforcement.
4. Birth Registration & Aadhar Coverage:
   - Birth registration: Maharashtra (96.30%) and Madhya Pradesh (94.10%) exceed the national average (89.10%), while Manipur (87.40%) lags.
   - Aadhar coverage: Maharashtra (95.14%) is on par with the national level (95.47%), Madhya Pradesh (92.01%) is slightly lower, and Manipur (82.54%) is the lowest.
5. Overall SDG-16 Index Score:
   - Maharashtra (76.00) performs the best, followed by Madhya Pradesh (73.00) and Manipur (69.00), all close to the national average (74.00).
   - Manipur's high crime rates, weak law enforcement, and low birth registration bring down its overall ranking.

Composite Performance:

	2023-24			2020-21		
	Maharashtra	Madhya Pradesh	Manipur	Maharashtra	Madhya Pradesh	Manipur
SDG-1	68	67	74	66	44	60
SDG-2	45	48	77	44	43	64
SDG-3	84	58	75	83	62	68
SDG-4	67	49	65	64	45	63
SDG-5	54	48	58	51	55	41
SDG-6	93	87	83	90	88	87
SDG-7	100	90	88	100	86	96
SDG-8	73	61	57	62	60	36
SDG-9	54	39	62	66	37	35
SDG-10	86	54	70	71	51	70
SDG-11	98	86	83	87	81	65
SDG-12	77	82	67	82	78	89
SDG-13	73	63	71	58	49	57
SDG-15	68	90	83	52	84	60
SDG-16	76	73	69	69	66	69
Composite Score	73	67	72	70	62	64

Key Highlights of SDG Performance (2023-24 vs. 2020-21):

1. Overall Improvement in Composite SDG Scores:
   - Maharashtra: Improved from 70 to 73
   - Madhya Pradesh: Improved from 62 to 67
   - Manipur: Improved from 64 to 72
2. Significant Progress in Specific SDGs:
   - SDG-1 (No Poverty): Improvement across all three states, with Madhya Pradesh showing the highest jump (from 44 to 67).
   - SDG-2 (Zero Hunger): All states saw growth, Manipur improved significantly from 64 to 77.
   - SDG-8 (Decent Work & Economic Growth): Notable progress in Maharashtra (62 to 73) and Manipur (36 to 57).
   - SDG-13 (Climate Action): Improved significantly in all states, with Maharashtra rising from 58 to 73.
   - SDG-15 (Life on Land): Manipur showed the biggest jump (60 to 83), and Maharashtra also improved (52 to 68).

3. Declining or Slow Progress Areas:
    - SDG-9 (Industry, Innovation & Infrastructure): Maharashtra saw a drop from 66 to 54, while Madhya Pradesh showed only a slight improvement from 37 to 39.
    - SDG-12 (Responsible Consumption & Production): Maharashtra declined slightly (82 to 77), and Manipur dropped (89 to 67).
    - SDG-6 (Clean Water & Sanitation): Manipur declined from 87 to 83.
4. Strong Governance & Institutional Improvements:
    - SDG-16 (Peace, Justice & Strong Institutions): Improvements across Maharashtra (69 to 76) and Madhya Pradesh (66 to 73), while Manipur remained unchanged at 69.

Final Takeaway:

- Overall SDG performance has improved across all three states, with strong progress in poverty reduction, hunger, climate action, and environmental sustainability.
- Economic and infrastructure-related indicators (SDG-9, SDG-12) need further improvement.
- Manipur showed the most improvement in environmental sustainability (SDG-15) and hunger reduction (SDG-2).
- Maharashtra led in governance (SDG-16) and economic growth (SDG-8).
- Madhya Pradesh showed steady progress but remains behind in industry and innovation (SDG-9).

Conclusion:

Maharashtra, Madhya Pradesh, and Manipur have shown overall improvement in SDG performance, with notable progress in poverty reduction, hunger, economic growth, and climate action. However, challenges remain in infrastructure development (SDG-9) and responsible consumption (SDG-12), requiring focused policy efforts. Continued emphasis on sustainable development, innovation, and environmental resilience will be crucial for long-term progress across all three states. SB

MONTHLY NEWS

Sustainability – A Global Outlook

1. **Nations salvage funding deal to reverse wildlife decline**

   The world's nations have agreed a funding plan at UN talks in Rome for reversing the decline of nature. Countries were eventually able to overcome deep divisions which had led to the breakdown of negotiations last year in Colombia.It is hoped that the deal will help countries to reach their goal of raising $200bn (£159bn) by 2030 for biodiversity action.

   Read More.....

2. **UN nature meetings finalize $200B plan to protect biodiversity by 2030**

   Governments reached a crucial agreement on February 27, 2025, in Rome to mobilize the resources needed to implement the Kunming-Montreal Global Biodiversity Framework (KMGBF). This follows COP16 negotiations, which resumed after being suspended in Cali, Colombia, in 2024.

   Read More.....

3. **National Wealth fund change must not undermine green investment**

   Clean energy is vital for national security, say campaigners, as the UK chancellor announces the NWF is to include defence spending

   Read More.....

4. **EU proposes three-year compliance period for automakers to meet CO2 emission targets**

   The European Commission has announced a plan to extend the compliance period for CO2 emissions targets from one year to three, giving automakers more time to meet stringent regulations and avoid hefty fines.

   Read More.....

5. **EU's plans to expand emissions trading system could worsen inequality**

   The EU's plan to expand its Emissions Trading System in 2027 to include buildings and road transport could significantly impact some consumers' ability to buy goods and services, research has found.

   Read More.....

6. **IFAC updates Global Accountancy Standards to embed sustainability reporting and assurance**

   Demand for robust sustainability reporting has surged globally, prompting IFAC (International Federation of Accountants) to significantly update the International Education Standards (IESs). The revised IESs now embed sustainability competencies–including analysis, reporting, and assurance–into the foundational training for aspiring accountants.

   Read More.....

7. Premier League launches environmental sustainability strategy to achieve Net Zero by 2040

The Premier League has unveiled its Environmental Sustainability Strategy, outlining a comprehensive roadmap to reduce its carbon footprint, support clubs in adopting greener operations, and engage fans in sustainability initiatives. This plan strengthens the league's commitment to reaching net zero emissions by 2040 and builds upon previous sustainability efforts, including the Premier League's Environmental Sustainability Commitment introduced in 2024.

Read More.....

8. Germany's Emissions Fell 3.4% in 2024, On Track for 2030 Climate Goals

Germany's Federal Environment Agency announced on March 14 that greenhouse gas emissions in Germany fell by around 3.4% year-on-year in 2024, putting the country back on track to meet its 2030 climate targets.

Read More.....

9. Brazil to Create $125Bn Fund for COP30

Brazil is preparing to announce a $125 bn fund at the COP30 summit to incentivise climate action, while early speeches and international contributions aim to ease logistical challenges during the event.

Read More.....

10. Asia's green jet fuel ambitions exceed demand, heralding exports

Asia's ability to supply sustainable aviation fuel will outpace regional demand this year and next as more production comes online, increasing exports and potentially lowering prices for the fuel.

Read More.....

Sustainability – Indian Context

1. Companies urged to pay into new UN fund to help protect nature

Countries are taking part in the COP16 in a fresh attempt to generate the funding needed to halt the destruction of ecosystems and species. Countries are taking part in the COP16 event in a fresh attempt to generate the funding needed to halt the destruction of ecosystems and species, with many arguing for a larger role for the private sector.

Read More.....

2. Yes Bank earns highest sustainability rank again

Yes Bank has emerged as India's highest-rated bank in sustainability for the third consecutive year. As per the S&P Global Corporate Sustainability Assessment (CSA) 2024 and the Carbon Disclosure Project (CDP), the bank got a CSA score of 72/100. It is the only Indian bank among 780 global firms, out of 7,690 assessed.

Read More.....

3. Delhi to get over 1,000 electric buses this month

Delhi will receive more than 1,000 electric buses in March month, Transport Minister Pankaj Kumar Singh said in an interview with PTI. It will be a major step toward sustainable transport

Read More.....

4. India has 6,327 dolphins, PM Modi releases first estimate report

River dolphins are crucial indicators of a healthy river ecosystem, and their dwindling numbers have raised concerns about pollution and habitat destruction. Prime Minister Narendra Modi released the first-ever comprehensive report on riverine dolphin estimation in India, revealing a total of 6,327 dolphins across the country.

Read More.....

5. India's first hydrogen train to launch on Jind-Sonipat route by March 31

India is set to mark a historic milestone in its railway sector with the launch of its first hydrogen-powered train. The train is scheduled to commence operations by March 31, 2025, on the Jind-Sonipat route in Haryana. This ground-breaking initiative aligns with India's vision for sustainable transportation, reducing carbon emissions, and embracing cleaner energy sources.

Read More.....

6. Solar capacity addition seen to jump to 90 GW in FY26-FY27

India's solar capacity addition is expected to go up to 85-90 gigawatt (GW) for FY26 and FY 27 combined, with residential rooftop solar driving the expansion, as per a latest report by SBI Caps. Driven by resilient demand, the capacity addition is likely to double to 30 GW in the current fiscal year 2024-25.

Read More.....

7. Jal Shakti Ministry intensifies efforts to tackle declining groundwater levels

While the world is in a hurry to transition from fossil fuel-generated electricity to renewable energy, moving away from coal-powered electricity is seen as the greatest challenge for India.

Read More.....

8. India expands use of advanced technology for marine conservation

India is integrating cutting-edge technologies, including satellite imagery and autonomous underwater vehicles, to bolster marine conservation efforts.

Read More.....

9. 13 0f World's 20 most polluted cities in India, Delhi most polluted capital as per World Air Quality Report 2024

The World Air Quality Report 2024 by Swiss air quality technology company IQAir said Delhi remains the most polluted capital city globally, while India ranked as the world's fifth most polluted country in 2024, down from third in 2023.

Read More.....

10. MNRE likely to meet half of the PM Surya Ghar Yojna target for FY25

The Ministry of New & Renewable Energy (MNRE) expects to install rooftop solar (RTS) plants on around 12 lakh households under the PM Surya Ghar: Muft Bijli Yojna in the current fiscal year, ending this month, against the target of covering 25 lakh households.

Read More.....

Climate Related Disclosures

The following is the ICMAI Sustainability Standard (ISS2) - Climate related disclosures

1. Introduction

This standard deals with the principles and methods of identification, classification, measurement and disclosure of information about an entity's climate-related risks their likely impact and opportunities that could reasonably be expected to affect the entity's performance, prospects and cash flows, over the short, medium or long term and how the entity manages these climate risks, their impacts, and opportunities that is useful to the stakeholders assessment of performance and prospects of the entity including providing resources

2. Objective

The objective of this standard is to bring uniformity and consistency in the principles and methods of identification, classification, measurement and disclosure of information about an entity's climate-related risks their likely impact and opportunities that could reasonably be expected to affect the entity's performance, prospects and cash flows, over the short, medium or long term with reasonable accuracy.

3. Scope

This standard should to be applied to Business Responsibility and Sustainability Reporting – Principle 6 disclosures which requires identification, classification, measurement and disclosure of information about an entity's climate-related risks their likely impact and opportunities.

This Standard applies to:

3.1 Climate - related risks to which the entity is exposed and reasonably expected to affect the entity's prospects ;including

- Climate - related physical risks; and
- Climate - related transition risk

3.2. Climate Related Opportunities available to the entity and reasonably be expected to affect an entity's prospects.

4. Definitions

The following terms are being used in this standard with the meaning specified.

4.1 **Air Pollution:** Air pollution means the presence in the atmosphere of any air pollutant.

4.2 **Air Pollutant:** Means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

4.3 **Business model** – An entity's system of transforming inputs through its activities into outputs and outcomes that aims to fulfil the entity's strategic objectives and purposes and create value for the stakeholders.

4.4 **Value chain** – A value chain comprises of full chain of an entity's activities in offering a product or service -- from initial receipt of materials through after sale market. The value

chain framework encompasses entire range of interactions, transactions, resources and relationships connected with reporting entity's business model and strategic objectives encompassing inbound operations, operations, outbound logistics, marketing and sales, and service intertwined with procurement, human resource management, technological development, infrastructure and the financing, in the context of geographical, and regulatory environments in which the entity operates.

4.5 **Climate-related physical risks** – Means risks resulting from climate change that can be event-driven (acute physical risk) or from longer-term shifts in climatic patterns (chronic physical risk).

4.6 **Climate related Transition Risks** - Transitioning to a lower-carbon economy may require and involve comprehensive and radical policy, legal, technology, and market changes to deal with mitigation and adaptation requirements and efforts related to climate change. These risks may carry financial implications for an entity, due possibly to increased operating costs or asset impairment due to new or amended climate-related regulations, shifting consumer demands and the development and deployment of new technology.

4.7 **Climate-related risks and opportunities** – Means Climate-related risks relating to the potential negative effects of climate change on performance, prospects and cash flows of an entity over short, medium and long term. These risks are categorized as climate-related physical risks and climate-related transition risks. Climate-related opportunities refers to the positive effects and impacts arising from Efforts to mitigate and adapt to climate change.

4.8 **Climate-related transition plan** – Means an entity's overall strategy that lays down the entity's objectives, targets, actions or resources for its transition towards a lower-carbon economy.

4.9 **CO2 equivalent** - CO2 equivalent refers to the universal unit of measurement to indicate the global warming potential of each greenhouse gas, expressed in terms of the global warming potential of one unit of carbon dioxide.

4.10 **Environment:** Environment includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property

4.11 **Environment Pollution:** Environmental pollution means the presence in the environment of any environmental pollutant.

4.12 **Environmental Pollutant:** Environmental Pollutant means any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment.

4.13 **Pollution Control:** Pollution Control means the control of emissions and effluents into environment. It constitutes the use of materials, processes, or practices to reduce, minimize, or eliminate the creation of pollutants or wastes. It includes practices that reduce the use of toxic or hazardous materials, energy, water, and / or other resources

4.14 **Greenhouse gases** - The seven greenhouse gases listed in the Kyoto Protocol are carbon dioxide (CO2); methane (CH4); nitrous oxide (N2O); hydro fluorocarbons(HFCs); nitrogen tri fluoride (NF3); per fluorocarbons (PFCs) and sulphur hexafluoride (SF6).

4.15 **Scope 1 greenhouse gas emissions-** Means direct greenhouse gas emissions that occur from sources that are owned or controlled by an entity.

4.16 **Scope 2 greenhouse gas emissions-** Means Indirect greenhouse gas emissions from the generation of purchased or acquired electricity, steam, heating or cooling consumed by an entity. Scope 2 greenhouse gas emissions physically occur at the facility where electricity is generated.

4.17 **Scope 3 greenhouse gas emissions** – Means Indirect greenhouse gas emissions that occur in the value chain of an entity, including both upstream and downstream emissions. Scope 3 greenhouse gas emissions include the Scope 3 categories in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011).

4.18 **Scope 3 categories** - Scope 3 greenhouse gas emissions are categorized into15 categories— as described in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011):

- purchased goods and services;
- capital goods;
- fuel- and energy-related activities not included in Scope 1 greenhouse gas emissions or Scope 2 greenhouse gas emissions;
- upstream transportation and distribution;
- waste generated in operations;
- business travel;
- employee commuting;
- upstream leased assets;
- downstream transportation and distribution;

4.18.10 processing of sold products;

4.18.11 use of sold products;

4.18.12 end-of-life treatment of sold products;

4.18.13 downstream leased assets;

4.18.14 franchises; and

4.18.15 investments.

4.19 **Soil Pollution:** Soil pollution means the presence of any soil pollutant(s) in the soil which is harmful to the living beings when it crosses its threshold concentration level.

4.20 **Soil Pollutant:** Soil Pollutant is a substance which is the source of soil contamination.

4.21 **Water pollution:** Water pollution means contamination of water or alteration of the physical, chemical or biological properties of water as may, or is likely to, render such water harmful or injurious to public health or safety, or to the life and health of animals or plants or of aquatic organisms.

5. Principles of identification and measurement

The principles, taken together, are designed to assist organizations in identification, classification and measurement of climate related risks, their impact and opportunities.

5.1 Assessing the circumstances

The approach used by an entity for climate-related scenario analysis shall be commensurate with its context and circumstances as at the time the entity provides climate-related disclosures.

To assess its context and circumstances the entity shall consider:

5.1.1. The entity's exposure to climate-related risks, their respective impact and opportunities ,and

5.1.2 The skills, capabilities and resources available to the entity for the climate-related disclosures.

5.2 Exposure to climate-related risks and opportunities

An entity shall consider its exposure to climate-related risks, their impact and opportunities in its assessment of its context and circumstances while providing climate-related disclosures. This provides facilitates for determination of relevant and appropriate approach to climate-related disclosures which may be quantitative, non –quantitative.

5.3 Assessing Impacts - Each type of sustainability risk exposure shall be treated as a distinct activity, if material and identifiable. The process for determining material sustainability risk exposure shall be as under:

- Understand the entity's context and circumstances
- Identify actual and potential risks and their likely impacts
- Assess the significance of the risks and their impact
- Prioritize the most significant risks and their impacts for Sustainability reporting.

5.4 Time frame- Entities should consider the time frames used to conduct their assessments. Of Risks, Their impact and opportunities. The impacts and opportunities associated with some of the sustainability- related risks may manifest and have implications for an entity over a longer period. It is, therefore, important for entities to consider the appropriate time frames when assessing sustainability- related risks.

5.5 Selecting inputs- The inputs selected for climate risk disclosures shall be relevant to the entity's context and circumstances, for example, to the particular activities the entity undertakes and the geographical location of those activities taking into consideration the entity's sustainability-related risks, their impact and opportunities

5.6 Resources Consumption Model (RCM) - A resource consumption model is a decision support methodology and a tool that can facilitate assessment of resource effectiveness, Identifying areas for improvement, minimizing resource usage and waste, and Enhancing environmental viability of an entity.

5.7 Resources to Value Mapping - Resources Value Mapping aims to map and classify activities and related energy/resource consumptions including estimation of the total resources and reuse potential available, as well as their financial values.

5.8 Impact Analysis - Impact Analysis is a structured approach for looking at a proposed change,with a view to identifying its impact on environmental. Social and financial performance , prospects and cash flows of the entity over the short, medium and long term.

5.9 **Environmental Cost Analysis** - Environmental cost-benefit analysis (CBA) is the application of Cost Benefit Analysis to projects or policies that are aimed at environmental protection, improvement or actions that affect and impact the natural environment as an indirect consequence. Environmental costs can be classified in four categories - prevention cost, detection cost, internal failure cost and external failure cost.

5.10 **Activity Based Management** - Activity-based management (ABM) facilitates identification and evaluation of activities that an entity performs, leveraging activity-based costing, value chain analysis or a re-engineering initiative to improve strategic and operational decisions in an entity.

6. Process of Identification and Measurement

6.1 **The Entity and Its Environment:**

6.1.1. Describe the nature of the entity, including its operations covering Business processes, major inputs, Joint & By-Products and Wastages and major inputs etc.

6.1.2 Describe the entity's ownership, relevant industry, regulatory, and other external factors including the applicable cost and financial reporting framework.

6.1.3. Description of entity's internal control systems

6.1.4 Description of IT Architecture, Systems and programs in use in the entity;

6.2 **Governance**

The objective of climate-related financial disclosures on governance is to enable users of general-purpose financial reports to understand the governance practices including controls an entity used to monitor, manage and oversee climate-related risks and opportunities.

6.2.1. Describe the governance body(s) (which can include a board, committee) responsible for oversight of climate-related risks, their impacts and opportunities.

6.2.1 Describe how responsibilities for climate -related risks, their impacts and opportunities are reflected in mandates, role descriptions

6.2.2 Describe the process how the body(s) or individual(s) determines whether appropriate skills and competencies are available to respond to climate - related risks, their impacts and opportunities

6.2.3 Provide information about how the controls and procedures are applied to the management of climate-related risks, their impacts and opportunities and their integration with governance strategies, performance, and prospects.

6.2.4 Describe the process by which the body(s) or individual(s) takes into account climate - related risks, their impacts and opportunities when overseeing, reviewing and guiding the entity's strategy, major plans of action, risk management policies, annual budgets, setting the entity's performance objectives, monitoring performance and progress against goals and targets, and overseeing major capital expenditures, acquisitions, and progress against goals and targets.

6.2.5 Describe the Process for delegating authority from the highest governance body to senior executives and other employees for dealing with Climate risks, their impacts and opportunities.

6.2.6 Describe the Processes for consultation between stakeholders and the body(s) or individual(s) on Climate risks, their impacts and opportunities.

6.2.7 Describe the process by which the body(s) or individual(s) reviews and approves the entity's climate risk disclosures and ensures that all material topics are covered.

6.3 Strategy

The objective of climate-related financial on strategy is to enable stakeholders to understand an entity's strategy for managing climate-related risks, their impact and opportunities. Specifically, an entity shall disclose information to enable the stakeholders to understand:

6.3.1 The climate-related risks, their impact and opportunities that could reasonably be expected to affect the entity's performance, prospects and cash flows over the short, medium and long term,

6.3.2 The current and anticipated effects of those climate-related risks, their impacts and opportunities on the entity's business model and value chain.

6.3.3 The effects of climate -related risks, their impact and opportunities on the entity's strategy about adaptation, mitigation and / or its sustainability -related transition plan

6.3.4 The climate resilience of the entity's strategy and its business model to climate-related changes, taking into consideration the entity's identified climate-related risks, their impact and opportunities.

6.3.5 Information about how the entity has responded to, and plans to respond to, climate -related risks and opportunities in its strategy and decision-making, including the entity's plans to achieve climate -related targets it has set internally / required to meet by law or regulation.

6.3.6 Current and planned direct or indirect climate risk mitigation and adaptation efforts (for example, through changes in production processes or equipment, relocation of facilities, workforce adjustments, and changes in product specifications);

6.3.7 Quantitative and qualitative information about the progress of plans disclosed in previous reporting periods.

6.4 Climate-related risks and opportunities

An entity shall disclose information that enables stakeholders to understand the current and anticipated effects of climate- related risks, their impact and opportunities on the entity's business model, strategy and value chain. Specifically, the entity shall provide:

6.4.1 A description of the current and anticipated effects of climate-related risks, their impact and opportunities on the entity's business model, strategy and value chain; and the key assumptions the entity made in the analysis, including assumptions about climate-related policies in the jurisdictions in which the entity operates.

6.4.2 A description of current and anticipated direct and indirect mitigation and adaptation efforts (for example, through working with customers and supply chains);

6.4.3 A description of any climate-related transition plan the entity has made, including information about key assumptions used in developing its transition plan, and dependencies on which the entity's transition plan relies;

6.4.4 A description of current and anticipated changes to the entity's business model, including its resource allocation, to address climate-related risks, their impact and opportunities.

6.4.5 The entity's capacity to adjust or adapt its strategy and business model to climate change over the short, medium and long term, including; the availability of, and flexibility in action to address climate-related risks, their impacts and to take advantage of emerging climate-related opportunities by the entity's ability to redeploy, repurpose, upgrade or decommission existing assets.

6.5 Risk management

The objective of climate-related disclosures on risk management is to enable stakeholders to understand an entity's processes to identify, assess, priorities and monitor climate-related risks, their impact and opportunities, including whether and how those processes are integrated into and inform the entity's overall risk management architecture:

To achieve this objective, an entity shall disclose information about:

6.5.1 The processes and related policies the entity uses to identify, assess, prioritize and monitor climate -related risks and their impact in the context and circumstances in which the entity operates including information about the inputs and parameters and the activities and processes the entity uses.

6.5.2 A description of how the entity assesses the nature, likelihood, magnitude effects and impacts (such as the qualitative factors, quantitative thresholds and other criteria used); associated with climate related risks and their impact.

6.5.3 A description of how the entity identifies and monitors sustainability -related risks in the context and relative to other types of risk;

6.5.4 Describe how, the architecture and processes for identifying, assessing, prioritizing and monitoring climate-related risks, their impact and opportunities are integrated into the entity's overall risk management architecture and process.

Whether the entity has changed the processes it uses for risk management compared with the previous reporting period; If yes, what are the changes made; and reasons thereof.

6.6 Performance, prospects and cash flows

An entity shall disclose information about :

6.6.1 The effects of climate-related risks, their impact and opportunities on the entity's performance, prospects and cash flows.

6.6.2 A description of how climate -related risks and opportunities are included in the entity's business model and business planning

6.6.3 A description of how the entity expects its performance , prospects and cash flows to change over time, given its strategy to manage climate-related risks, their impact and opportunities, taking into consideration: its investment and disposal plans (for example, plans for capital expenditure, major acquisitions and divestments, joint ventures, business transformation, innovation, new business areas, and asset retirements)

6.7 Metrics and targets

The objective of climate-related disclosures on metrics and targets is to enable stakeholders to understand an entity's performance, prospects and cash flows in relation to its climate-related risks, their impact and opportunities, including progress towards any climate-related targets it has set, and any targets it is required to meet by law or regulation.

To achieve this objective, an entity shall disclose:

6.7.1 A description of targets set by the entity/ required to meet by law or regulation, to mitigate or adapt to climate -related risks and their impact over the short, medium and long term or take advantage of climate -related opportunities,

6.7.2. A description of industry-based metrics that are associated with particular business models, activities and circumstances.

6.7.3 Metrics, including Scope 1, 2 and 3 emissions, and targets used to assess and manage climate related risks and opportunities;

6.7.4 A description whether the targets the entity has set to manage climate-related risks their impact and opportunities have been validated by a third party;

6.7.5 In describing their targets, organizations should consider including the following

- whether the target is absolute or intensity based,
- time frames over which the target applies,
- base year from which progress is measured, and
- key performance indicators used to assess progress against target
- description of the methodologies used to calculate targets and measures

7. Presentation

Information relating to climate risk shall be presented as per PRINCIPLE 6: Businesses should respect and make efforts to protect and restore the environment, prescribed in the Business Responsibility and Sustainability Reporting framework as per following components (Appendix 1)

8. Disclosures

8.1 Disclosures shall be made only where material and significant

8.2. Disclosures should be presented in sufficient detail to enable stakeholders to assess the entity's exposure and approach to addressing climate-related risks and their impact.

8.3 Disclosures should be presented using standardized and consistent formats, language, and metrics from period to period to allow for inter-period comparisons.

8.4 Key assumptions used for future-oriented data should be clarified.

8.5 Terms used in the disclosures should be explained or defined for a proper understanding by the shareholders.

8.6 Disclosures should be defined, collected, recorded, and analyzed in such a way that the information reported is verifiable to ensure it is high quality.

8.7 Where estimates are made of future / expected climate related risks and their impact , the basis of estimate shall be disclosed separately.

8.8 Any change in the methods applied for the Identification and measurement of climate related risks and their impact during the period covered by the BRSR report which has a material effect on the performance, prospects and cash flows shall be disclosed. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.

Effective Date

This Sustainability Standard (ISS 2)

Climate related disclosures shall be effective from 1st April, 2025 and will apply for collation and reporting of Climate related disclosures by the entities covered under BRSR from the financial year 2025-26. SB

ARTICLE-I

Circular Economy: Case Studies from Indian Household to Industry

CMA Jyotsna Rajpal
Practicing Cost Accountant
Nagpur

1.0 The Concept

The growing population and depleting natural resources have led people to think about the effective utilization of the resources that are currently available. Now that we are aware of the limited resources, the search for new directions in production is becoming highly important, and sustainability is coming to the fore in various aspects of life, viz. environmental, economic, and social.

i. **Linear Economy:**

The prime focus of linear economy is profitability and its process includes extraction from nature, production, consumption, and scrap. In other words, it is a 'use and throw economy'. Until now we are living with linear production models having high rate of consumption that is fast becoming unsustainable for the planet. Current practices of high waste generation are prime area of concern and that is the outcome of Linear Economy.

By reusing it through recycling, we can process some part of waste and use them to our advantage. In this regard, a new thought of circular economy is taking frontal seat.

ii. **Circular Economy**

The circular economy has its roots in the 19th century, when a group of British textile manufacturers protested the introduction of new machines that they believed would put them out of work. At the time, there was no such thing as recycling – all materials were either used up or burned. They argued that it would be better to use the new machines to recycle old materials, instead of creating new ones from scratch.

This idea was the beginning of circularity, but still it took almost 200 years to shape the idea of circular economy. Before we move further ahead, let us understand the present-day economy i.e. Linear economy and futuristic economy i.e. Circular Economy.

As per Wikipedia, "Circular Economy is an economic system that targets zero waste and pollution throughout materials' lifecycles, from environment extraction to industrial transformation and final consumers, applying to all involved ecosystems".

The circular economy indicates a production and consumption model that is more sustainable in nature and facilitates longer production cycles where raw materials remain in process for longer duration and can be used repeatedly, therefore generating lesser waste. As the name indicates, the circulation of resources for as long as possible, is essential part of this model of economy. This also makes it possible to use the waste generated by one industry or process as raw material for other industry(ies) or process(s).

Major points of differences between these two economies can be understood with the help of following Table

Linear Economy	Circular Economy
Present Day economy	Futuristic Economy
Use & Throw	7 R s
High Waste generation	Zero waste
Hurts nature	Heals Nature
Leaves High Carbon footprint	Targets for Carbon negative Environment

In simple words, it can be said that the circular economy is presented as an alternative to the linear model of production and consumption. This makes it possible to respond to the challenges of current economic and productive growth since it promotes the circular flow of extraction, transformation, distribution, use, and recovery of materials and energy from the products and services available in the market.

The term circular economy was first used in 1980 to describe a system of interrelationships between the economy and the environment. At present, the advantages of this model are mainly aimed at a considerable reduction of carbon dioxide and waste to generate more sustainable business models by improving the supply chain with the application of regenerative agriculture that captures more carbon.

2.0 The Principles

Circular economy basically works on the principles of Nature, with zero waste generation. Let us understand it with the help of a tree, whose every part is usable like, its fruits are eaten, shredded leaves and barks are generally used as manure or sometimes as medicine, wood can be used for furniture and construction etc. and roots are used for its regeneration. So, no portion of a tree is a waste. In the same way, Circular Economy guide its development and implementation in various manufacturing and service industries, agriculture, infrastructure, rural and urban administration etc. with zero waste and emissions. These principles are uniformly applicable to all kind of business environment. These can be broadly decoded as:

i. **Design for longevity and durability**: Products designed as per the principles of circularity last longer with easy repairs, and upgradations. Such products are durable and not only 'use and throw';

ii. **Reuse and refurbish**: Products are designed to be repaired or refurbished after use for some time. Refurbishing makes them ready to be sold again in the preowned market. This reduces the need for new products and minimizes waste;

iii. **Recycling**: At the end of a product's life cycle, its major components can be recycled to create new products, closing the loop and reducing the demand for virgin resources. Battery of motors and vehicles is an instant example;

iv. **Waste reduction and resource efficiency**: The circular economy aims to reduce waste generation at every stage of the product life cycle and optimize the use of resources;

v. **Bio-mimicry**: The circular economy takes inspiration from nature and seeks to develop systems that mimic natural ecosystems with regenerative and waste-free characteristics.

3.0 Seven R of Circular Economy

Circular economy focuses on the optimum utilisation of materials for improved efficiency of products with minimum impact on environment. Seven R's are essential ingredients for conceptualization and implementation of the circular economy model. These are:

i. **Reduce**: It means to reduce the overall consumption. It can be applied at individual level by changing the consumption pattern or by increasing yield in industries. It will automatically lead to reduced consumption and there by less production. It is a healthy way to take care of the environment by reducing the production levels and resultant waste generation.

ii. **Reuse**: Many products are designed for multiple applications over a period of the time. Reuse can be done by the change of hands from user to user or different application in the hands of same user. This can be the case for most of the products viz. clothes, books, furniture, home appliances, cars etc. There is a need to develop the markets for preowned products, where any one can buy and sell freely.

iii. **Recycle**: It gives umpteen possibilities for reuse of materials that are non-biodegradable. When you discard a broken glass and put it in a recycling bin, it is sorted by colour, washed, crushed, melted and moulded again in new form to make some new products such as new vase, bottles etc. Similar processes can be adopted for most of the inert materials like plastic, paper, steel, aluminium etc.

iv. **Repair:** It is about taking the products that are broken or not working and putting them again into work after required repairs or servicing. It can be applied for larger home appliances like TV, fridge, washing machine, air conditioners, automobiles etc. In industries, over all plant, machinery and equipment can be repaired and overhauled from time to time for efficient working, zero break down time and reduced wear and tear.

v. **Refurbish:** It means the distribution of a product that has been returned to the manufacturer or vendor for any reason and tested for its functionality and defects before they are sold again. Some refurbished items can be used, sometimes for their vintage appeal or sometime due to being cost effective. Refurbish is usually applied to old buildings, old pieces of furniture, high end mobile phones, laptops, jewellery and any old product that will be transformed to become a modern item.

vi. **Rethink:** It is a process to redesign considering ecology and environmental concerns that should form part of the design process to manufacture products that are more eco-friendly. It is not only about end use of the products but also about the raw material consumption, packaging design and manufacturing process etc.

vii. **Recover:** In recovery, the focus is on the valuable material in the waste generated by us. This waste can be segregated and put for either reuse or recycle. For example, recovering aluminium and copper from worn-out electrical motors, precious buttons from worn out dresses, batteries from worn-out machines, carbon from the green cuttings from the agricultural waste etc. The aim is to reduce the quantum of waste generation and thereby reducing the need for landfill space. This also helps in extracting maximum value from waste and can lead from waste to wealth approach.

4.0 Case Studies from Indian Households

The history of Indian civilization is known to be from Bronze Age that began around 3300 BCE. Family household was said to exist from that era. If I go back to ancient Mahabharata times, we still find few interesting instances of multiple uses of one product. At first instance, when Draupadi torn a piece from her saree and tied it on the wounded finger of Sri Krishna. Second, when Arjuna took wheel of his rath using as weapon to kill Karna. Such instances indicate that the multiple use of one product existed even in Mahabharata times. Continuing with this context, If we go back to some 50 years ago, the wisdom of our grandparents will teach us the basic principles of Circular Economy. Let us see some cases of awareness about circular economy from our house holds:

i. **From Kitchen:**

In earlier years, when mammals were living in surroundings, all wet waste like fresh peels, used to go as animal feed. Grandmothers used to utilise some dinner leftovers like dal, rice, sabzi, chapatti etc. for making stuffed parathas, muthia or any other yummy snack. Further if something is still remaining from food plate that used to go for composting and the rich manure would add beauty to kitchen garden.

After making juice, breakfast used to be parathas with the leftover pulp and essential spices, and juicer wash was used for watering the plants.

ii. **From Wardrobe:**

Every Indian mom wears saree as regular attire; these sarees range from thick cotton to fine silk and from plain to intricate designs. One saree used by mom is generally converted by daughter as a dress and its left over fabric is generally used to make some scarfs, cushions, pillow covers or kitchen duster depending on the fabric condition. Then, once the daughter grows, its dress is also worn-out, it can be used to make some bags, duster, mop or can be further used to make some rugs or foot mats etc. This entire saree is used till every thread of it is worn out. So, the concept of Circular economy was ingrained in the psyche of every person of the Indian society irrespective of social or economic status.

iii. **From House Construction**

In earlier years, every house use to be constructed with renewable and vernacular materials with local construction techniques. These materials and techniques do not leave any carbon footprint and never harmed the environment. All the bricks, stones, roofing materials, wood etc. were procured locally and as far as possible reclaimed materials were also utilized.

Like above cases, the concepts of circulatory systems were part of everyday Indian life. May it be agricultural practices, studies of scriptures, reading books, or celebrating festivals, all the aspects of life were sensitive to nature and environment.

5.0 Case Study from Sugar Industry

Industry and economy are complementary to each other. Practices adopted by industry leave a great impact on the economy and vice versa. With World-wide exponential growth of industry, many challenges creeped in as by product. To address these challenges, the concept of Sustainable Manufacturing, that forms the back bone of Circular Economy, was evolved. It promotes minimization of waste in the process and further improves the product design. This minimizes the waste generation of all resources and also carbon footprint to achieve higher productivity levels and a clean environment.

Let us understand the implication of sustainable manufacturing with the help of Sugar industry. Sugar is extracted from various sources like sugar cane, beet root, corn etc. In India, Cane Sugar is most commonly available. Every part of sugar cane is utilized for making one or the other product. Detail of process wise waste generated and its usage are mentioned below:

i. Once sugar cane is harvested at field, cane is dispatched to the factory. Its green trash is fed to the animals and remaining dry trash is mulched in the field after some time. This mulching acts as good soil nutrient for next crop to be sown in the field.

ii. After reaching the factory, cane goes for crushing. After crushing, juice is extracted and bagasse is generated as by-product. Bagasse is used as fuel in the power plant. Generally, it is used in the cogeneration power plant to give steam and power to run the sugar plant. The products and by-products generated from sugar cane are given in figure 1 below.

iii. After the sugar manufacturing process is complete, sludge called molasses remains as by-product. It contains total reducing sugar (TRS) of 45 to 55. Molasses is used as raw material in distillery to produce alcohol and or ethanol. The products and by-products generated from molasses are given in figure 2 below.

   a. Alcohol is the main product made up of molasses. It is used for making all kind of spirits for industrial and potable purposes

   b. Ethanol is used for Blending in the petrol.

c. Co2 is generated as by-product of distillation process having industrial applications

d. Spent wash is the waste water generated after the distillation process is complete. This also contains 1.5 – 2% of alcohol, that can be utilized either as fuel for running a small boiler or can be used as soil booster.

iv. At the end of entire cycle, a muddy substance called Press Mud is generated. This is an excellent bio fertilizer. This can be directly used in the fields or can further be processed into Organic Manure.

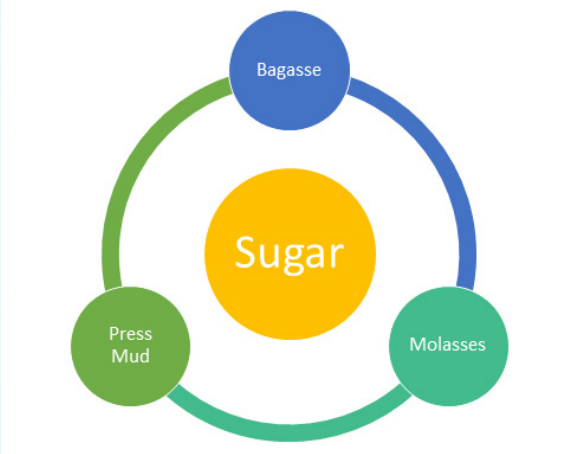


Figure 1: Main & By Products of Sugar Cane

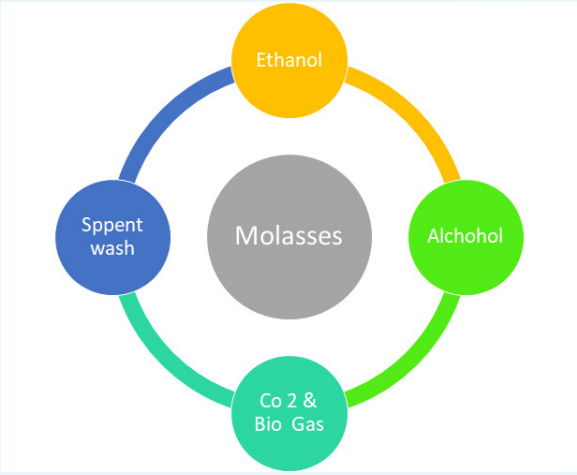


Figure 2: Products made up of Molasses

It is evident from above analysis that complete sugar economics is circular and its secret of sustainability lies in being a Zero Waste Industry.

6.0 Way Forward

Concluding, it can be said that Circular Economy is the answer for majority of present day crisis which emerged as a resultant of 'use and throw' linear economy. The contribution of all members of society, viz. individuals, industry, and business is needed to reverse the ecological imbalances. At personal level, one needs to look back and adopt the age old practices of reduce, reuse and recycle the materials in line with our ancestral wisdom to heal the planet. On the other hand, businesses and industries need to rethink on redesigning the systems to repair the ecological imbalance for the recovery of sustainable environment.

7.0 Learning Take

All industries need to evolve a Zero waste process to emerge as carbon negative entity and take the driving seat for Circular Economy. SB

References:

i. The concept paper on Opportunities and Challenges in India, Government of India, Feb 2021

ii. https://www.ellenmacarthurfoundation.org/

iii. https://www.repsol.com/en/sustainability/sustainability-pillars/environment/circular-economy/

iv. Visit to various Sugar cane farms and Sugar plants in Maharashtra

ARTICLE-II

ESG Accounting Compliance: A Comparative Analysis of IFRS and Ind AS in India

Jyothi G. H.
Assistant Professor, Department of MBA
PES Institute of Technology and Management
Shivamogga

Environmental, Social, and Governance (ESG) factors have become integral to corporate reporting, influencing financial decision-making and stakeholder expectations. This research paper examines the compliance framework for ESG accounting in India, focusing on the comparative analysis of International Financial Reporting Standards (IFRS) and Indian Accounting Standards (Ind AS). The study explores the alignment of these frameworks with global sustainability reporting requirements, assessing their impact on corporate disclosures, financial transparency, and regulatory adherence.

Introduction

ESG (Environmental, Social, and Governance) factors are now a key part of corporate reporting, influencing investment decisions, regulations, and business sustainability. ESG compliance ensures companies disclose their sustainability efforts transparently, following both global and national standards. In India, ESG reporting follows International Financial Reporting Standards (IFRS) for global alignment and Indian Accounting Standards (Ind AS) for country-specific regulations. While IFRS sets worldwide principles, Ind AS includes guidelines tailored to India's regulatory needs.

This study compares ESG compliance under IFRS and Ind AS in India, highlighting key differences, regulatory updates, and challenges companies face in adopting these standards. It also examines how these frameworks impact financial transparency, investor trust, and long-term business sustainability.

Overview of ESG Accounting Compliance

ESG (Environmental, Social, and Governance) accounting compliance has become essential as businesses work toward sustainability. It involves measuring, reporting, and disclosing a company's environmental impact, social responsibility, and governance practices. Transparent ESG reporting helps investors, regulators, and consumers evaluate a company's long-term stability and ethical standards. Globally, ESG compliance follows frameworks like IFRS, GRI, TCFD, and SASB, while in India, Ind AS, SEBI regulations, and the BRSR framework guide ESG disclosures.

Companies adopting ESG accounting can reduce financial and reputational risks, attract responsible investments, and align with global sustainability goals like the UN SDGs and the Paris Agreement. Strong ESG compliance improves corporate transparency, enhances risk management, and supports long-term business resilience.

https://incorpadvisory.in/

Importance of ESG Reporting in Corporate Governance

ESG (Environmental, Social, and Governance) reporting plays a key role in corporate governance by ensuring transparency, accountability, and ethical business practices. It helps companies align their strategies with social and environmental goals while complying with regulations.

A strong ESG framework enhances governance by providing clear insights into sustainability efforts, such as carbon emissions, waste management, and labor practices. This transparency builds investor trust and ensures ethical corporate behavior.

ESG reporting also improves risk management by helping businesses identify and address environmental and social challenges like climate change and regulatory shifts. Proactive ESG policies reduce financial and reputational risks.

Additionally, ESG compliance attracts investors and improves access to capital, as companies with strong sustainability commitments are seen as lower-risk and more resilient. In India, SEBI's BRSR framework mandates ESG reporting for the top 1,000 listed companies.

Beyond compliance, ESG reporting is a strategic tool for ethical decision-making, reputation building, and long-term business sustainability. As regulations and stakeholder expectations grow, companies must integrate ESG principles to stay competitive.

Role of ESG in Financial and Non-Financial Reporting

ESG (Environmental, Social, and Governance) factors are important in both financial and non-financial reporting, helping businesses present a clear picture of their sustainability efforts.

ESG factors are now being integrated into financial reporting because they directly affect a company's financial health. Environmental issues like climate change and carbon emissions can lead to fines or higher costs, impacting profitability. Likewise, strong governance practices, such as ethical leadership and transparent decision-making, can reduce risks and boost investor confidence. Financial reporting standards like **IFRS** and **Ind AS** are beginning to include ESG-related disclosures, making it necessary for companies to report on ESG risks and opportunities in their financial statements.

Non-financial reporting focuses on sustainability and ethical impact, covering areas like carbon footprint, resource use, employee welfare, corporate social responsibility (CSR), and diversity. Global and national frameworks, such as **GRI, SASB, and BRSR (in India),** require companies to disclose this information. These reports help investors, regulators, and the public understand how businesses operate responsibly, manage social and environmental risks, and contribute to sustainable development.

Why ESG Reporting Matters?

Integrating ESG into financial and non-financial reporting enhances credibility, attracts sustainable investments, and ensures regulatory compliance. In India, SEBI mandates ESG disclosures for large companies, reinforcing the need for sustainability in corporate reporting. As ESG concerns grow, IFRS has introduced standards to address climate, social, and governance risks, shaping responsible business strategies and long-term value creation.

Key ESG-Related Provisions in IFRS

1. **Climate-Related Financial Disclosures**

   Under existing IFRS standards, companies must disclose climate-related risks that could impact their financial statements. This includes the valuation of assets, liabilities, and potential impairments due to environmental changes, such as: Asset devaluation due to climate-related risks (IFRS 13 – Fair Value Measurement) and Recognition of provisions for environmental liabilities (IAS 37 – Provisions, Contingent Liabilities, and Contingent Assets).

2. **ESG Risks in Financial Reporting**

   IFRS requires companies to consider ESG risks in their financial disclosures. Key provisions include: IFRS 9 (Financial Instruments): Requires businesses to disclose credit risks associated with ESG factors, such as investments in industries affected by regulatory changes (e.g., fossil fuels). IFRS 16 (Leases): Ensures companies report the environmental impact of leased assets, such as carbon-intensive equipment.

3. **Social Responsibility and Human Capital Disclosures**

   While IFRS does not mandate standalone social reporting, several provisions encourage companies to disclose: Employee benefits and workforce diversity (IAS 19 – Employee Benefits). Human rights risks associated with business operations.

4. **Corporate Governance and Transparency**

   Governance is a key component of ESG compliance under IFRS, with provisions that emphasize: Disclosure of board structures, executive compensation, and audit practices. Risk management policies and internal controls for ESG-related issues.

   The IFRS Foundation's ISSB is also working on the IFRS Sustainability Disclosure Standards (IFRS S1 and IFRS S2), which will provide a standardized framework for ESG disclosures, ensuring consistency and comparability across global markets.

Key regulations under Ind AS

Ind AS, introduced by the Ministry of Corporate Affairs (MCA), aligns India's financial reporting with IFRS while considering local regulations. It is mandatory for listed and large unlisted companies to ensure transparency and uniformity. To address sustainability, SEBI's BRSR framework mandates ESG reporting alongside financial statements, integrating global trends with India's regulatory and economic needs.

- **Ind AS 16 (Property, Plant, and Equipment):** Requires companies to consider environmental costs in asset valuation.
- **Ind AS 37 (Provisions, Contingent Liabilities, and Contingent Assets):** Mandates disclosure of environmental liabilities and legal risks.
- **Ind AS 115 (Revenue Recognition):** Ensures that companies disclose any ESG-related commitments affecting revenue generation.

ESG Reporting Requirements in Ind AS

ESG reporting under Ind AS is primarily guided by SEBI's Business Responsibility and Sustainability Reporting (BRSR) framework, which mandates the top 1,000 listed companies in India to disclose key ESG-related information. The framework covers three main areas: Environmental, Social, and Governance (ESG) reporting. Environmental reporting includes disclosures on greenhouse gas (GHG) emissions, energy and water usage, waste management, and compliance with environmental laws. Social reporting focuses on workforce diversity, employee well-being, corporate social responsibility (CSR), customer satisfaction, and health and safety standards.

Governance reporting ensures transparency in board composition, leadership accountability, anti-corruption policies, executive compensation, and ESG risk management. Additionally, Ind AS aligns with India's climate commitments under the Paris Agreement and the Sustainable Development Goals (SDGs). With increasing regulatory focus, ESG integration into Ind AS is expected to strengthen corporate accountability and enhance India's competitiveness in global markets.

Challenges in ESG Accounting Compliance for Indian Companies

1. **Regulatory Complexity**

   Indian companies face difficulties navigating multiple ESG frameworks such as IFRS Sustainability Disclosure Standards, SEBI's BRSR, and GRI. Differences between IFRS and Ind AS create reporting inconsistencies. Frequent policy changes and stricter industry-specific regulations add to the compliance burden, especially for SMEs.

2. **Data Availability & Accuracy**

   ESG reporting lacks standardized data collection methods. Many Indian businesses, particularly SMEs, have limited experience in maintaining ESG records. Third-party verification is costly, and a shortage of ESG audit firms makes compliance more challenging. Inconsistent data affects credibility in global markets.

3. **High Costs**

   Implementing ESG compliance requires significant investment in technology, employee training, and third-party audits. Large corporations can manage these expenses, but SMEs struggle to afford full compliance, often leading to delayed or partial adoption.

4. **Lack of Awareness & Expertise**

   Many business leaders and financial professionals lack ESG knowledge, leading to poor reporting. India also faces a shortage of ESG experts, making it harder for companies to meet global standards. Some businesses view ESG compliance as a regulatory burden rather than a long-term opportunity.

5. **Stakeholder Expectations & Greenwashing Risks**

   Investors and regulators demand ESG transparency, but companies struggle to balance financial goals with sustainability efforts. Some businesses resort to greenwashing – misrepresenting ESG achievements – risking reputational damage. Genuine sustainability improvements take time and resources.

6. **Supply Chain Challenges**

   Ensuring ESG compliance across supply chains is difficult, as many suppliers lack formal reporting standards. Indian exporters must also meet global ESG regulations, such as the EU's CSRD, requiring additional compliance efforts.

Impact of ESG Accounting Compliance on Corporate Performance

ESG accounting compliance positively impacts corporate performance by enhancing transparency, reducing risks, and improving investor confidence. Companies adhering to

ESG standards, such as IFRS and Ind AS, attract responsible investments, lower capital costs, and strengthen market reputation. Compliance also drives operational efficiency through sustainable practices like energy conservation and ethical sourcing. Additionally, it helps businesses mitigate regulatory and financial risks while fostering long-term growth and stakeholder trust.

Conclusion

ESG accounting compliance is a critical factor in shaping corporate performance, ensuring transparency, reducing risks, and enhancing investor confidence. By adhering to ESG standards under IFRS and Ind AS, companies can attract responsible investments, lower capital costs, and improve their market reputation. Compliance also fosters operational efficiency through sustainable practices such as energy conservation, ethical sourcing, and responsible waste management. Moreover, ESG integration helps businesses mitigate regulatory and financial risks while strengthening stakeholder trust. As global sustainability regulations evolve, Indian companies must continue adapting ESG frameworks to drive long-term growth, competitiveness, and ethical corporate governance. SB

References

- **https://www.ifrs.org/issued-standards/list-of-standards/**
- **https://www.icai.org/post/indian-accounting-standards-indas**
- **https://www.mca.gov.in/content/mca/global/en/acts-rules/ebooks/accounting-standards.html**
- **https://journals.sagepub.com/doi/10.1177/09726527231197328?icid=int.sj-full-text.similar-articles.7**
- **https://www.researchgate.net/publication/354335955_The_effect_of_corporate_governance_on_compliance_with_Indian_Accounting_Standards_An_empirical_analysis_of_post_IFRS_convergence**
- **https://taxguru.in/chartered-accountant/esg-accounting-audit-india-comprehensive-guide.html**
- **https://www.mbgcorp.com/in/insights/raising-criticality-on-ind-as-among-indian-companies/**

Vasudhaiva Kutumbakam

VK Webinar Series of the Sustainability Standards Board

27th Webinar

Renewable Energy in Germany, Key Takeaways

February 28, 2025 from 4 to 5:15 p.m.

Shri Mahesh Krishnan

CMA Dibbendu Roy

Shri Mahesh Krishnan, Project Developer, Solar Energy- Berlin, Germany was the speaker. He made the presentation in various sector covering the renewable energy and sustainability, introduction of renewable energy in Germany, overview of the solar energy along with wind energy in Germany and challenges and future scope.

He started the session with the renewable energy and sustainability and covering the micro and macro impact. He covered the challenges of both solar and wind energy stating the cost aspect, storage and other policies for encouragement in the sector. The speaker stated the energy scenario at Germany and the government's incentives for growth in this sector. He deliberated the mechanism of solar energy and how it is being tapped by the Germany in providing a supplement to the energy requirement of the country. He highlighted the German Government's policies and programmes in making an ambitious target of 215 GW by 2030 in solar energy. He further highlighted the macroeconomic benefits of job creation and environment benefits the solar energy can create. He thereafter highlighted the scope and potential of wind energy covering the policies of the country and the benefits and challenges for such usage in Germany.

He presented an overview of the energy position in Germany and the way in which the demand would be catered in future in Germany from renewable sources and finally he shared important snippets of information related to energy related and the roadmap of consumption of energy from renewable sources at Germany.

There were pertinent and interesting questions which were replied by the speaker and thereafter the webinar ended with concluding remarks and vote of thanks by CMA Dibbendu Roy, Secretary, SSB, ICMAI.

Vasudhaiva Kutumbakam

VK Webinar Series of the Sustainability Standards Board

28th Webinar

Integrating Sustainability and Technology in Supply Chain Operations

March 14, 2025 from 4 to 5:15 p.m.

Dr. Joji Chandran O.

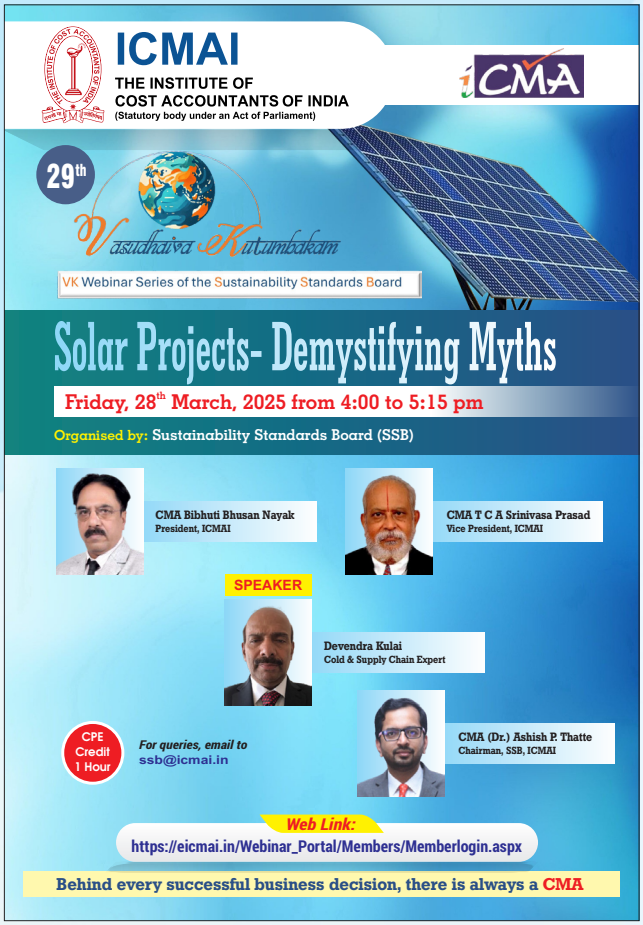
CMA Dibbendu Roy

Dr Joji Chandran O, Professor, School of Business and Management, CHRIST (Deemed to be University), Bangalore was the speaker for the 28th Webinar of the *Vasudhaiva Kutumbakam (VK)* series which was held on March 14, 2025 from 4 to 5: 15 pm. At the outset the webinar was scheduled on the occasion of the Holi. The speaker highlighted the importance of sustainability in the Supply Chain Operations and he iterated that by reducing the environmental impact it will enhance social responsibility by driving economic efficiency. He stated that the presentation is divided into 7 by parts and covered the importance of sustainability in supply chains and various new technologies like AI, Blockchain, Internet of Things (IoT) and challenges and solutions to Integrating Solutions.

He stated the importance of Artificial Intelligence and Internet of Things and how it enhances sustainability and supply chain efficiency. He emphasized the predictive maintenance and automated tracking which entails in reduction of the carbon footprint.. The objective of sustainability is reduction of waste and provides real time data with boost in profitability. He stated few examples of IoT applications and explained the AI and predictive analytics, blockchain technology and how it enhances transparency of operations. He explains few industries which are using the blockchain technology and how it has enhanced trust and ethical practices. Finally, he highlighted the integration strategies and step by step guide for technology integration. He thereafter touched upon the challenges and solutions for such challenges by overcoming resistance with clear communication and inclusive decision making.

The webinar ended with concluding remarks and vote of thanks by CMA Dibbendu Roy, Secretary, SSB, ICMAI.

FORTHCOMING VASUDHAIVA KUTUMBAKAM SERIES



CPE Credit 1 Hour

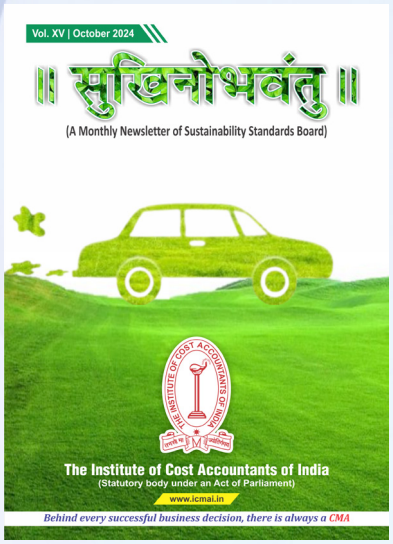
Web Link:
https://eicmai.in/Webinar_Portal/Members/Memberlogin.aspx

SUSTAINABILITY GUIDANCE CELL

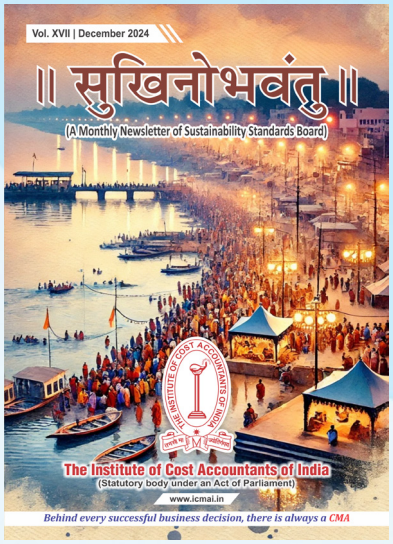
Announcement

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".

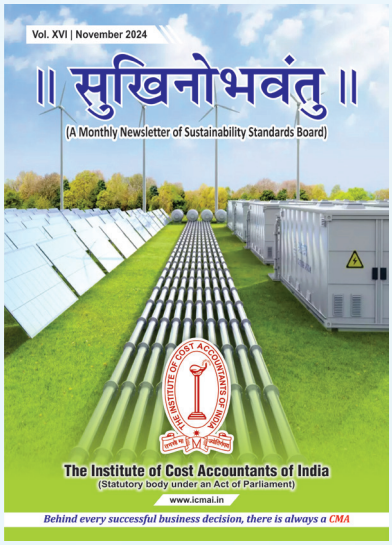
Past Issues of *Sukhinobhavantu*



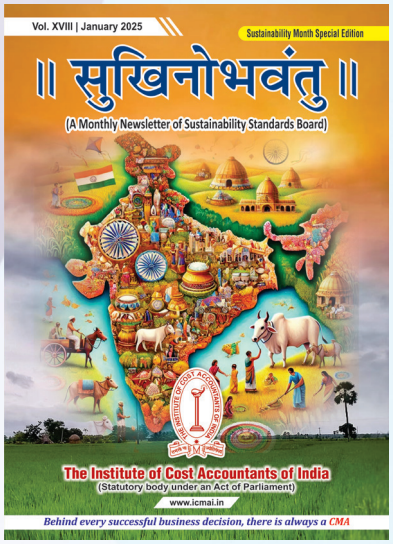
https://icmai.in/upload/Institute/Updates/SSB_October_2024.pdf



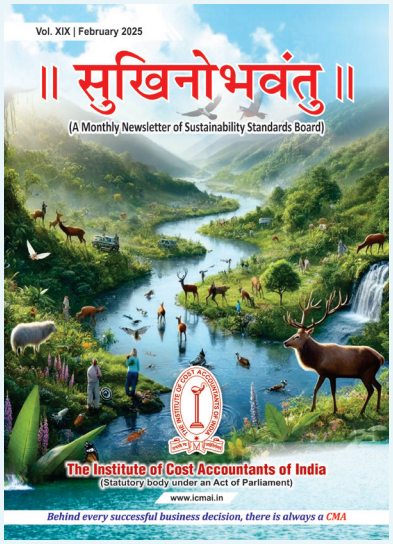
https://icmai.in/upload/Institute/Updates/SSB_Dec_2024.pdf



https://icmai.in/upload/Institute/Updates/SSB_Nov_2024.pdf



https://icmai.in/upload/Institute/Updates/SSB_Jan_2025.pdf



https://icmai.in/upload/Institute/Updates/SSB_Feb_2025.pdf

Sustainability and Traditional Arts and Crafts

Usha Ganapathy Subramanian
Practicing Company Secretary
Chennai

Introduction

The rich tapestry of Indian arts, handicrafts and textiles is woven with the warp and weft of both tradition and sustainability.

Sustainability in the context of arts and crafts is where the art is not just for art's sake but is made in a way that cherishes nature's bounty, preserves the dignity of human labour and creativity, and upholds traditional wisdom. It involves keeping in mind both aesthetics and functionality. It aims at durability, reducing wastage and respecting the environment.

The myriad forms of Indian arts and crafts hold a lesson in sustainability, be it the eye-catching dolls of Navratri or be it performing art forms like the Tholpavakoothu of Kerala or be it visual art like Madhubani paintings, or decor like Jaipur pottery.

We shall take a little around these specific aspects of Indian art and handicrafts and see what lessons they hold for us in sustainability.

Navratri Golu Dolls (Tamil Nadu)

In Tamilnadu, the nine days of *Navratri* is celebrated by having a *golu* at homes - a display of traditional dolls - that evoke a sense of communal harmony, devotion and divine grace.

Navratri dolls are traditionally made of clay; sometimes made of paper mache or wood - all natural and biodegradable. Traditionally, these are painted with indigenous eco-friendly pigments.

These are crafted by local artisans thereby promoting social equity. Culturally, not only the tradition of Golu has been passed on from generations but the dolls themselves, if preserved in the right manner, can be and have been, in many homes, passed on through generations.

Navratri and *golu* celebrations are not just religious occasions but promote communal and social bonding, with the custom of neighbours visiting each other's *golu* display and partaking of the *'sundals'* prepared in each other's home. (*Sundal* is a stir-fried and boiled lentils or pulses seasoned with coconut and mild spices). The whole celebration is multi-faceted - religious, spiritual, communal, environmental and even health-conscious.

Tholpavakoothu (Kerala) – Shadow Puppetry

Tholpavakoothu is a form of shadow puppetry that is traditionally used to depict stories from the Ramayana and Mahabharata, and are performed in temple festivals primarily in certain parts of Kerala. It is an art form that requires deep knowledge of the Kamba Ramayana, knowledge of thousands of verses, classical singing and the whole plethora of skills needed to maintain the shadow puppetry show.[1]

The puppets are traditionally made from dried deerskin (deer being held sacred in the culture). Traditionally, the hide was taken from the skin left behind by hunters. Nowadays, with the ban on deer hunting, goat hide is being used. Artisans avoid plastic and synthetic materials, using organic dyes and handcrafted wooden frames.

1 https://en.wikipedia.org/wiki/Tholpavakoothu

With the tradition passed on from centuries, tholpaavakoothu makes people sit up and listen to the ancient wisdom contained in our epics, and shows how live performances and storytelling have a way of reaching people's hearts. This is an example of nurturing cultural sustainability as well.

Madhubani Paintings (Bihar)

The famous Madhubani paintings, unique to the Mithila region (parts of Bihar, Jharkhand and Nepal), are created using natural dyes. They are traditionally painted on mud walls and floors. Later on, they began to be painted on handmade paper, canvas and cloth too.[2]

Artists use eco-friendly materials like powdered rice, vermillion powder, ground mustard, soot, turmeric, and other plant-based colors, reducing or eliminating chemical waste. This not only has aesthetic value but benefits from the properties of the indigenous dyes - for instance, turmeric has antiseptic properties.

As the art form has remained confined to a specific geographical area, the content and style of the paintings have largely remained the same for centuries. Rightly, the art form has received GI (Geographical Indication) status - which offers legal protection and exclusive rights to the artisans belonging to the region from counterfeit reproductions of the artform.

2 https://en.wikipedia.org/wiki/Madhubani_art

Blue Pottery (Jaipur, Rajasthan)

Traditionally made using quartz, fuller's earth, and eco-friendly glazes, these pottery are not just art but serve a functional purpose. As they are fire-resistant, non-toxic and long-lasting, they make great serveware, cutlery and home decor. Again, this art form too has been carried on through generations and holds traditional wisdom.[3]

Challenges Faced by Traditional Craft Communities and Potential Solutions

Declining demand is the biggest concern these days where fast fashion and mass-produced synthetic alternatives have mired the minds of the consumer. Lack of awareness on the differences between the authentic versions and the mass-produced ones, and limited understanding of sustainability aspects also add to the problem. This also has led to the exodus of the younger generations of the artisan families to other sources of livelihood, which further threatens the continuity of the artforms.

Integrating traditional crafts with modern markets is the need of the hour.

Handicraft fairs and online e-commerce platforms are doing their bit to promote regional handicrafts. Dedicated platforms connecting regional artisans with ultimate consumers may be promoted - either as part of the mainstream platforms or as a separate platform.

3 https://en.wikipedia.org/wiki/Blue_pottery_of_Jaipur

Performing art forms like the Tholpaavakoothu have been dwindling since the advent of television, and now OTT platforms, as consumers are switching to on-tap entertainment channels. Making them a part of temple festivities, art exhibitions and fairs can bring about a revival.

GI (Geographical Indication) Tags for regional handicrafts like Madhubani Paintings ensures that the products marketed with the regional tag do actually come from the producers belonging to the region. Schemes like Make in India and Aatmanirbhar Bharat support rural artisans but more innovative marketing techniques are needed to popularise the authentic versions of the handicrafts. Sustainable Tourism with the concepts of craft villages and heritage walks may be promoted.

More importantly, popular culture platforms and mainstream media must also take up the cause of promoting regional handicrafts. Corporate gifting could be made more mindful using these alternatives. Further, social media influencers could take up the cause of sustainability and promote regional art forms. Most of all, the need for sustainability must be entrenched in the minds of the masses through awareness programmes, social media messages and live local demonstrations.

Conclusion

A notable aspect of our indigenous art forms is that these traditions have been kept alive for centuries and have become an important part of our rich cultural heritage and legacy. For example, Madhubani paintings also called Mithila paintings have been said to be around even since the time of Ramayana.

This is largely owing to the fact that the art forms have a functional aspect to them. Hence, they are not just relegated to the royal court rooms and temples, but form a part of everyday life in one way or the other - as wall paintings, decor, kitchenware or religious artifacts.

We are at the cusp of a global transformation where Artificial Intelligence could drive most mundane decisions and tasks. If the present generation does not ensure integration of tradition with technology, the posterity may lose the treasures that our heritage has given.

And it is important that these treasures are preserved, cherished and taken forward - for here, cultural sustainability ensures preservation of nature and social equity as well. SB

FEATURE

Green Refineries: An initiative of Public Sector Downstream Oil Companies

CMA Dibbendu Roy
Additional Director
Kolkata

Present Scenario

As per the statistics it is estimated that India's energy requirement in 2030 is expected to reach around 366 GW of the power demand. The demand can be met by a significant thrust towards renewable energy sources aiming for 500 GW of non-fossil fuel based capacity by 2030.

What is a Green Refinery

A green refinery is a conventional petroleum refinery that has been converted into a bio-refinery and the objective of the oil companies is to achieve net zero goal by operational emissions by 2046.

Green Refinery Footprint

At present in India we have the example of green refinery at the refinery at Bargarh, Odisha of Bharat Petroleum Corporation Limited. The objective of the refinery is to produce biofuels through a 2G ethanol manufacturing plant. It is the best example of sustainable fuel production in the country and Indian Oil Corporation is also exploring their refinery at Panipat to undertake the objective of Green Refinery by exploring the production of Green Hydrogen. It will benefit by contributing to reduction in Carbon Footprint. The project is intended to produce 100 kilotons of green hydrogen per year. A green refinery is a conventional petroleum refinery that has been converted into a bio refinery.

The focus is now to achieve Net-Zero operational emissions by 2046 .

Various Government Initiatives

The various Government initiatives to propagate and promote includes Pradhan Mantri JI-VAN Yojana which was formed to support bio-ethanol projects. Thereafter, ethanol blending program which will promote the biofuels and thereby reduce fossil fuel dependence. Further, to that Initiative are done in which it Invites investors to set up Compressed Biogas (CBG) production plants.

The main objective of the Government is to be a catalyst in the National Bio-Energy Programme and to enhance the bio-energy production while reducing waste.

Programme like Mission Green Hydrogen was formulated with the objective of enhancing green hydrogen production and thereby reduce the carbon footprint. The Green Hydrogen in petroleum refining will in future replace the hydrogen produced from fossil fuel sources with green hydrogen. The Green Hydrogen in city gas distribution will thereafter blend green hydrogen in city gas distribution systems and create a Natural gas infrastructure.

The City Gas Distribution Network Expansion will further expand the piped natural gas (PNG) and compressed natural gas (CNG) and other infrastructure.

Initiatives like the Strategic Petroleum Reserves which will enhance energy security through storage facilities. Energy Security Initiatives

will further bring in investments in overseas exploration and acquisition of oil blocks. Finally, the National Policy On Bio-Fuels will enhance biofuels as a strategic resource in the Indian energy basket.

Hydrogen Footprint

We know that for a decarbonized world the role of Hydrogen plays an important gamut especially if we look of India's energy transition. It has the ability to reducing carbon emission, enhance public health and improve the quality of life. The thrust is not only to bolster the economic development but to imbibe various hydrogen based technologies and India can play a vital role in such change management. High scale Manufacturing and Technology Improvements in electrolyzers will reduce the cost of hydrogen in coming days. The objective of the Government is to push usage of hydrogen usage by providing a demand pull and supply push strategy. At present the cost is higher for Green Hydrogen as a fuel but with greater usage , production and policy action it would be an enabler and an alternative for the fossil fuels which the nation requires. At present New Delhi has been categorized as the polluted capital as per the latest study and many of our cities are under the bracket of most polluted citiies including Byrnihat, Meghalaya as the most polluted city with a PM of 2.5 milligram.

Examples of Green Refineries in India

Mumbai Refinery: The Bharat Petroleum Mumbai Refinery (BPCL - MR) is one of the most versatile refineries in India and has been accredited as ISO 14001 (Environment Management System) and OHSAS 18001 (Occupational Health and Safety Management System).

Kochi Refinery: Kochi Refinery Year after year is appreciated as the refinery who has been bagging accolades for its commitment to the environment, use and reuse of water, the efficiency in managing solid wastes and effluents and the care taken to keep the atmosphere clean.

Other refineries like Bhatinda and Numaligarh Refinery are classic examples of the Green Refineries in Public Sector Oil Companies.

Approaches by various Oil PSUs

Indian Oil's current GHG emission stands around 21.5 million metric tonnes of carbon dioxide equivalent (MMTCO2e). The GHGs accounted by the company are CO2 (98.5%), CH4 (0.5%) and N2O (1%). Out of the above, Scope-1 emission constitute 96% of the emissions while the remaining 4% are on account of Scope-2 emissions. About 97% of the emissions are due to refineries and petrochemicals operations while about 2% are on account of Pipeline operations and balance about 1% are from Marketing operations. With proposed expansions, the emissions are expected to be over 40 MMTCO2e by the end of this decade.

The company continues its existing emission mitigation efforts towards lowering operational emissions, offering greener products and mitigating supply chain emissions. Going forward, you would see our commitments grow to meet our net zero aspirations.

It has the focus areas of achieving net zero operational emissions, increase the proportion of greener fuels in the product mix, investment in low carbon technology, engagement with value chain partners to reduce emissions across the current network, linkages with employee skills and company climate goals and goal of environmental sustainability. These are the focus areas of the Company and has lot of initiatives for their pathway to net zero with shifting from fuel oil, gas oil and naptha to compressed natural gas, purchase of carbon credit and enhance tree plantation and moving towards green hydrogen. Ethanol blended petrol upto 20 percent is the goal and enhancing charging stations for the electric vehicles is the goal of the PSU. Sustainability practises of lower emissions and use of solar energy in their supply chain goes a long way of making their processes cleaner and greener.

Hindustan Petroleum Corporation Limited (HPCL) Bio-Refinery have taken significant steps to establish bio-refineries focused on producing ethanol, biodiesel, and other bio-based chemicals. Its Bhatinda refinery they have incorporated advanced emission reduction

techniques and green hydrogen production to minimize its environmental footprint.

Numaligarh Bio-Refinery Project this bio-refinery is one of India's flagship green projects, aiming to produce bioethanol using bamboo as the primary feedstock. This initiative is a game-changer for the north-eastern region, promoting sustainable economic growth while reducing fossil fuel dependency.

Green Refining Innovative Steps

The integration of cutting-edge technologies has been instrumental in enhancing the efficiency and sustainability of green refineries in India. Some of the key advancements include hydroprocessing and Bio-Cracking where the processes undertaken to covert the biomass and used cooking oil into renewable diesel and aviation fuel, offering a cleaner alternative to conventional fossil fuels.

We also have the option of Carbon Capture and Utilization (CCU) in which we can capture CO_2 emissions from the refinery operations. This carbon can be repurposed for industrial use, reducing the overall environmental impact. A classic example of circular economy.

Enhancement of Green Hydrogen Production in which the Electrolysis powered by renewable energy sources helps generate green hydrogen, which can be used in refining processes with minimal carbon emissions and finally we have Waste-to-Energy Solutions in which the conversion of refinery waste and agricultural residues into energy fosters a circular economy approach, further reducing pollution and resource wastage.

Conclusion

Green refineries are a vital part of India's sustainable energy transition and with the ongoing advancements in bio-refining technologies and strong institutional support backed by policy push by government we find that the eco-friendly refineries are poised to play a transformative role in India's energy sector. As the country moves toward achieving its net-zero emission targets in 2070 the green refineries will be at the forefront of a cleaner, greener, and more resilient energy landscape. SB

Sources:

1. https://iocl.com/
2. https://www.bharatpetroleum.in/
3. https://www.hindustanpetroleum.com/
4. https://niti.gov.in/

Social Media and Professional Branding Etiquette

Usha Ganapathy Subramanian
Practicing Company Secretary
Chennai

Introduction

Social media has become an indispensable part of everyone's life today. Social media is not only an important component of a person's personal life, but it also is pivotal to one's career growth and professional success, these days. Maintaining a positive and strategic online presence has become a necessity for exploring professional opportunities and expanding business.

Platforms like LinkedIn and X (previously Twitter) have become a way of maintaining one's online presence as well as a medium of expression of one's thoughts and opinions on matters big and small.

Maintaining a professional online presence involves a nuanced discernment between personal online presence and professional online presence, being sensitive to various groups of audience, and having regard to legal and data privacy concerns.

Differentiating Between Personal and Professional Online Presence

It is important to understand the difference between personal online presence and professional online presence. Understanding the platform dynamics of different social media platforms is key here. Generally, a platform like Facebook is used for having a personal online presence, whereas LinkedIn is designed for professional networking.

A more visual platform like Instagram renders itself useful for both personal social presence as well as for promoting one's personal or business brand. However, it is better to maintain separate accounts for the two purposes. Instagram's reach could suit professionals in marketing, event management, or any other art-related domains, or for any one with a need and penchant for personal brand promotion.

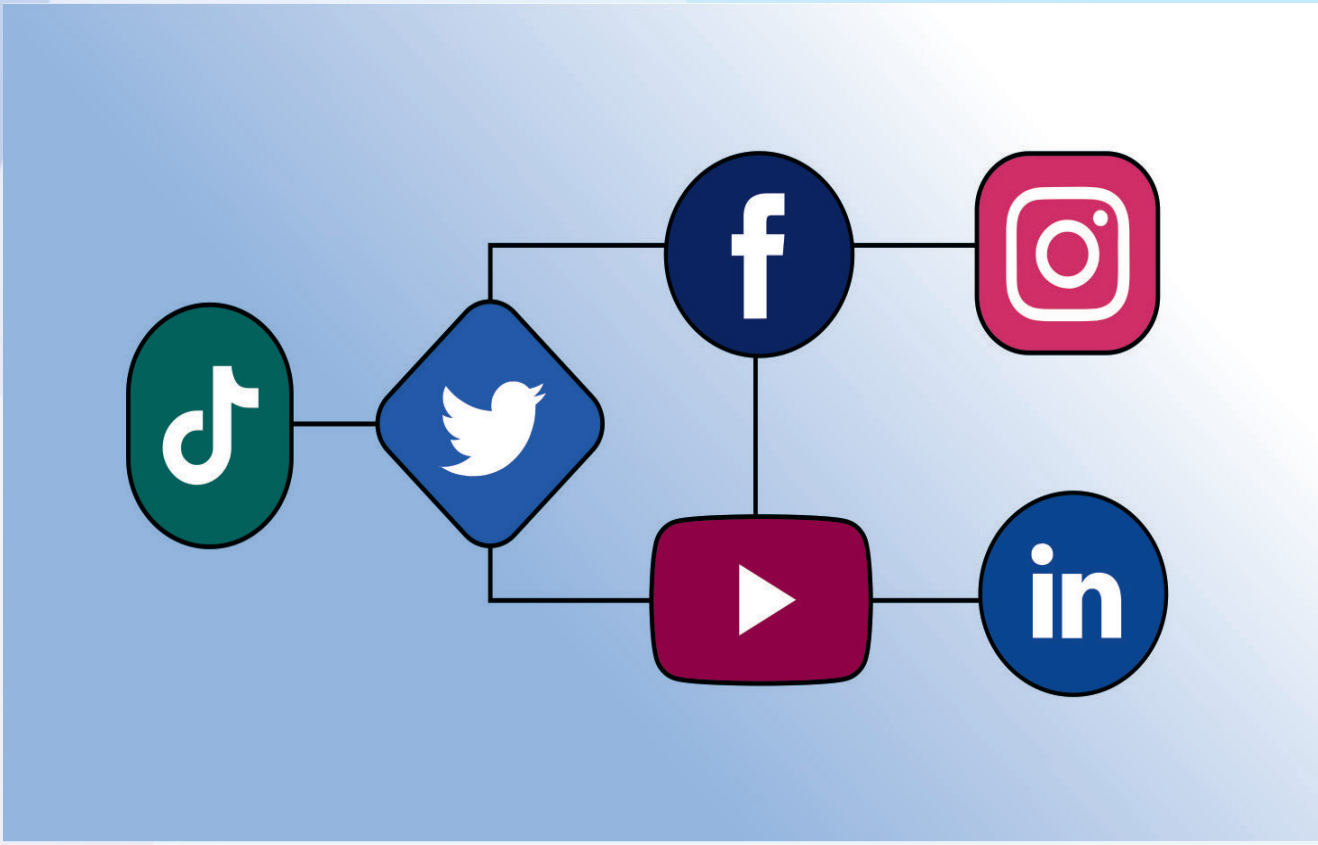
A platform like X (previously Twitter) can be used for showcasing one's thoughts on recent industry developments, and can be used for building a strong online presence among a target audience that is more technical and discerning. Understanding the platform dynamics of the different social media platforms becomes key to maintaining a strategic and positive online presence.

Posting personal life events or celebrations may be avoided on professional platforms. Blurring the lines between personal and professional presence may have some benefits like rendering a down-to-earth persona to the user, but it may also come across as oversharing, irrelevant and lacking healthy boundaries.

Posting Thoughtfully on Professional Networks

These days curating a professional online presence starts with creating a LinkedIn profile that showcases one's experience, achievements, and skills with clarity and brevity, without any understatement or overstatement.

When posting on social media, the content should be relevant to the platform dynamics, the audience and must have relevance to what one aims to achieve through the social media presence. Ideally, one may avoid posting



controversial or polarizing topics unless relevant to one's professional identity.

When posting updates one must ensure relevance and avoid oversharing. Reiterating the previous paragraphs, it is prudent to avoid posting personal events on the platform, unless it has any professional relevance.

Using a consistent tone and language that aligns with one's professional image is key. Most importantly, one can avoid a negative impression by ensuring proper formatting and grammar in posts and articles.

Every post should not be about self-promotion. Sometimes, users post about a random social message that ultimately brings the conversation back to his or her personal quality or achievement. This may be avoided. While the platform itself is for professional networking and some amount of patting oneself on the back may seem unavoidable in today's world, blowing one's own trumpet at every turn is sure to put off the audience. The quality and essence of a person is ideally felt, rather than heard.

Emotional balance is necessary to avoid the temptation of venting professional frustrations online, as all it takes is a few seconds of indiscretion to cause damage. The more the platform appears to be inclusive and accommodating of emotions, the more tempting it is to overshare and the more careful and self-aware one must be.

Mindful Interactions

The etiquette of commenting and engaging on professional posts with respect must be observed carefully. When peers post their professional achievements, acknowledging and congratulating them must be done in a way that is sincere, respectful, with a touch of warmth. However, one must be careful not to appear too eager to please.

One must think twice before liking, sharing, and retweeting posts as they too have an impact in shaping one's professional image.

Maintaining composure when facing criticism is the hallmark of professional behaviour. A case-based strategy must be adopted for handling

negative comments: ignoring, addressing professionally, or escalating when needed.

The art of apologizing or clarifying misunderstandings without escalating conflicts is also necessary. Recognizing when to disengage from online disputes is also crucial in maintaining a presence that is reflective of a thorough professional.

Managing Privacy Settings and Sharing Appropriate Content

For one's own safety, one must always review the privacy settings on platforms to control visibility of one's profile, posts, and contact information.One must understand the risks of oversharing personal details, given the increasing instances of cybercrimes and using intel from online data to augment the modus operandi of offline crimes as well.

One must have regard to the company's policies, legal considerations and contractual clauses while sharing details about the company or client's information. For professionals, the code of ethics and guidelines issued by the governing body must be kept in mind.

Conclusion

In essence, being inherently ethical, respectful and patient, reflects in one's online persona too. Curating an online presence is more about accurately reflecting what one is and aspires to be, rather than crafting an online persona that is miles apart from the real person. One must also remember that it is a written form of networking. The words posted are for everyone to see, and what one sees, one remembers. This is what makes it different from offline networking.

While one must be diligent in the use of social media, one need not shy away from it. In fact, it is becoming an essential component of one's career growth.

One must endeavour to remain authentic and true to themselves on social media just as in the real world, all the while being mindful and respectful. SB

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

Geeta Joshi Brahme
Founder Sun N Soul
Certified Mandala Therapist

Consciousness connected to Mandala

Our history of Indian religion is an attempt to attain auto-consciousness. We blend religion and philosophy together in the unity of vision that helps an experience. In Vedanta this consciousness which is derived from *Upnishads* calls this consciousness as "Brahma' and its mysterious presence in us as "*Aatma*" called secrete self or pure intelligence.

In primitive Buddhism, they picturized the existence of 2 worlds totally different from one another. Our own world "*Sansara*" in which *karma* operates & which is always dying & being born again & again. On the other side the place of *nirvana* reached by a quality leap when *karma* & the force which causes it are stopped or suppressed.

So here we are in the place of *Sansara* work on the principle of moral responsibility. So here we connect it with behavior of human to sustainability of the earth.

About Mandala

Mandala is a geometric projection of the world reduced to an essential pattern. It's a circle of life. Those are layers of mind. It represents spiritual journey starting from the outside to inner soul through seven different layers.

Mandala consists of the 5 elements. It helps to find out deficiencies in any *Tattva*, as our body is also a composition of 5 elements. Mandala has a structure. It's a cognitive process where you submerge into time & space.

The first Indian expression of Mandala, has in its center which is the luminating point of consciousness, like the hub of a wheel.

Mandala brings different thinking patterns together. Logical thinking where you know, what you see & perceive without being judgemental. Critical thinking where you think about consequences and understand things at practical level.

Mandala, in Sanskrit means Circle or Centre. Mandala represents that everything in life is interconnected. We all are part of nature, world & universe. Circle represents life has no end. So, Mandala is a spiritual symbol. It is a visual representation of the universe and a guide to meditation.

In Hinduism & Buddhism, it is believed that while doing Mandala, you are guided through the cosmic process of suffering into one of joy & happiness.

Mandala therapy heals a person, makes them feel good, it makes you aware about your weaknesses. Mandala helps in listening to ourselves.

So once the person who is involved in decision making related to sustainability, can by healing own self, make better decisions & helps to balance *Shiva & Shakti Tattva* of our mind.

There are 7 layers of the mind, which makes important contributions to the life of an individual.

> At the core of every person is a self, and the self can't be damaged. It knows how to heal.
> *- Edward Schwarts*

- It enables us listen our inner signals so we are aware of what we need & when we need it in our lives.
- It helps us to engage ourself thoughtfully with compassion.
- We can access to our deep intuition, so we make decisions that makes lives better.

The deepest level of self-listening is Reflective listening. Where we listen to our intuition & deeper self. So, we eliminate fear & ego and just

listen with real wisdom. This allows us to take true decisions which leads to truth, growth and wholeness.

Healing Mandala

These are made for meditative purposes. These Mandalas helps to gain wisdom, insight. It also channelizes focus & concentration.

The famous Buddhist Sand Mandalas has religious and traditional patterns. These Mandala designs use variety of symbols which are made from colored sand, which ultimately represents the impermanency of life.

The traditional Tibetan Mandala which is found in Buddhism, depicts the enlightenment state of mind, through sand art. Symbols & patterns are formed on the ground by using metal and small tubes. Monks complete it in 12 days and on 13th day, they destroy it, just to show that nothing is permanent.

In modern context, Mandalas are used in *Yog*, in healing circles, where body, mind & heart is restored. So, in Hindu & Buddhism, Mandala is used to perform sacred rites & as a meditation instrument.

Sustainability

Sustainability is society's ability to exist & develop without depleting natural resources which are necessary for us for future living. Environmental, economic, social and human sustainability are the four types, in which Mandalas as they are connected to human minds, play major role.

Taking decisions to maintain sustainability depends on how much that decision maker is calm, balanced and a visionary.

To have balanced mind & body, one needs to have well-balanced *chakras* in body. As we all know, there are 7 *chakras* in body, which helps us to think logically, to think for upliftment of

society. Aligning *chakras* helps energy flow to be smoother and creates state of well-being.

As chakras are derived from Chakra Mandalas, by applying different techniques one can work on human sustainability through drawing them.

There are 6 expressions of feelings which are universal: anger, happiness, fear, surprise, disgust and sadness. So, these different feelings we need to control while taking decisions at business level to maintain the sustainability. As Mandalas teach us how we can have control over emotions.

Mandala Meditation gives you a purposeful sense of calm, peace & balanced mind that benefits your emotional well-being & overall health. You can use Mandalas to relax & cope up with stress & anxiety by focusing. It gives you an inner peace.

Mandalas have profound impact on one's awareness, values & behaviors related to sustainability. Here's how sustainability and mindful Mandalas are interconnected.

1. **Brings Mindfulness**

   Mandala meditation encourages how individual can use resources carefully. People become aware of consumption, which will take them to more sustainable choices like reducing wastages, recycling material, reuse of resources, conserving energy and try to be eco-friendly.

2. **Work on stress & anxiety**

   Mandalas can help us to lead simple lifestyle. Once we work on stress, then we can make better decisions in relation to sustainability, we stop over-consumption.

3. **Turns us Empathetic**

   One become more empathetic & compassionate towards others, like sense of compassion for the Planet & all of us.

4. **Be Self aware**

   Breaking away from unhealthy habits by becoming self-aware, to align with

   sustainability principles like using more public transport, saving water & electricity.

5. **Think for future**

   By doing Mandals one start thinking for future generations and start preserving the resources for them.

6. **Self-Discovery**

   Mandalas helps to Self-discover, which leads to live life with high values & morals.

7. **You getting less Materialistic**

   Mandalas promotes happiness & contentment that is not dependent on material properties, which is a key to sustainability living.

8. **Leads to Consciousness**

   Thus, Mandalas gives sustainable mindset that influences consciousness & lead to a better society which has priorities towards sustainability.

To summarize, Mandalas take you to the meditational path & we start getting more sustainable towards available resources as it works on our consciousness. Being mindful leads to have environmental awareness. Being conscious of your choices is the connection between sustainable way of living & protecting our planet. And doing Mandalas is one of the techniques to become Mindful. SB

The following questions and answers are considered.

1. How do perimenopause, menopause, and postmenopause impact a woman's psychological well being ?

Perimenopause, menopause, and postmenopause can significantly impact a woman's psychological well-being. These stages can cause various emotional and mental health challenges, including mood swings, irritability, anxiety, depression, hot flashes, night sweats, and body image concerns. Hormonal changes, sleep disturbances, lifestyle changes, and sociocultural factors contribute to these symptoms.

These stages typically occur during the following time periods:

- **Perimenopause:** 2-10 years before menopause (average age: 40-45)
- **Menopause:** typically occurs between ages 45-55 (average age: 51)
- **Postmenopause:** after menopause, lasting for the rest of a woman's life

If left unaddressed, these symptoms can negatively impact overall well-being and quality of life. Cognitive-behavioral therapy (CBT) can help women manage menopause-related symptoms by developing coping skills, improving self-esteem, and leading to improved overall well-being.

2. What are the psychological effects of work guilt and stay-home grief on women, and how can they be mitigated to promote overall well-being?

Work guilt and stay-home grief are two distinct experiences that can significantly impact a woman's psychological well-being. **Work guilt** refers to feelings of guilt, anxiety, and stress experienced by working women, particularly mothers, who feel they are neglecting their family responsibilities. This can be caused by societal expectations, pressure to balance work and family responsibilities, and lack of support from employers or partners.

On the other hand, **stay-home grief** refers to feelings of loss, grief, and identity crisis experienced by women who leave their careers to care for their families. This can be caused by the loss of professional identity and purpose, reduced social interaction, increased isolation, and pressure to be a "perfect" caregiver. Symptoms of stay-home grief include depression, anxiety, decreased self-esteem, and difficulty finding new purpose and meaning.

Both work guilt and stay-home grief can have a profound impact on psychological well-being, leading to anxiety, depression, decreased self-esteem, and difficulty finding new purpose and meaning. These experiences can also affect spouse relationships. Early intervention, treatment, and support systems like CBT therapy & NLP, support groups, and self-care activities can help prevent psychological disorders and strengthen relationships.

Ms. Jayasri Tangirala
Psychologist, Founder, Beyond well being Yousva

There are nine types Nakshatra Groups and each belonging to 9 different Planets

Each Planet represents different Characteristics.

Moon, Mars, Rahu, Jupiter, Saturn, Mercury, Ketu, Venus and Sun.

Hasta	Chitra	Swati	Vishakha	Anuradha	Jyestha	Mula	Purvashadha	Uttarshadha
Sravana	Dhanishtha	Satbhisa	Purva Bhadrapd	U.Bhadrapad	Revati	Ashwini	Bharani	Krittika
Rohini	Magashira	Ardra	Punarvasu	Pushya	Aslesa	Magha	P.Phalguni	U.Phalguni
MOON	**MARS**	**RAHU**	**JUPITER**	**SATURN**	**MERCURY**	**KETU**	**VENUS**	**SUN**

Each Zodiac sign covers 2.5 Nakshatras and therefore we have 27 Nakshatras and one Abhijeet Nakshatra which is considered most auspicious in Muhurat Shastra.

Someone who belongs to Kanya Rashi and Hasta Nakshatra will have completely different characteristics from someone who has Kanya Rashi but Chitra Nakshatra.

So each person is a combination of any of 9 planets, 12 zodiac signs and 27 nakshatras.

The permutations and combinations are very varied and that makes every person unique.

Every person has a corresponding Tree/Plant/Shrub to enhance his/her life.

Today we will be discussing the 2nd Nakshatra

BHARANI: This Nakshatra has Venus as its lord and therefore can bring the qualities of Venus with it likeLuxuries, Harmony, Romance etc.

Today we will talk about the tree that signifies the Bharani Nakshatra.

Amla Tree belongs to this Nakshatra (Indian Gooseberry)

Amla has many medicinal benefits in making medicines.

It reduces acidity or excess pitta in the body and revitalises your hair, keeps them black.

It also has many nutritional properties and is widely used to make pickles in India.

Someone who belongs to this nakshatra must have Amla trees planted in their vicinity and to be watered daily.

To generate good karma one can even donate 108 Amla trees to their friends or relatives where they are sure the plants will be cared for.

Purvi Dalal
Tree Analyst
Thane

DO YOU KNOW?

Finland is World's Happiest Country for 8th year straight, India stands at 118

It is released on the UN's International Day of Happiness, the report assesses the quality of life in over 140 countries based on resident feedback.

Finland has retained its top spot as the happiest country in the world for the eighth consecutive year, according to the annual World Happiness Report. Released on the UN's International Day of Happiness, the report assesses the quality of life in over 140 countries based on resident feedback. The report evaluates various factors such as social support, health, freedom, generosity, perception of corruption, and gross domestic product (GDP) to determine the happiness levels of 147 countries, Fortune reported.

Finland scored an impressive average of 7.74, securing its position as the happiest nation globally.

India has made a slight improvement in its happiness quotient, moving up from 126 in 2024 to 118 in the latest World Happiness Report, 2025. However, this ranking still places India behind several conflict-affected countries, including Ukraine, Mozambique, and Iraq.

Source:NDTV.com

SUSTAINABILITY QUIZ RAPID FIRE ROUND

Five questions on sustainability

1. GCF stands for _____.
2. Green Loan Principles are developed by _____.
3. According to PWC's 2023 Middle East Report, _____% considered the absence of adequate internal skills and expertise to be the biggest challenge in progressing an organisation's ESG strategy
4. China is working towards laying the foundation for building a national sustainability disclosure system by _____.
5. According to the Sustainable Development Report 2024, USA with a score of 74.4 is ranked _____.

WINNER	
Sl. No.	**Name**
1.	CMA Leelendra Adusumilli

Congratulations to the Winner!

CORRECT ANSWERS OF PREVIOUS QUIZ

1.	250 listed entities
2.	Principles-based framework
3.	3.67 in 2023-24
4.	Streamlined Energy and Carbon Reporting
5.	4 (four)

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 April'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 April 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.

Date of Publication: March 25, 2025

Research and Compilation:

CMA Arunabha Saha, Practising Cost Accountant
Dr. Ranjith Krishnan, SSB Member

Curated and Edited by

Dr. Ranjith Krishnan, SSB Member

Secretary to SSB:

CMA Dibbendu Roy, Additional Director, ICMAI

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
(Statutory Body under an Act of Parliament)
www.icmai.in

Headquarters
CMA Bhawan, 12 Sudder Street, Kolkata – 700016
Ph: +91-33-2252 1031/34/35/1602/1492

Delhi Office
CMA Bhawan, 3 Institutional Area, Lodhi Road, New Delhi – 110003
Ph: +91-11-24666100