

Green Files

July to September 2021 / Volume 39





Editorial



Green Files, a quarterly newsletter published by iCED features glimpses of recent environment news, events, emerging trends, innovations, initiatives and efforts of different organizations to protect the environment.

This edition of the newsletter features highlights of Shri Girish Chandra Murmu, **Comptroller And Auditor General of India's** address during the 15th ASOSAI Assembly and the 57th Governing Board Meeting in September 2021 as well as CAG's message while signing MoU between SAI India and SAI Maldives, which provide key insights into areas and concerns of Environment Audit and need to be factored into risk assessments and topic identifications.

The newsletter also covers the activities at iCED during July-September 2021. iCED organised five National Training Programmes, two webinars and an International Webinar including a training programme for IA&AS Officer Trainees of the 2020 batch in this period.

Green Files further features the proceedings of the High Level Political Forum and recent Steering Committee meeting of the INTOSAI WGEA. There are discussions on the Rights of Nature: "The core of all other Rights", Environmental Governance in India- post the Stockholm Conference of 1972 and "Halma" tradition used by the communities for water conservation in India. Audit Reports of NAO Estonia on Waste and of CAG of India on Wildlife and Forest Management in Meghalaya are also included in the newsletter.

We at iCED, value your suggestions to make Green Files more informative and user friendly. Your contributions within the broad scope of the newsletter will be highly appreciated.

Syantani Jafa
Director General
iCED, Jaipur

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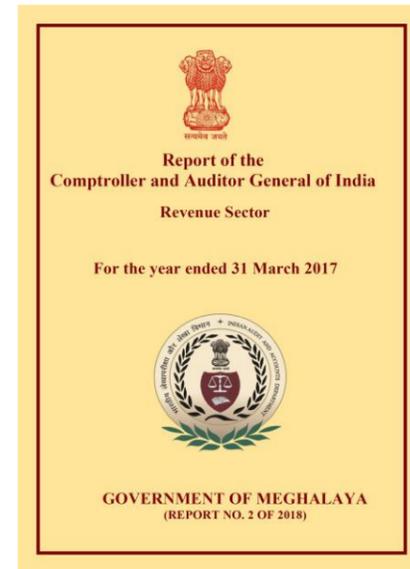
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SAI INDIA NEWS

Manoj Kumar, AAO

Shri Girish Chandra Murmu, CAG of India elected Chairman of ASOSAI from 2024-2027

The 56th Governing Board of ASOSAI held in September 2021 elected **Shri Girish Chandra Murmu, the Comptroller and Auditor General of India (CAG)** as the host of the 16th Assembly of Asian Organization of Supreme Audit Institutions (ASOSAI) in 2024 and the Chairman of ASOSAI from 2024-2027

In his address, on 7th September 2021 **Shri Murmu** stated that the 2030 Agenda was adopted in the year 2015. Out of 169 SDG targets 21 SDG targets should have been met by the year 2020 and the rest of them are scheduled to be met by the years 2025 and 2030.

Shri Murmu emphasised on the importance that the Asian region has, in the global achievement of SDGs and stated that the “Asia and the Pacific SDG Progress Report” by the UN Economic & Social Commission for the Asia and the Pacific, has highlighted, the risk and possible impact and has expressed concerns which needs to be factored in while defining our audit process.

Shri Murmu insisted on the important role that SAIs can play towards the achievement of SDGs by conducting audits and emphasised that in coming times, we need to focus on identifying what has been the achievement against targets that should have met by 2020, and gaps as well as provide timely audit advice and actionable recommendations to ensure the effective and efficient progress towards the SDG targets scheduled for the years 2025 and 2030.



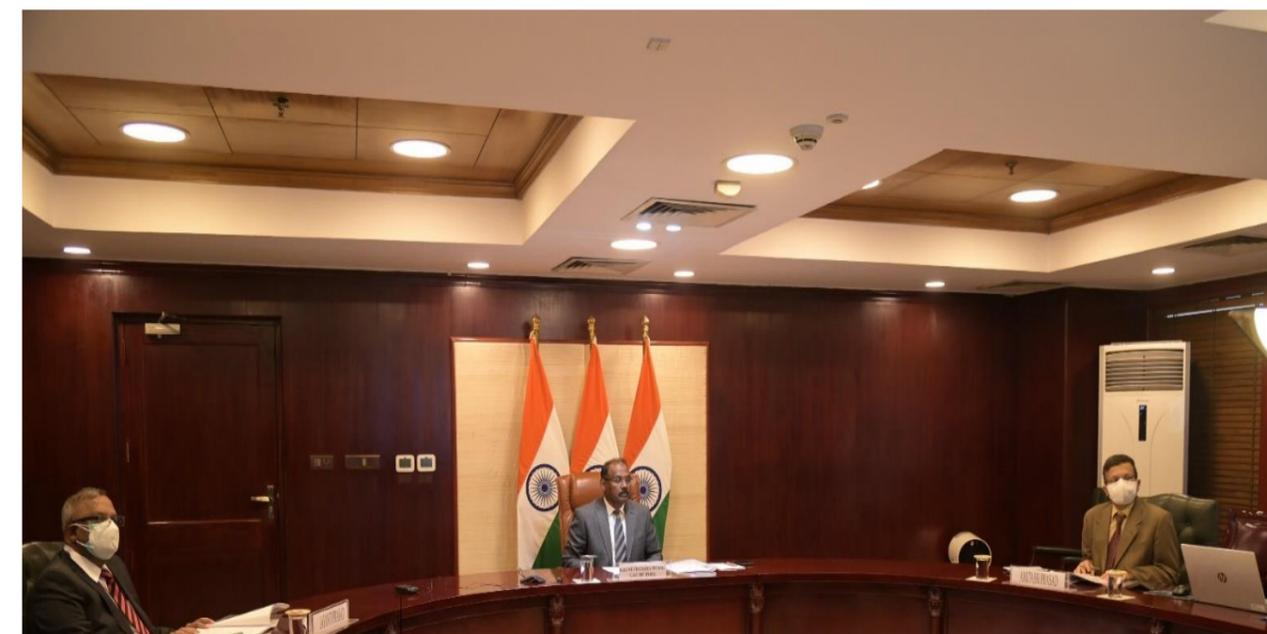
Shri Girish Chandra Murmu C&AG of India, attending the 15th ASOSAI Assembly on 7th September 2021



Shri Girish Chandra Murmu C&AG of India during 57th ASOSAI Governing Board Meeting held on 8th September, 2021

He assured the members that during SAI India’s three year term as Chair of the ASOSAI, **SAI India will focus on the areas of environment audit and leveraging emerging technologies for audit.** First, develop a comprehensive framework with environment audit specific definitions and parameters for **natural resource accounting** dovetailing with overall framework of sustainable development. This conceptual framework is fundamental for checking whether the expenditure is creating a negative environmental return. He stated that this would also complement the efforts taken by the ASOSAI Working Group on Environment on topics of climate change and carbon emissions.

Shri Murmu informed that SAI India regularly conducts audits on the vast and ever-evolving domain of environment audits across the federal and provincial levels of government. In the recent past, SAI India has published compliance and performance audit reports covering a variety of issues related to land, water, air, waste, biodiversity, forest, wildlife, environment clearance, river rejuvenation, coastal regulation, green initiatives, environmental and sustainability issues in the management of resources etc. Realizing that achievement of SDGs require cross-cutting efforts, SAI India, leverages current and advanced technologies including **Data analytics, remote sensing, and GPS** to make audit conclusions more realistic, precise and persuasive. SAI India actively promotes Natural Resource Accounting.



The 57th ASOSAI Governing Board Meeting held on 8th September, 2021

He stated that we will seek active participation of members to create process and structures within ASOSAI to address the challenges faced by SAIs in the region in dealing with Big Data with an aim to leverage on **artificial intelligence, machine learning and collaborative remote access data audits.** He emphasised that, these emerging technologies, will also help in augmenting existing audit competence as well as accelerate capacity building for performance audit, apart from regular financial certification audit.

Shri Murmu informed the members about the state of the art training facilities, IT infrastructure and tools established by SAI India to make our auditors future ready. This **vast network of training facilities** includes the International Centre for Information Systems & Audit (iCISA), Centre for Data Management & Analytics (CDMA), the International Centre for Environmental Audit & Sustainable Development (iCED), the National Academy of Audit & Accounts, and the 12 Regional Training Centres.

Till now, **SAI India has trained 6183 auditors across the world** and have been handholding many SAIs within and outside ASOSAI in emerging areas of audit. **CAG** informed the members that SAI India will be happy to share the learning experience, experts and facilities for capacity building among the member SAIs of ASOSAI with a special focus areas of environment, emerging technologies and natural resource accounting.

In his address, **Shri Murmu** stated that Human Development Index which provides an alternative single number by capturing progress in the dimensions of education, health and standard of living may prove to be useful for SAIs to assess the progress in implementing SDGs till such time data relating to targets and indicators gets stabilised. He added that, we look forward to work together on developing a strategy to equip member SAIs in the focus areas of SDGs, environment, emerging technologies and natural resource accounting to support and supplement national strategies and plans for sustainable development.

With less than 10 years to go, to deliver the ambitious 2030 promise, this decade requires action to be taken by all, at all levels- individual, local, regional and global, to address the challenges raised by poverty, climate change, gender inequality and SDG financing gap.

Shri Murmu assured the Governing Board that, we will remain in close contact with the ASOSAI Secretariat and esteemed ASOSAI Governing Board members to seek their valuable advice, opinions and ideas to bring about transformation in the audit practices of our region. We will also seek to expand collaboration with other regional group of SAIs to not only **exchange the best practices** but also to **jointly develop capacity-building programs** to develop robust audit practices. He concluded the address by thanking all the member SAIs for reposing their faith in SAI India.

SAI India signed Memorandum of Understanding with SAI Maldives

A Memorandum of Understanding was signed between **Shri Girish Chandra Murmu**, C&AG of India and his Maldivian counterpart **Shri Hussain Niyazy**, on 24th October, 2021, at Male, Maldives to strengthen the professional capacity of both the institutions & improve the methodologies in Public Audit. The objective of this MoU is to promote and develop the cooperation between the Parties in order to strengthen respective institution's professional capacity and improve methodologies in the field of audit of public finance. Both parties also agreed to conduct training programmes in their respective countries for their staff on a need basis and explore other means of capacity development support and cooperate on areas that are mutually beneficial.



Shri Girish Chandra Murmu, C&AG of India signed MoU with SAI Maldives

C&AG said sustainable development is at the forefront of the partnership between the two sides. He highlighted the importance of judicious use of resources and sustainability for future generations that has given rise to the concept of **natural resource accounting (NRA)**. The NRA provides an outline of resource bases, pace of usage with an eye on their sustainability and embeds environmental aspects into the economic indices.

1. Areas of cooperation of the Parties shall include the following:
 - a. Conduct **training** at, Auditors General's Office Maldives or in India on a need basis;
 - b. **Other capacity development programmes** as desired by the Parties; and
 - c. Any other **areas of cooperation** as mutually agreed upon by the Parties.
2. Forms of cooperation of the Parties shall include the following:
 - a. Conduct **training in Maldives or in India** on a topic requested by SAI Maldives on a need basis;
 - b. Invite **each other's representatives** to participate in selected conferences, seminars, internships and other training activities of international character;
 - c. Exchanging **visits or programs** for strengthening institutional relationship; and
 - d. Sharing experiences and **best practices** in the field of public auditing.

This MoU will be valid for a period of **six (06) years** and will be renewed automatically for another successive period of six year.

INTOSAI WGEA NEWS

Manoj Kumar, AAO

INTOSAI WGEA Virtual Steering Committee meeting 2021

The INTOSAI WGEA virtual Steering Committee (SC) meeting was held from 20th September 2021 to 24th September 2021. The SC meeting was inaugurated by **Mr. Matti Okko (Chair of INTOSAI WGEA, Acting Auditor General, SAI Finland)**. **Ms. Vivi Niemenmaa (INTOSAI WGEA Secretariat)** underlined the purpose of the meeting and the agenda. It was followed by a “**Future Strategy Workshop**” which had the objectives to “outline a common vision of the desired future role of the INTOSAI WGEA. Plan the trajectory and actions to fulfil that role & identify topics that the INTOSAI WGEA should focus on in the next work periods.” Regional WGEA updates were communicated on 21st and 22nd September 2021.

A report on results of the **10th Environmental Survey** was communicated by the INTOSAI WGEA Secretariat on 21st September. The survey gives an overview of the audits SAIs have conducted and plan to undertake, the resources SAIs dedicate to the work, the topics they choose, the way they conduct their audits and communicate about them, and how they consider the global frameworks, notably the UN Sustainable Development Goals. This report also provided an analysis on how the pandemic has affected SAIs work in environmental auditing.



Participants during the INTOSAI WGEA 18th Steering Committee Meeting

Presentations about progress of various Work Plans were given by representatives of respective Project Leaders. There were presentations on WP1 (Past Work), WP 2 (Plastic Waste), WP 3 (Climate Change) WP 4 (Sustainable Transportation), WP5 on Environmental SDGs (INTOSAI WGEA Secretariat), (SAI Canada) and WP6, The presentation on **Work Package 2- SDG 12- Responsible Consumption and Production-Focus on Plastic Waste** was given by **Shri Manish Kumar, DG, iCED** on 22nd September. Shri Manish Kumar informed about progress of Research Paper after the Assembly Meeting held in January 2021 and the modified report incorporating the inputs and suggestions received from different quarters.



Shri Manish Kumar, OSD, iCED during presentation on WP 2 session

Shri Manish Kumar, informed the Steering Committee that the Research Paper will provide auditors the source from where useful information for audit of plastic waste/plastic related issues can be referred. Various themes of the Research Paper were discussed briefly. Shri Manish Kumar, deliberated on cross linkages of WP 2 Research Project with other work packages like Work Package 3, 4, 5 and 6. Shri Kumar, informed about inclusion of relevant audit case studies and other related materials in the work package on Training and Green lines (SAI Estonia), (SAI Indonesia), (SAI India), (SAI USA).

Shri Pushkar Kumar Director (Trg. & Res.), iCED gave a presentation on **WP-6-Global Training Facility: International Centre for Environment Audit and Sustainable Development (iCED)** on 23rd September. Shri Kumar informed the Steering Committee about the increasing trend in number of International participants and future course of action. The final day marked the presentation on Secretariat Progress Report by the INTOSAI WGEA Secretariat. There were discussions on the topic for the next INTOSAI WGEA Award and Future Strategy & Work Plan 2023-2025. The closing speech was given by **Mr. Matti Okko (Chair of INTOSAI WGEA, Acting Auditor General, SAI Finland)**.



Shri Pushkar Kumar, Director, iCED during presentation on WP 6 session

ACTIVITIES AT ICED, JAIPUR

During the July-September 2021, one International workshop on Renewable Energy and its Audits, two National Workshop on “Natural Resource Accounting” and “Land Management with reference to Environmental perspective” and Five National Training Programmes have been organized in mixed format of online and face to face (physical) mode by iCED, Jaipur. The details are given below-

Shri R M Johri, ADAI (GASAB) inaugurated the Webinar on “**Natural Resource Accounting (NRA)**” organized virtually on 05th July, 2021.



Shri R M Johri, ADAI (GASAB) addressing the participants during Webinar on NRA

ADAI stated that implementation of NRA is very much significant in context of India because India is bound to adhere to commitments of SDGs as suggested by United Nations. He suggested that natural resource accounts should be prepared in such a way that it gives a clear set of presumptions and assumptions used in asset accounts, methodologies used and how credible it is supposed to be and then only, it would fulfil the purpose of NRA for all its intendent users. Total 83 participants from 28 offices attended the seminar. There were five sessions led by experts from IBM (Nagpur), TERI (New Delhi), NRSC (Hyderabad), Pr. AG (A&E) Jaipur and Shri Sudipta Biswas,

Pavan Meena, AAO

A five day National Training Programme on “**Environment Audit**” was conducted online from 12th to 17th July to create a pool of trainers. The programme was attended by 13 Group officers. The Training Programme on “**Environment Audit**” for **IA&AS Officer Trainees (2020 Batch)** was organized in face to face mode from 26th to 30th July, 2021. Total 27 officer’s trainees attended the programme. **Ms. Madhumita Basu, ADAI (Training)** inaugurated the programme.



Ms. Madhumita Basu, ADAI (Training) and Shri Manish Kumar, DG, iCED with Officer’s Trainees of 2020 Batch

NTP on “**Environmental Issues in Sustainable Cities, Government Establishment and Public Sector Enterprises including Indian Railways with focus on SDGs**” was organized from 26th to 30th July, 2021. There were 21 officers from 08 offices who attended the programme.

NTP on “**Audit of Mining and other Extractive Industries**” was organized from 20th to 24th September, 2021. Twenty three participants from eight field offices participated in this programme.

iCED organized a National Seminar on “**Land Management with reference to Environmental Perspective**” on 09th August, 2021. The seminar had six sessions steered by experts from ICAR-NBSS & LUP (Nagpur), WALMI (Maharashtra), FAO (India), CAT (Mumbai), DAG (AMG-II, Audit-II, Bhopal, MP).

A National Training Programme on “**Audit of Environmental Pollution (Air, Water and Land)**” was organized online from 23rd to 27th August, 2021 for twenty one officers from IA&AD.

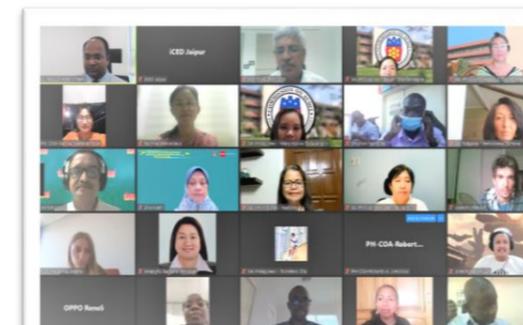
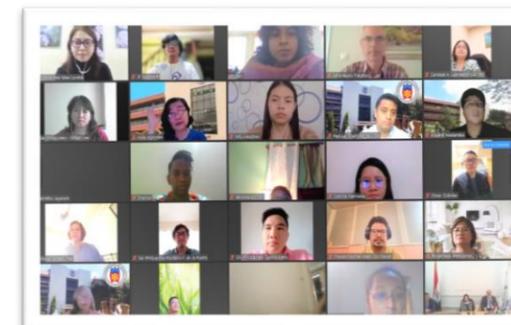
iCED also organized one day International Webinar on “**Renewable Energy and its Audit**” in two batches on 06th and 07th September with different timings to enable participants from different parts of the world to participate. **Ms. Atreyee Das, ADAI (Training)** inaugurated the webinar on 06th September, 2021.



Ms. Atreyee Das, ADAI (Training) addressing the participants during inauguration of International Webinar on Renewable Energy and its Audits

While addressing the participants, ADAI (Training) stressed on the need for an effective framework for auditing renewable energy to promote development of this sector, reducing carbon footprints and mitigating climate change. Experts from TERI, New Delhi, European Court of Auditors (ECA) and US Government Accountability Office (GAO) delivered the sessions during this webinar. From SAI India, **Mr. Bibhudatta Basantia, PAG (Audit)-II, Odisha, Bhubaneshwar** delivered the session during this webinar.

Mr. Manish Kumar, Director General, iCED chaired the valedictory sessions. **Mr. Pushkar Kumar, Director. (Training & Research)** presented vote of thanks. Total 123 participants from 31 SAIs participated in the webinar.



Participants of International Webinar on Renewable Energy and its Audits

Shri Jayanti Prasad, Deputy Comptroller and Auditor General (HR & IR) visited iCED from 28th to 30th September, 2021. Shri Manish Kumar Director General (iCED) and Shri Pushkar Kumar, Director (T&R) explained working of iCED



Shri Jayanti Prasad, Deputy CAG (HR & IR) planting a tree at iCED, Jaipur.

ENVIRONMENTAL NEWS

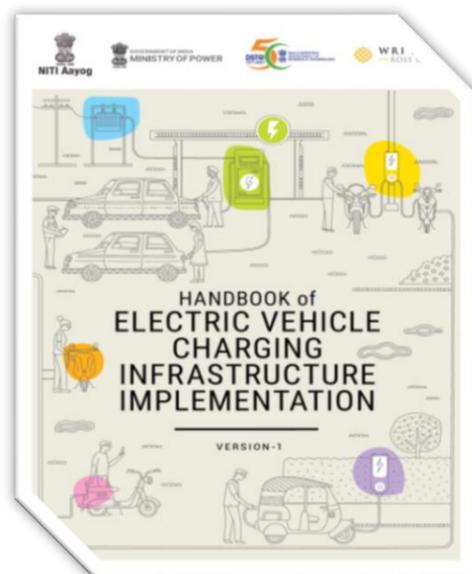
by Vijendra Singh Tanwar, AAO

Government notifies the Plastic Waste

Management Amendment Rules, 2021

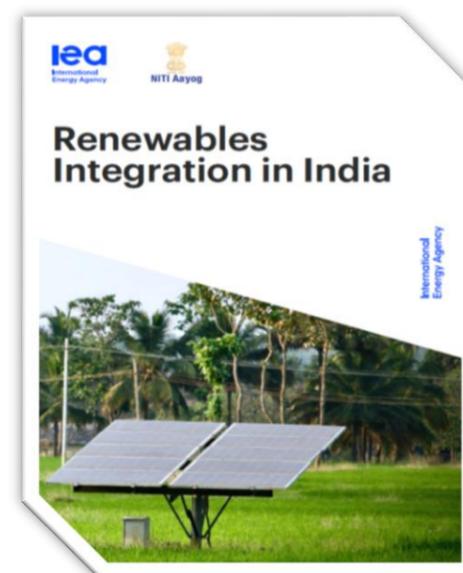
Ministry of Environment, Forest and Climate Change, Government of India notified the Plastic Waste Management Amendment Rules (2021), which prohibits identified single use plastic items which have low utility and high littering potential by 2022. In order to stop littering due to light weight plastic carry bags, with effect from **30th September, 2021**, the thickness of plastic carry bags has been increased from **fifty microns to seventy five microns** and to **one hundred and twenty microns** with effect from the **31st December, 2022**. The manufacture, import, stocking, distribution, sale and use of following single-use plastic, including polystyrene and expanded polystyrene, commodities shall be prohibited with effect from the **1st July, 2022**:-

- ear buds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, ice-cream sticks, polystyrene (Thermocol) for decoration;
- plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays, wrapping or packing films around sweet boxes, invitation cards, and cigarette packets, plastic or PVC banners less than 100 micron, stirrers.



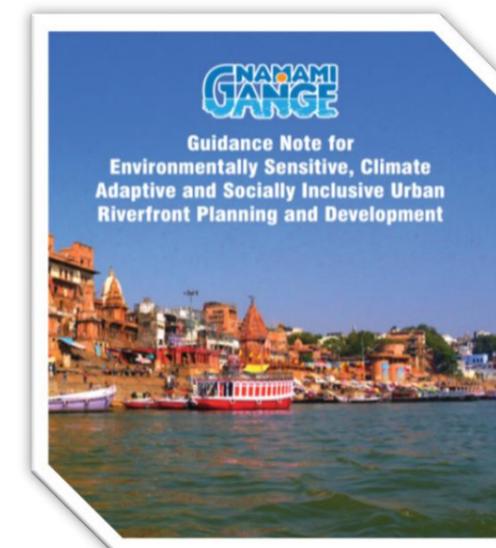
NITI Aayog Releases Handbook to Guide Electric Vehicle Charging Infrastructure in India

NITI Aayog released a handbook to guide state governments and local bodies to frame policies and norms towards setting up charging networks for electric vehicles (EV). The Handbook has been jointly developed by **NITI Aayog, Ministry of Power (MoP), Department of Science and Technology (DST), Bureau of Energy Efficiency (BEE), and World Resources Institute (WRI) India, states and local bodies**. It addresses the common challenges being faced by different local authorities in implementing Electric Vehicle charging networks. It serves as a starting point for the peer-to-peer exchange of best practices between states and local bodies



NITI Aayog and International Energy Agency launched 'Renewables Integration in India 2021'

A report on "Renewables Integration in India 2021" jointly launched by **NITI Aayog & International Energy Agency (IEA)** on 22nd July, 2021. The report uses IEA modelling results to show the effects of different flexibility options on the power system. It highlights that India's power system can efficiently integrate renewables (175 GW by 2022 and 450 GW by 2030), but it would require identification of resources and proper planning, regulatory, policy and institutional support, energy storage and advance technology initiatives. Indian states need to employ a wide range of flexibility options – such as demand response, more flexible operation of coal based power plants, storage, and grid improvements – to transition to cleaner electricity systems. Larger shares of renewables can be better managed by shifting time of use in agriculture. Time of Use (ToU) tariffs can be an effective tool to incentivize demand side management and encourage flexible consumption.



National Mission for Clean Ganga (NMCG) launched Guidance Note for Urban Riverfront Planning and Development

A guidance note namely "Guidance Note for Environmentally Sensitive, Climate Adaptive and Socially Inclusive Urban Riverfront Planning and Development" was launched by NMCG at 'Connect Karo' which was organised by World Resources Institute (WRI), India. This guideline will help city planners across the Ganga River Basin, and the country at large, to understand how to integrate urban river fronts into a Master Plan. The document also presents **various international and national case studies on river city management**. The 3 main objectives of the Guidance Book are:

- Appraisal tool to support decision making on urban riverfront development (URFD).
- Informs about environmentally sensitive, climate adaptive and socially inclusive riverfront developments.

Guidance to various service providers on design and planning and implementation of ecological urban riverfront development (URFD).

NITI Aayog released North Eastern Region District SDG Index and Dashboard 2021–22

The first edition of the North Eastern Region (NER) District SDG Index Report and Dashboard 2021–22 was released by **NITI Aayog and Ministry of Development of North Eastern Region (M/o DoNER)** in August 2021 as a step towards localising the Sustainable Development Goals (SDGs).

The North Eastern Region (NER) District SDG Index & Dashboard, is a collaborative effort by NITI Aayog and Ministry of Development of North Eastern Region (DoNER), with technical support from **United Nations Development Programme (UNDP)**. It is the first of its kind initiative in the country which focuses on the North Eastern Region, which is of critical significance to the country's development trajectory.

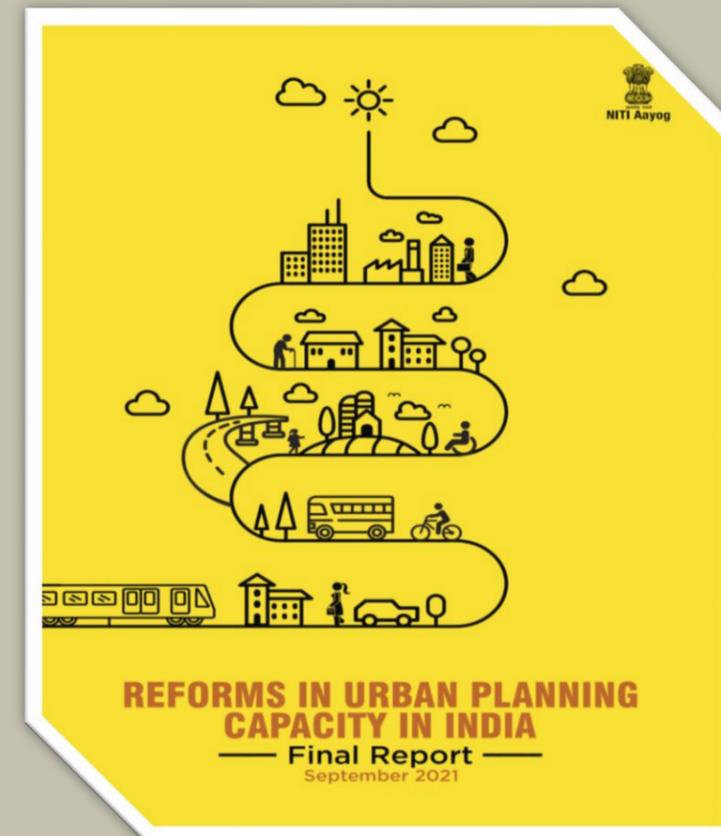


The Index measures the performance of the districts of the eight States (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura) on the Sustainable Development Goals and their corresponding targets and ranks the districts based on the same. Out of the **103 districts** considered for ranking, **64 districts** belonged to the **Front Runner** category while **39 districts** were in the **Performer** category in the composite score and ranking of districts. **All districts in Sikkim and Tripura were categorized in the Front Runner category** and there are no districts in the Aspirant or Achiever categories. East Sikkim [Score 75.87] ranked first in the region followed by districts Gomati and North Tripura [Score 75.73] in the second position. The score for the 103 districts ranged from 53.00 (Kiphire) to 75.87 (East Sikkim).

NITI Aayog launched Report on Reforms in Urban Planning Capacity in India

NITI Aayog launched a report on measures to ramp up urban planning capacity in India. The report has been developed by NITI Aayog, in consultation with concerned ministries and eminent experts in the domain of urban and regional planning. Urban planning is the foundation for an integrated development of cities, citizens, and the environment. The report, titled 'Reforms in Urban Planning Capacity in India' makes recommendations on following broad areas to unblock bottlenecks in the value chain of urban planning capacity in India:

- Programmatic Intervention for Planning of Healthy Cities
- Programmatic Intervention for Optimum Utilization of Urban Land
- Ramping Up of Human Resources
- Ensuring Qualified Professionals for Undertaking Urban Planning
- Re-engineering of Urban Governance
- Revision of Town and Country Planning Acts
- Demystifying Planning and Involving Citizens
- Steps for Enhancing the Role of Private Sector
- Steps for Strengthening Urban Planning Education System
- Measures for Strengthening Human Resource and Match Demand–Supply



CASE LAW- ACTION REPORT AND RECOMMENDATIONS FOR COMPLIANCE OF HAZARDOUS AND OTHER WASTE RULES, 2016

Introduction

Ministry of Environment, Forest and climate Change (MoEF & CC) promulgated Hazardous Waste (Management and Handling) Rules, 1989 under the provision of the Environment Protection Act, 1986. In September 2008 the said rules were amended and new rules entitled "Hazardous waste (Management, Handling and Transboundary Movement) Rules, 2008" were promulgated. These rules were further amended in the year 2009 & 2010 for proper management and handling of hazardous waste in the country (CPCB, 2010-2011). The rules have been further amended recently, entitled Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, to include other wastes such as Waste tyre, paper waste, metal scrap, used electronic items, etc.

Background of the case

A grievance was filed before the National Green Tribunal (NGT), through an application, against unscientific disposal of spent catalysts (Oxide), (a category of hazardous waste within the Schedule 1 of the Hazardous and other Waste Rules, 2016) by Panipat refinery and Digboi refinery. The violation takes place in selling, handling, storing and transporting the waste illegally.

Earlier, the Tribunal had issued an order in the Original Application No. 284/2015, Jugal Kishore v. Union of India & Ors., in which it had directed that "There shall be no transfer/sale of Spent Catalysts (Alumina Containing) to any bidder/persons who plans to dispose of the spent catalyst by using it as a raw material without having approval from the Central Pollution Control Board (CPCB) as envisaged under Rule 11 of the Hazardous Waste Rules.

Proceedings of the case

In the above background, the tribunal directed that a factual and action taken report be submitted by the Central Pollution Control Board (CPCB), Punjab State PCB, Haryana State PCB, West Bengal State PCB, Assam State PCB and the DPCC with reference to compliance of directions of the Tribunal by the concerned entities in the said States. Central Pollution Control Board (CPCB) was made the nodal agency for the purpose.

by Manoj Kumar AAO

Central Pollution Control Board (CPCB) asked the concerned State PCBs/PCCs where oil refineries were operational to provide information about generation, storing, handling and selling of spent catalyst in the oil refineries. A six-member Committee was constituted which included CPCB, DPCC, WBPCB, PPCB, HSPCB and ASPCB to conduct inspection for furnishing the factual and action taken report to the Tribunal.

The following observations were revealed in the inspection report-

Authorization granted by the SPCB's lacked information about category of spent catalyst, quantity and disposal method. The refineries were generating spent catalyst which were exceeding the authorized quantity. In violation of Rule 8 of Hazardous and other Waste Rules, 2016 (HOWM Rules, 2016), some refineries had been storing the spent catalyst in the storage yard beyond 90 days. There were cases of, non-maintenance of manifest records (used for assessing the actual quantity of generation and disposal of spent catalyst) and selling of spent catalyst to unauthorized utilizers. Some refineries were not maintaining packaging and labelling of hazardous and other waste as per Rule 17 of HOWM Rules, 2016.

There was lack of adequate storage facility for safe and environmentally sound management of hazardous and other wastes. No information was received from Andhra Pollution Control Board regarding generation and utilization of spent catalyst in the state of Andhra Pradesh. Similarly, no information was received from Rajasthan Pollution Control Board, Chhattisgarh Environment Conservation Board and Telangana State Pollution Control Board, regarding re-processor/ utilizers of spent catalyst in the state.

Recommendations

The Central Pollution Control Board (CPCB) filed its action taken report on 08.09.2020. Its recommendations are as follows:

1. SPCBs/PCCs shall be directed to issue proper authorization for handling and management of hazardous and other waste in accordance of Hazardous Waste Management Rules 2016 (HOWM Rules), 2016 to generators/utilizers/recyclers, clearly mentioning the category, quantity and disposal method.
2. All oil refineries generating hazardous waste including spent catalyst shall ensure disposal of their hazardous and other waste in scientific manner or to the authorized utilizers/recyclers in accordance with Hazardous Waste Management Rules 2016 (HOWM rules 2016).
3. Recyclers/utilizers shall be directed to ensure that procurement of hazardous and other waste including spent catalyst is done as per authorization granted to them.
4. All oil refineries generating hazardous waste including spent catalyst shall ensure proper packaging and labelling of hazardous and other waste and also ensure adequate storage facility for their safe and environmentally sound management.
5. All generators/utilizers/recyclers of hazardous waste including spent catalyst shall maintain mandatory records as prescribed in Hazardous Waste Management Rules 2016 (HOWM Rules, 2016).
6. Financial Penalty shall be imposed on all the defaulting units (generators/utilizers/recyclers) for procedural violations.
7. Environmental compensation shall be imposed on defaulting units (generators/utilizers/recyclers) for violating Hazardous Waste Management Rules 2016 (HOWM Rules, 2016) as per CPCB guideline "Enforcement Framework for Effective Implementation of HOWM Rules, 2016".
8. All the spent catalyst generator i.e., oil refineries shall be directed to prepare uniform Standard Operating Procedure (SoP) for E-auctioning of hazardous and other waste including spent catalyst across the country." The Tribunal issued order that the recommendations of the Committee need to be followed. The State PCBs/PCCs were directed to take action to stop continuation violation of law and remedial action for the past violations, following due process of law. The Tribunal ordered that the compliance of the recommendations may be overseen by the concerned State PCBs/PCCs and Central Pollution Control Board (CPCB) jointly. CPCB may furnish further action taken report after collecting information from all the concerned oil refineries/State PCBs/PCCs.

Conclusion

Rapid industrialization has led to generation of huge quantities of hazardous waste. Unsystematic and unscientific disposal of hazardous waste poses a serious threat to the environment and human health. Rules and notifications issued by the regulatory agencies provides a pathway to industries for exercising safe and sustainable practices for treatment of hazardous waste generated by them. Moreover, timely regulatory interventions by monitoring agencies as recommended in "The Action Taken Report" in the matter of Original Application No. 67/2020 "Nathan Chaudhary vs State of GNCTD & Ors." will aid in promoting compliance of the Hazardous and other Waste Rules, 2016 (HOWM Rules, 2016), thereby preventing pollution by hazardous waste in India.



**World Ozone Day – 16
September**



**World Rivers Day – 26
September**



**World Lion Day – 10
August**



**World Elephant Day – 12
August**



**International Day for Ozone
Preservation – 16 September**

**World Zero Emission
Day – 21 September**



**World
Environmental
Health Day 2021**

**World Environment Health
Day – 26 September**



UNITED NATION'S HIGH LEVEL POLITICAL FORUM- 2021

By Kailash Baiya, AAO



The meeting of High Level Political Forum (HLPF) was held from 06th July 2021 to 15 July 2021, under the auspices of the Economic and Social Council. A three-day ministerial meeting of the forum from 13 July 2021 to 15 July 2021 was included in this Meeting.

The establishment of the United Nations HLPF was mandated in 2012 by the outcome document of the United Nations Conference on Sustainable Development¹ (Rio+20), "The Future We Want". The format and organizational aspects of the Forum are outlined in General Assembly resolution 67/290.

HLPF¹ is the core United Nations **platform for follow-up and review of the 2030 Agenda** for Sustainable Development and its 17 Goals.

The opening of the High-level Segment began in the UN General Assembly.

The HLPF discussed ways to ensure a sustainable and resilient recovery from COVID-19 that puts us on track to realize the 2030 Agenda. The theme was "**Sustainable and resilient recovery from the COVID-19 pandemic that promotes the economic, social and environmental dimensions of sustainable development: building an inclusive and effective path for the achievement of the 2030 Agenda in the context of the decade of action and delivery for sustainable development**".

Participants discussed the kind of policies and international cooperation that can control the pandemic and put the world back on track to achieve the SDGs by 2030. They also highlighted increased poverty rates and hunger, decreased number of children in school, job losses, increased debt burdens, growing inequalities, along with increased human rights violations which are linked to the COVID-19 pandemic.

Many of the participants said the solutions exist to recover and build better future. The panelists focused on the importance of social protection systems, sustainable agriculture, digitization, creating new debt relief and financing architecture, and stronger partnerships between civil societies, the private sector, governments and the international community, among others, as the way to get back on track.

The Forum focused on the theme of "Sustainable and resilient recovery from the COVID-19 pandemic that promotes the economic, social and environmental dimensions of sustainable development: building an inclusive and effective path for the achievement of the 2030 Agenda in the context of the decade of action and delivery for sustainable development." To that end, the Forum reviewed progress on the following SDGs:

- SDG 1: No poverty
- SDG 2: Zero hunger
- SDG 3: Good health and well-being
- SDG 8: Decent work and economic growth
- SDG 10: Reduced inequalities
- SDG 12: Responsible consumption and production
- SDG 13: Climate action
- SDG 16: Peace, justice and strong institutions
- SDG 17: Partnerships

The Forum also considered the integrated and interlinked nature of the SDGs and reviewed the SDG targets that matured in 2020, and discussed whether to update these targets. Specific focus was given to the impacts of the COVID-19 pandemic on the SDGs in least developed countries (LDCs), landlocked developing countries (LLDCs), small island developing states (SIDS) and African countries, as well as the special challenges faced by middle-income countries, and the need for reform of the international financial system and the debt relief architecture.

During the second week of the meeting, **42 countries presented Voluntary National Reviews (VNRs)** of their efforts to achieve the 2030 Agenda, including 10 first timers, 24 second timers, and 10 third timers.

The 2021 HLPF concluded with the adoption of the **Ministerial Declaration**. HLPF heard presentations of the final 14 Voluntary National Reviews (VNRs) submitted by countries on their implementation of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs).

RIGHTS OF NATURE: “THE CORE OF ALL OTHER RIGHTS”

By Nishant Kr. Upadhyay,
Research Intern, iCED

“The river is now considered by law, by code, a living entity, so you'll have to face the consequence by law if you do anything that kills the river.”

-Mohammad Abdul Matin, General Secretary of Bangladesh Poribesh Andolon

Rights which are primary preventive measures, are used to prevent the atrocities and limit adverse actions. As per John Locke's theory of Natural Rights, each individual is born with the right to life and liberty. The Indian constitution also provides certain sets of rights to people. So why we are talking about these rights today?

Supreme Court of India in **Maneka Gandhi case** (1979) and **MC Mehta case** (2004) declared that right to clean environment and quality of life is an intrinsic part of human life. This comes under article 21 “right to life and liberty”.

In July 2019, **Bangladesh** became the first nation in the world to devote equal rights to rivers as human. The top court of Bangladesh declared river as mother and ensured its protection with certain rights. Anyone who violates and infringes the ensured rights can face legal repercussion and can be taken to court by the appointed commission **National River Conservation Commission (NRCC)** which acts as the protector or guardian. This move also implies the transition from anthropogenic to eco-centric concept of rights in modern times.

In India, the **Uttarakhand High Court in 2017** accorded **legal personhood to river Ganga and Yamuna and their ecosystems**. The court declared them as “Living Human Entities- with juridical and moral person.” The court followed this with another judgment in which it declared the **associated glaciers of Gangotri and Yamunotri as a natural system** with similar rights as living human entities.

What is Environmental personhood?

Equating environment to a person with equal rights and legal provisions is defined as environmental personhood or personification of environment. **Cristopher D. Stone** in 1974, in his book named “**Should trees have standing?**” highlighted the environmental personhood concept and argued that if environmental entities are given a “legal personality” then it cannot be owned by anyone and would have the right to appear in court to protect themselves. However, the major problem associated with this is who on behalf of environment would appear in court? In reply to this, countries like **New-Zealand** came with the **guardianship concept**, while other countries appointed commissions to represent the environmental entities.

India and environmental personhood: In India personhood of environment is not a new phenomenon. Since centuries, entities like trees, rivers, lakes and mountains as God and Goddess have been personified by communities in India. They have been practicing traditional patterns of worshiping these environmental entities which have helped in their preservation. India's traditional moral and ethical values have also personified the environment as God. During many festive occasions **Tulsi** (*Ocimum tenuiflorum*), **Peepal** (*Ficus Religiosa*) etc. have been worshiped.

Decentralized concept of Deity and Environment in India: India is a diverse country with numerous tribes and communities with their own set of customs and rituals. This gave rise to decentralized concept of Deity in the Indian society. Decentralized system of personification in Indian Tribal community has supported the environment at many levels. For example Gond tribal community practiced worshiping *Saja* Tree as their *Baradeo* deity, while Tripuri community worship River Ganga as their deity. These communities act like decentralized guardians of environment by practicing the concept of personhood of environment and support environment to achieve its true meaning of rights.

Conclusion

We can conclude from the above, that the concept of personhood of environment is prevalent in human society since the time immemorial. The human community has been practicing it to support its moral and ethical principles. However, there has been no progress in awarding the personhood status to these environmental entities even though we have awarded various legal rights to people.

It is high time that we extend our support from moral and ethical background to legal rights based approach towards these environmental entities. Various nations across the world have initiated approach towards according legal status to environmental entities. We must also, strive towards imparting a legal status to personhood of environmental entities for the better future.

PERFORMANCE AUDIT ON “WILDLIFE AND FOREST MANAGEMENT IN MEGHALAYA”

by Gaurav Jain SAO

Background: - Forest are essential to sustain the life support system on earth. Article 48-A of Constitution of India requires that state shall endeavour to protect and improve the environment and to safeguard the forest and wildlife of the country. ‘Forests’ and ‘protection of wild animals and birds’ under concurrent list of the seventh schedule of the constitution enable both central and state governments to regulate on this matter.

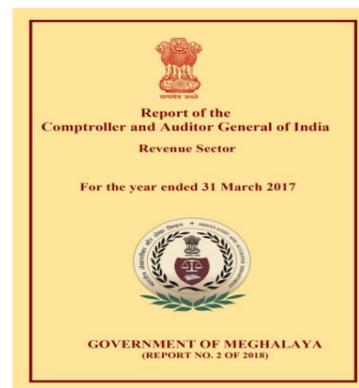
Meghalaya, has a geographical area of 22429 sq.km. Meghalaya has two National Parks (NPs), three Wildlife Sanctuaries (WLS’) and 24 Reserve Forests (RFs). Meghalaya is among the few states in the country having the highest density of elephants.

A performance audit on “Forest and Wildlife in Meghalaya” was conducted during May 2017 to August 2017 covering the period from 2012-13 to 2016-17.

Audit Scope: - The scope of audit was limited to the management of forest areas under the direct control of the Department and other activities undertaken by the Department covering the issue of encroachment/felling of trees, forest fire, illegal mining, man-animal conflict etc. in addition to the prevailing revenue collection mechanism. Scrutiny of records at 13 units at the divisional level along with PCCF and heads of four circles at the Directorate level was carried out. Furthermore, Medicinal Plants Board and Compensatory Afforestation Management Planning Authority were also audited.

Audit Objective: - The Performance Audit (PA) was carried out with a view to assess whether:

- Conservation, protection and rehabilitation activities had been adequately planned and the efficacy of their implementation with focus on:
 - a) Protection of endangered/endemic species;
 - b) Survey and demarcation of forest land;
 - c) Anthropogenic activities such as mining, industrialisation, etc
 - d) Action plan for forest fire disaster management; and
 - e) Prevention of man-animal conflict.



- Regulatory framework, in place, was adequate to ensure maximisation of revenue collection through efficient mobilisation of human resources, etc.
- Appropriate mechanism for regular monitoring by the management and effective information sharing within the Department existed.

Audit Criteria: -

The following Acts/Rules were used as sources of Audit Criteria for carrying out the PA:

1. Indian Forest Act, 1927;
2. Forest Conservation Act and Rules;
3. Assam Forest Regulation, 1891 (as adapted by Meghalaya);
4. Wildlife Protection Act and Rules;
5. Meghalaya Forest (Ejection of unauthorised persons from Reserved Forests) Rules, 1979;
6. Meghalaya Forest (Removal of Timber) (Regulation) Act and Rules;
7. Circulars/Notifications issued by Government of India/Government of Meghalaya.

Major Audit Findings: -

Human-Animal Conflict: Fragmentation and shrinkage of wildlife habitat has threatened the existence of many species. Mega-herbivores like the elephant with a large home range and equally large food requirement have been among the most affected species, leading to increased human–elephant conflict and damage to property and life.

During a joint inspection in the Shillong, Audit observed that a natural salt lake in the area which was once a big gathering place for the elephants had almost vanished. Construction activities, heaps of coal stock and deforestation could be noticed all along the area. Fresh coal stock was found lying/dumped in these forest areas. All these have reduced the food and water availability for wildlife.

Illegal saw mills:

The Department had been ineffective in closing down the illegal saw mills which had been detected by the Department itself. In JH Div, the number of illegal saw mills operating had remained unchanged during the last three years.

The Forest Department did not put any efforts to identify the source of timber for these saw mills and the means with which the sawn timber was being sold in the markets.

The Department needs to devise a system to make sure the finished product of big illegal saw mills is not able to reach the organized markets. Audit observed that the DFOs did not inspect any of the retail sawn timber outlets during the period of audit.

Illegal Mining in the State:

It was observed during the course of the audit that extractions of sand and boulders from river beds was prevalent in Khasi and Garo Hills. It was further observed that the DFO, GH Territorial Division issued transport passes for removal and transport of the extracted sand/stone, thus regularising the illegal extraction in the area.

Encroachment in the Reserve Forests:

It was observed during the audit that encroachment in Reserve Forests in the State is increasing continuously. Encroachment is invariably followed by clearing of land. Sometimes the encroached land is used for the settlements, however, in most cases it is for the agricultural purpose. Generally, the encroached land is the extension of agricultural farms in the fringes of the protected forests. It leads to fragmentation of the wildlife habitat resulting in incidents of Human Elephant Conflict.

Lack of facilities for safe-keeping of timber:

During the audit, a physical verification of the timber stock kept within the premises of the DFOs of Jaintia Hills and Garo Hills divisions was conducted. It was observed that that seized timber was kept in the open within the premises of the Department without any facilities for its safe-keeping and being exposed to the vagaries of nature. Some of the seized timber had decayed.

Lack of manpower:

Availability of manpower (including muster roll) in the ranges to check wildlife illegalities ranged from one person for every 67 sq. km. (Garo Hills) to one person for every 159 sq. km (Jaintia Hills) (Annexure XIII). DFOs have time and again cited their inability in effectively performing their duties due to shortage of manpower available with them.

Recommendations:-

- Exchange of information and coordination to limit incidents of illegal mining, illegal felling of timber and encroachment.
- Speed-up the process of acquiring land in elephant corridors and restrict the construction works to mitigate man-animal conflicts.
- Adequate staff is deployed for field patrolling to check wildlife irregularities.
- Mechanism to obtain information periodically from other departments so that it may act as an effective control to minimize instances of under-reporting by check gates.
- Setting up of integrated check gates for taxation, forest, mining, transport departments etc.

ENVIRONMENTAL GOVERNANCE IN INDIA- POST UNITED NATIONS CONFERENCE ON ENVIRONMENT- STOCKHOLM 1972

by Manoj Kumar AAO

United Nations Conference on Human Environment held at **Stockholm** in 1972) gave a new impetus to environmental awareness in India. Based on recommendations of **Pitambar Pant Committee**, Government of India formed a **National Committee on Environmental Planning and Coordination (NCEPC)** in 1972 within the Department of Science and Technology. NCEPC was replaced by **National committee on Environmental Planning (NCEP)** in 1981. Through insertion of **Article 48A** in the constitution (1977), wildlife and forest were brought from the State list to the Concurrent list. A federal **Department of Environment** came up in the year 1980, which later was known as **Ministry of Environment and Forest** in 1985. It was renamed as **Ministry of Environment, Forest and Climate Change** in the year 2014.

Some of the main acts for environment protection in India after the Stockholm Conference of 1972 are given below-

1. The Wildlife (Protection) Act 1972

The Act created six schedules which gave varying degrees of protection to classes of flora and fauna. It empowered the Central Government (under Sec. 3) and State Government (under Section 4) to appoint officials as authorities for preserving wildlife. The Wildlife (Protection) Act, 1972, Amendment 1991 resulted in the insertion of the special chapters dealing with the protection of specified plants and the regulation of zoos. It has further been amended in the year 1993, 2002, 2008 and 2013. It provides for protection to listed species of flora and fauna and establishes a network of ecologically-important protected areas. The WPA empowers the central and state governments to declare any area a wildlife sanctuary, national park or closed area.

2. Water (Prevention and Control of Pollution) Act 1974

The Water Act was followed by the Water (Prevention & Control of Pollution) Rules, 1975 and the Water (Prevention & Control of Pollution (Procedure for transaction of Business) Rules, 1975. Water (Prevention and Control of Pollution) Act of 1974 has been amended in 1988 to conform closely to the provisions of the Environmental Protection Agency (EPA), 1986.

3. Water (Prevention and Control of Pollution) Cess Act, 1977

This Act provides for a levy and collection of a cess on water consumed by industries and local authorities. It aims at augmenting the resources of the central and state boards for prevention and control of water pollution. Following this Act, The Water (Prevention and Control of Pollution) Cess Rules were formulated in 1978 for defining standards and indications for the kind of and location of meters that every consumer of water is required to install.

4. The Forest Conservation Act, 1980

This Act was adopted to protect and conserve forests. The Act restricts the powers of the state in respect of de-reservation of forests and use of forestland for non-forest purposes (the term 'non-forest purpose' includes clearing any forestland for cultivation of cash crops, plantation crops, horticulture or any purpose other than re-forestation).

5. The Air Prevention and Control of Pollution, 1981.

The Act provides means for the control and abatement of air pollution by prohibiting the use of polluting fuels and substances, as well as by regulating appliances that give rise to air pollution. To empower the central and state pollution boards to meet grave emergencies, the Air (Prevention and Control of Pollution) Amendment Act, 1987, was enacted. **The Air (Prevention and Control of Pollution) Rules formulated in 1982**, defined the procedures for conducting meetings of the boards, the powers of the presiding officers, decision-making, the quorum; manner in which the records of the meeting were to be set etc.

6. The Atomic Energy Act. 1982.

The Atomic Energy Act. 1982 was introduced to deal with radioactive waste.

7. The Environmental Protection Act, 1986.

This Act came into force soon after the Bhopal Gas Tragedy. It is an umbrella legislation designed to provide a framework for the co-ordination of central and state authorities established under the **Water (Prevention and Control) Act, 1974 and Air (Prevention and Control) Act, 1981**. Under this Act, central government is empowered to take measures necessary to protect and improve the quality of the environment by setting standards for emissions and discharges; regulating the location of industries; management of hazardous wastes, and protection of public health and welfare.

Some notifications issued under this Act are:

- Doon Valley Notification (1989)
- Coastal Regulation Zone Notification (1991)
- Dhanu Taluka Notification (1991)
- Revdanda Creek Notification (1989)
- The Environmental Impact Assessment of Development Projects Notification, (1994 and as amended in 1997).
- Ash Content Notification (1997)
- Taj Trapezium Notification (1998)
- Disposal of Fly Ash Notification (1999)
- Recycled Plastics Manufacture and Usage Rules, 1999
- Manufacture, Use, Import, Export and Storage of Hazardous Micro-organisms/Genetically Engineered Organisms or Cell, 1989
- Mass emission standards 1990, 1996, 2000
- E-Waste (Management) Rules 2016, as amended in 2018 (E-Waste Rules);
- Bio-Medical Waste Management Rules 2016
- Plastic Waste Management Rules 2016
- Solid Waste Management Rules, 2016
- Construction and Demolition Waste Management Rules 2016
- Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016, as amended in 2019 (HW Rules)
- Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 (MSIHC Rules)
- Coastal Regulation Zone Notification 2019
- Environment Impact Assessment Notification 2006
- 'ECOMARK'- a label scheme was instituted in 1991 for environmentally-friendly products.

8. The Environment (Protection) Rules, 1986

These rules lay down the procedures for setting standards of emission or discharge of environmental pollutants. The Rules prescribe the parameters for the Central Government, under which it can issue orders of prohibition and restrictions on the location and operation of industries in different areas.

9. Factories Act, 1948 and its Amendment in 1987

The Factories Act, 1948 was a post-independence statute that explicitly showed concern for the environment. The primary aim of the 1948 Act has been to ensure the welfare of workers not only in their working conditions in the factories but also their employment benefits.

10. The Motor Vehicles Act, 1988

The Act was enacted to regulate vehicular traffic, besides ensuring proper packaging, labelling and transportation of the hazardous wastes.

11. Biochemical Waste (Management and Handling) Rules, 1988

These rules were formulated for proper disposal, segregation and transport of infectious wastes.

12. The Environmental Conservation Act, 1989

Its objective is to provide for the protection and improvement of the environment. The Act empowers the Central Government to establish authorities charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country. The Act was last amended in 1991.

13. Handling and Management of Hazardous Waste Rule in 1989

The rules brought out a guide for manufacture, storage and import of hazardous chemicals and for management of hazardous wastes.

14. The Public Liability Insurance Act, 1991

The Act covers accidents involving hazardous substances and insurance coverage for these. Where death or injury results from an accident, this Act makes the owner liable to provide relief as is specified in the Schedule of the Act. The PLIA was amended in 1992, and the Central Government was authorized to establish the Environmental Relief Fund, for making relief payments.

15. The National Environmental Tribunal Act, 1995.

The Act provided strict liability for damages arising out of any accident occurring while handling any hazardous substance and for the establishment of a National Environment Tribunal for effective and expeditious disposal of cases arising from such accident, with a view to give relief and compensation for damages to persons, property and the environment and for the matters connected therewith or incidental thereto.

16. National Environmental Appellate Authority Act, 1997.

This Act provided for the establishment of a National Environment Appellate Authority to hear appeals with respect to restriction of areas in which any industry operation or process or class of industries, operations or processes could not carry out or would be allowed to carry out subject to certain safeguards under the Environment (Protection) Act, 1986.

17. The Biomedical Waste Management and Handling Rules, 1998.

These rules were formulated along parallel lines, for proper disposal, segregation, transport etc. of infectious wastes.

18. The Environment (Siting for Industrial Projects) Rules, 1999

The rules lay down detailed provisions relating to areas to be avoided for siting of industries, precautionary measures to be taken for site selecting as also the aspects of environmental protection which should have been incorporated during the implementation of the industrial development projects.

19. The Municipal Solid Waste (Management and Handling) Rules, 2000.

It aims at scientific disposal of municipal solid waste.

20. Hazardous Wastes (Management and Handling) Amendment Rules, 2000

This notification issued with the view to providing guidelines for the import and export of hazardous waste in the country.

21. The Ozone Depleting Substance (Regulation and Control) Rules, 2000.

The rules provide for the regulation of production and consumption of ozone-depleting substances in accord with the Montreal Protocol on Substances that deplete the ozone layer.

22. The Batteries (Management and Handling) Rules, 2001

The rules seek to regulate and ensure the environmentally safe disposal of used batteries and apply to every manufacturer, importer, re-conditioner, assembler, dealer, auctioneer, consumer, and bulk consumer involved in the manufacture, processing, sale, purchase, and use of batteries or components.

23. The Noise Pollution (Regulation and Control) (Amendment) Rules 2002

The rules lay down such terms and conditions as are necessary to reduce noise pollution, permit use of loud speakers or public address systems during night hours (between 10:00 p.m. to 12:00 midnight) on or during any cultural or religious festive occasion.¹ Amended in the year 2010.

24. The Biological Diversity Act 2002

It aims at the conservation of biological resources, managing its sustainable use and enabling fair and equitable sharing benefits arising out of the use and knowledge of biological resources with the local communities.

25. The National Green Tribunal Act, 2010¹

The National Green Tribunal Act 2010 provides for creation of National Green Tribunal for effective and expeditious disposal of cases related to conservation of forests, environmental protection and enforcement of any legal right relating to the environment. The Act also gives proper compensation and relief for damages to persons and property, and connected matters. The Act contains proper clauses on the jurisdiction, powers and proceedings of the tribunal and penalties of contravention.

Conclusion

The Stockholm Conference, proved to be a starting point for generating awareness all over the world for environmental concerns. The Constitution of India imposes a duty on every citizen 'to protect and improve the natural environment including forests, lakes, rivers, and wildlife'. The constitutional provisions are backed by a number of laws – acts, rules, and notifications. The EPA (Environment Protection Act), 1986 came into force soon after the Bhopal Gas Tragedy and is considered an umbrella legislation as it fills many gaps in the existing laws. Thereafter a large number of laws and rules came into existence for the protection of environment and paved the way for promoting good environmental governance in India.

GREEN INITIATIVES- “HALMA’- AN AGE OLD COMMUNITY TRADITION FOR WATER CONSERVATION



Introduction

As per Census 2011¹, Bhil tribe is most populous tribe in India. They are known as “brave bow men of India” who possess rich culture and practices aimed at protecting environment. Since times immemorial, the Halma tradition had been among the Bhil’s. Halma is an age old tradition in the tribal villages of Jhabua district in Madhya Pradesh¹.

Halma involves the participation of youth, elderly and woman whereby other families are invited to help the family unconditionally in need when they have exhausted all their means. It can be termed as “pukaar” for help. The tradition epitomizes selflessness, philanthropy and community values. The villagers gather together to discuss about the problems faced by community. The problem is then identified as individual issue or predicament of whole community. The tradition has become a solution to overcome big challenges in development.

by Vikas Dhir AAO

Innovating Halma into modern community practice

The potential to scale up Halma is huge. It is evident from the experience of “Shivaganga Samagra Vikas Parishad”. Under the banner called “Shivaganga Abhiyaan”, the tradition of Halma has been metamorphosed into a campaign for the people. Shivaganga helped retaining its value and popularity by utilizing practice of Halma to work towards conservation of water in the area.

The tribals of Jhabua and Alirajpur districts of Madhya Pradesh had been facing the water crisis since a long period. They decided to deal with predicament in a different manner- by utilizing their age old traditional practice of Halma. The local people were already engaged in water conservation practices by using traditional conservation methods. They further decided to incorporate the practice of “Halma” to fine tune their efforts in this regard. The people regularly gathered under “Halma” to construct contour trenches in the area every year. Construction of physical works such as excavation of contour trenches on denuded hillocks, construction of water harvesting structures, plantations is all done by collective labour. On the Halma day excavation sites are supervised by Gram engineers and watershed experts. In the past ten years, the tribes have constructed almost 3200¹ big ponds in 225 villages in Jhabua district alone.

In order to make the area green, the tribes dug contour trenches around hills, planted trees, repaired hand pumps and built ponds. Many programmes for water conservation were taken to train the youth. Campaigns were started to collect rainwater, revive water bodies like ponds, check dams, lakes and wells.

Achievements

In 2018, around 12000 villagers gathered and participated in the Halma organised at Hathipava in Jhabua. It was joined by students from IIT’s and IIM’S along with people from different spheres across the country. In the year 2020, around 20, 000 people came together and built 40,000 contour trenches which will enable the production of 360 crore litres of water in the next five years. So far, more than 1,60,000 contour trenches have been built. It has increased the water availability in villages surrounding area thereby improving agricultural production and wildlife.

The annual Halma organised by Shivaganga caused the tribal community to revisit their tradition. It gave rise to small scale inter village Halmas called by tribal community members to create water harvesting potential in villages. Halma’s are organised by community members during March to June to enhance water harvesting potential of the area. In last 11 years, Halma has facilitated works as given below -

Water Harvesting Structures	Earthen Check dams	Water Reservoirs	Contour Trenches	Plantations	Skill Development	Total Villages
65	10	55	141000	110000	12000 + 900 (women trained)	1320

Source: Compendium of Best Practices Water Management in Tribal Areas 2021, Aga Khan Rural Support Programme (India) and Axis Bank Foundation.

A pond which was completely dried up was revived by people of Jhabua. The dry area has undergone complete transformation and now has water available throughout the year. Witnessing the evident transformation, people have started implementing similar compaigns in other areas and have started calling to invoke Halma. Other major works in the area of water conservation included rejuvenation of 59 ponds that can hold about 400 crore litre of water, repairing of 4500 check dams, recharging of wells and hand-pumps.

The development of an age old tradition of Halma into a successful community practice in Jhabua district can serve as an inspiring model for other resource deficient areas in the country. The tribal society advocates for community action for solving issues and problems faced by them. It is the strength of the community which has given inspiration to the work and resolving the issues. The experience of Halma indicates that practicing innovative traditional practices along with present day government schemes like MGNREGA can prove to be helpful in solving many environmental problems in particularly rural India.

AUDIT REPORT ON 'WASTE RECOVERY OPERATIONS OF LANDFILLS AND SUPERVISION OVER WASTE DISPOSAL' BY NAO ESTONIA

by Anil Beniwal SrAO

Background

There are five municipal waste landfills operating in Estonia. In 2019, total 175,000 tonne waste was deposited in these landfills. Pollution charges are applied while disposing waste so as to make the disposal of waste more expensive than recovery or recycling of waste. A landfill has to pay 29.84 Euros per tonne of waste. In 2019, the landfills paid a total of 4.9 million Euros of pollution charges.

Apart from the disposal, landfills also recover waste to generate fuel and use it in various construction works (e.g. landfill slopes, intermediate layers, roads and sites). In 2019, landfills recovered 110,000 tonne waste.

Audit Scope

The National Audit Office (NAO), Estonia audited whether the Environmental Board, when permitting the recovery of waste at the landfills, makes sure that it is justified, and whether precise requirements have been established for the recovery.

The NAO assessed whether the Environmental Board, in the course of the supervision, has an overview of how waste is recovered, and how much of it is actually recovered.

The NAO also analysed the recovery operations which take place on the territory of the landfill.

Audit Observations

- The Environmental Inspectorate did not check whether the landfills complied with the requirement in law according to which mixed municipal waste may not be subject to the disposal, when unsorted.
- The supervision operations by the Environmental Inspectorate have not been so thorough as to prevent or detect as early as possible any violations at the landfills. The control by the Environmental Inspectorate has limited itself to the assessment of documents. Therefore, it is difficult to identify the amount of the illegally disposed waste and enforce the forgone pollution charge.
- The requirements by the Environmental Board for the recovery activities of landfills are not precise and therefore prevent the Environmental Inspectorate from exercising the supervision. Due to unsubstantiated requirements, the Inspectorate cannot make sure whether the waste recovered at the landfill had the same characteristics and had been used in the same amount as the material it was supposed to replace. It is therefore possible that, in order to reduce the obligation to pay the pollution charge, there was used the kinds of waste not intended for these activities, and in larger quantities than necessary.



- When giving consent for the recovery of waste, the Environmental Board does not make sure whether the proposed activity is necessary, or whether its purpose is to avoid the payment of a pollution charge upon waste disposal.
- When permitting the recovery, landfills are not treated in the same way, although the legal bases for their activities are the same. For example, at some landfills, it is permitted to recover waste on the waste disposal site for the construction of roads or for making intermediate layers, but these operations are prohibited at other landfills.

Audit Recommendations

The Environmental Board must ensure, when permitting the recovery of waste, that it is necessary, and that its purpose is not to avoid paying pollution charges.

In permits of landfills, the recovery activities must be described in more detail, as well as clear and verifiable requirements must be set for these activities.

The supervision over the recovery operations by the Environmental Inspectorate must provide an accurate overview of which waste and how has been recovered at the landfills.

Conclusion

In the opinion of the NAO, the control activities of the Environmental Board and the Environmental Inspectorate neither prevent abuses of the recovery of waste at the landfills, nor reduce the risk of frauds. There is a significant risk that the scamming is happening at the landfills, and that the disposal of waste actually takes place there under the name of the recovery, for which no pollution charges are paid. Operations with residues of sorting mixed municipal waste offer the greatest opportunities for frauds. As the amount of waste reaching the landfills increases, so does the risk of frauds.

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Biodiversity at iCED

https://en.wikipedia.org/wiki/Red-wattled_lapwing

Biodiversity in iCED, Jaipur



Distribution



The red-wattled lapwing (*Vanellus indicus*) is an Asian lapwing or large plover. They are ground birds that are incapable of perching. Red-wattled lapwings are large waders, about 35 cm (14 inches) long. A red fleshy wattle in front of each eye, black-tipped red bill, and the long legs are yellow.

Their characteristic loud alarm calls have been variously rendered as “did he do it or pity to do it” leading to the colloquial name of did-he-do-it bird. In parts of India, a local belief is that the bird sleeps on its back with the legs upwards and an associated Hindi metaphor “*Tithiri se asman thama jayega*” (“can the lapwing support the heavens?”) is used to refer to persons undertaking tasks beyond their ability or strength.

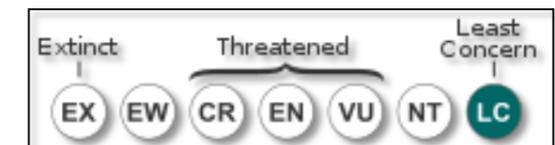
In parts of Rajasthan it is believed that the laying of eggs by the lapwing on high ground was an indication of good rains to come. The eggs are known to be collected by practitioners of folk medicine.

Red-wattled Lapwing

(*Vanellus indicus indicus*)

Kingdom:	Animalia
Phylum:	Chordata
Class:	Aves
Order:	Charadriiformes
Family:	Charadriidae
Genus:	Vanellus
Species:	V. indicus

Scientific Classification



Least Concern (IUCN 3.1)