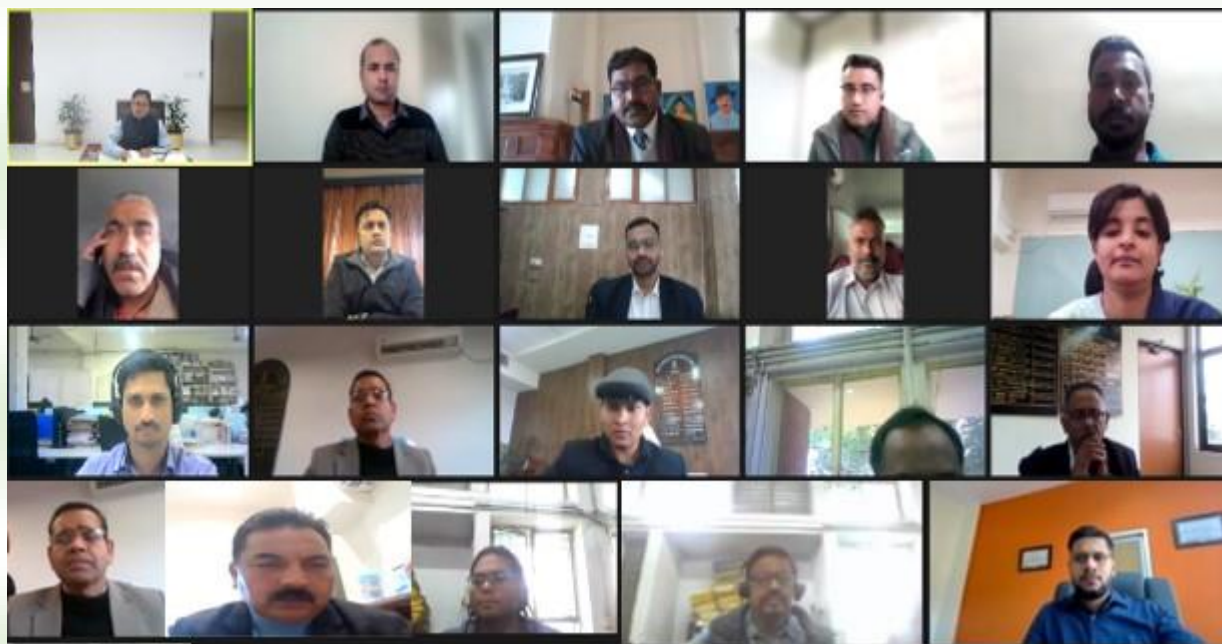


Summary of

National Training Programme on “Natural Resource Accounting”

from 08th to 12th January, 2024

International Centre for Environment Audit & Sustainable Development (iCED) organized a 05 days’ National Training Programme on “Natural Resource Accounting” from 08th to 12th January, 2024 through virtual mode. A total of 21 participants from 07 field offices including 07 group officers, participated in the training programme.



Inauguration of the Online National Training Programme on “Natural Resource Accounting”

Dr. Nanda Dulal Das, Director (Training & Research) at iCED, virtually welcomed the participants on behalf of the Addl. Deputy Comptroller and Auditor General and Director General, iCED. He highlighted that the training programme would cover a wide range of topics viz. accounting of mineral, energy resources, water resources, etc. including highlighting environmental issues in Natural Resources Accounting.

He emphasized the significance of the training programme in raising awareness and providing knowledge about critical aspects of various fund and flow natural resources. He highlighted the short-term goal of the NRA Concept Paper for implementing NRA for mineral and energy resources, which many offices have already completed for one or two year(s). The midterm goal involves preparation of water resources’ accounts, for which many States have already taken initiatives.

He highlighted that mineral energy resources, treated as stock resources, undergo extraction from fixed reserves in mines, resulting in resource depletion. The exploration of new mines contributes to replenishing the existing stock. Therefore, accounting for these stock resources is relatively easy. In contrast, resource accounting which involves flow resources, such as water resource accounting, is dynamic and more complex in nature. Such reserve experiences continuous fluctuations influenced by factors like rainfall, precipitation or lack of rainfall, because of withdrawal and urban consumption. He further emphasized the challenges in accounting for forests, where the forest reserve deplete due to natural degradation, vegetation loss, and activities like forest fires. The process becomes a little trickier when we try to account for these flow resources.

He informed that iCED, being a specialized Centre on environmental audit and sustainable development, consistently covers environmental and sustainability issues in its training programmes. Therefore, iCED actively undertakes capacity building efforts in areas of Natural Resources Accounting. iCED is also part of a project called the Environmental Accounting Project, of the INTOSAI Working Group on Environmental Auditing (WGEA), currently underway between 2023 and 2025. With this introduction, Director (T&R) again welcomed all the participants virtually, expressing hope for a productive and engaging training programme.

During this five days' training programme, ten experts from IA&AD and many other reputed organisations like National Remote Sensing Centre, Hyderabad; Indian Institute of Science, (IISc) Bangalore; Indian Bureau of Mines (IBM), Nagpur; The Energy and Resources Institute (TERI), New Delhi; Oil India Limited, Assam; National Institute of Ocean Technology, Chennai and Madras Institute of Development Studies, Chennai etc. were invited to deliver the sessions. Details of the trainers and the sessions delivered during this programme are as follows:

Sl. No.	Sessions	Trainer/s
1.	Conceptual Discussion; Theory of linkage with SDGs; GASAB initiative; State NRA Cells; Roles	Shri Tushar Kain, DyAG, Accountant General (A&E), Uttarakhand
2.	Asset Accounts; Templates; Information collection & presentation; Tables; Report Structure; VLC Initiative by A&E Telangana	Shri Akhil S, DyAG, Accountant General (A&E), Hyderabad

3.	Validation of Accounts; Audit Perspective & Role; Common findings; Practical issues/observations in the Process	Ms Saranya Baskar, DyAG, PAG(Audit-II), Karnataka
4.	Good/Best Practices noticed - Odisha, Meghalaya, Rajasthan & Gujarat; Way Forward	Shri Tushar Kain, DyAG, Accountant General (A&E), Uttarakhand, Ms Saranya Baskar, DyAG, PAG(Audit-II), Karnataka, Shri Akhil S, DyAG, Accountant General (A&E), Hyderabad
5.	Remote Sensing and Geospatial Technology (Applications to Mineral Resources/Mine mapping/Auditing)	Shri Priyom Roy, Scientist, NRSC, Hyderabad
6.	Economic Valuation of Wetlands	Dr T V Ramachandra, Indian Institute of Science, (IISc) Bangalore
7.	Overview of Natural Resource Accounting with special reference to Mineral Resources	Shri P K Jain, Retired Chief Mineral Economist, Indian Bureau of Mines (IBM), Nagpur
8.	Natural Resource Accounting in Water Sector	Shri Souvik Bhattacharjya, Associate Director, Resource Efficiency and Governance Division, TERI
9.	Enumerating Stock of Natural gas and Crude Oil	Shri Deb Ranjan Banerjee, Retired Executive Director - Oil India Limited, Assam
10.	Vision for India's Blue Economy and the Role of National Ocean Accounts	Dr. R. Venkatesan, Former Scientist G & Head, Ocean Observation, National Institute of Ocean Technology, Chennai
11.	Assets Account on Mineral & Energy Resources: A Case Study	Shri H K Dharamdarshi, PAG, Tripura
12.	Green GDP – Concept and Applications	Shri L Venkatchalam, Professor, Madras Institute of Development Studies, Chennai

Office Wise Exercise: Office Wise Exercise was also given to the participants by dividing the participants in seven groups. Dr. Nanda Dulal Das, Director (Training and Research), iCED

evaluated the presentations given by all the groups of the participants during the pre-valedictory session.

Feedback:- Feedback on course designing, the time required, content, knowledge and its delivery by the resource persons was also collected from the participants through SAI Portal. The average feedback of the participants was 9.64 out of 10, which is very encouraging. Session on **“Assets account on Mineral & Energy Resources: A Case Study”** was rated as the best.

Summing-up and valediction:

Ms. Sayantani Jafa, ADAI & DG, iCED graced the valedictory session of the National Training Programme on “Natural Resource Accounting” through virtual mode.

She highlighted that iCED, as a Centre of Excellence on the Audit of Blue Economy, aligns with the broader goals of water and ocean resource accounting. ADAI & DG Madam invited participants to explore iCED's publications, including recent Volumes of Green Files journal and Occasional Research Paper (ORP) Series. She also invited participants to contribute articles for iCED’s upcoming edition of Green Files.



Ms. Sayantani Jafa, Additional Deputy Comptroller and Auditor General & Director General, iCED, during Valedictory Session

ADAI Madam concluded the valedictory session by quoting the author Elizabeth Kolbert that "Neither optimism nor pessimism alters the fact that we live in an extraordinary moment. The choices that we'll make —that we are making right now, without necessarily being aware of them— will determine the future of life for our children and their children and all the other species on earth for generations to come. This is the situation we're in, and there's no avoiding it, because, in the end, this marvellous, fragile planet is all we've got". With this, she thanked all

the experts and participants for their contributions in making this online event a success. The training ended with thanks to the Chair and all concerned.