

Summary

NTP on “Blue Economy: A Multi-Dimensional Overview with special focus on Marine and Coastal Ecosystem Conservation Measures” (17.07.2023 to 27.07.2023) at iCED Jaipur

International Centre for Environment Audit & Sustainable Development (iCED) organized a 10 days' National Training Programme on “Blue Economy: A Multi-Dimensional Overview with special focus on Marine and Coastal Ecosystem Conservation Measures”, from 17.07.2023 to 27.07.2023 at its own campus. This was the first 10 days' National Training Programme conducted at iCED. A total of 20 participants from 07 field offices including 06 group officers, participated in the training programme.



Group Photo during National Training Programme on “Blue Economy: A Multi-Dimensional Overview with special focus on Marine and Coastal Ecosystem Conservation Measures”

Ms Sayantani Jafa, Additional Deputy Comptroller and Auditor General & Director General, iCED inaugurated the training programme and extended a warm welcome to all the participants. She emphasized that the NTP's primary focus is to equip participants with an in-depth understanding of the different sectors of the Blue Economy, their challenges, opportunities, and the policy paradigm and required strategies to ensure sustainable growth of sectors of Blue Economy.

She further emphasized significance of the Blue Economy for economic growth & development,



**Ms Sayantani Jafa, ADAI &
Director General, iCED
addressing the participants**

especially in the post-COVID-19 scenario. It is a sector having immense potential to create employment opportunities, promote sustainable development, and improve the livelihoods of millions of people.

Ms. Jafa further mentioned that the Blue Economy sectors in India include fisheries and aquaculture, coastal tourism, maritime transport, offshore oil and gas exploration, and renewable energy generation, among others. Each of these sectors present unique opportunities and challenges that need to be understood and addressed to harness their potential fully.

Recognizing the Government of India's commitment to promoting the sustainable growth of the Blue Economy, she informed that the Hon'ble C&AG of India, as the Chair of the SAI-20 organisation, has highlighted the importance of audit of multifarious sectors of the Blue Economy and in recognition of the same, designated iCED as the Centre of Excellence for Audit of Blue Economy.

Ms. Jafa also mentioned that iCED, while shouldering the responsibility of a Centre of Excellence, actively engaged with participants from SAI India and other SAI communities. Over the past three months, iCED successfully trained approximately 100 participants from over 25 countries, with an additional 50 participants from SAI India, focusing on various dimensions of the Blue Economy.

Referring to the Prime Minister Shri Narendra Modi's proposed "One-Word Movement" focusing on Lifestyle for Environment (LIFE) at the COP-26 summit in Glasgow, Ms. Jafa emphasized the need for collective action to promote environmental sustainability by reducing consumption and enhancing mindful utilisation.

With this introduction, Ms. Jafa again warmly welcomed all the participants to iCED, expressing hope for a productive and engaging training programme and a pleasant stay on the campus.

During this 10 days National Training Programme, experts from IA&AD, Research Associates from iCED and many other reputed organisations such as The Energy and Resources Institute (TERI); National Centre for Coastal Research (NCCR), Tamil Nadu; National Institute of Ocean Technology; National Maritime Foundation (NMF), New Delhi; Pondicherry University; World Bank; Central Institute of Fisheries Technology (ICAR CIFT), Kerala; Central Marine Fisheries Research Institute (CMFRI), Kerala ; United Nations; National Remote Sensing Centre (NRSC), Hyderabad, among others were invited to deliver the sessions.

The teaching methods during the training programme included formal lectures, as well as various individual and group exercises.

Many distinguished resource persons delivered sessions during this programme, including **Dr. Pablo Benitez Ponce**, Senior Environmental Economist, The World Bank, and **Vice Admiral Pradeep Chauhan**, AVSM & Bar, VSM, IN(Retd), National Maritime Foundation (NMF), New Delhi. Details of the trainers and the sessions delivered are as follows:

Sl. No.	Sessions	Trainer/s
1.	An Overview of Blue Economy: Multi-Dimensional Perspective	Dr. Manish Anand, Senior Fellow, Resource Efficiency & Governance Division, TERI, Goa
2.	Marine Pollution with Special Focus on Plastic Pollution	Dr. Pravakar Mishra, Scientist-F, NCCR, Chennai
3.	Coastal Water Quality Measurement Framework	
4.	Environmental and Strategic Impact Assessment with special reference to Blue Economy	Dr. Fraddry D' Souza, Independent Consultant Former Fellow & Area Convenor, The Coastal Ecology & Marine Resources Centre, TERI, Goa
5.	Blue Economy - Role of Ocean Governance, Science, Information Services and Ocean Accounting	Dr. R.Venkatesan, Head, former Scientist G & Head Ocean Observation, National Institute of Ocean Technology
6.	Framework and Implementation of SDG 14: Conservation of Ocean, Sea and Marine Biodiversity	Dr. Nanda Dulal Das, Director (T&R), iCED Jaipur
7.	Coastal and Marine Tourism: A Sustainability Perspective	Commodore Debesh Lahiri, Executive Director & Ms. Ayushi Srivastava, Research Associate, National Maritime Foundation (NMF), New Delhi
8.	Integrating Marine Biodiversity Conservation and Blue Economy in India	Dr. K. Sivakumar, Professor, Pondicherry University
9.	Discussion on Toolkit on Ocean Acidification w.r.t. Climate Change and Marine Renewable Energy & Marine Fisheries	Dr. Mahesh Kumar Saini, Research Associates, iCED Jaipur & Dr. Gulshan Sharma, Research Associate, iCED Jaipur

10.	Use of Data Analytics in Coastal and Marine Environment	Shri Gaurav Rai, Director, Inf. Systems-I, O/o the C&AG, New Delhi
11.	Challenges and Opportunities in Auditing Marine and Coastal Ecosystem Conservation Measures: Experience Sharing	Ms. Monisha T M, DAG, O/o the PAG, Goa
12.	Climate Change and Blue Finance	Dr. Pablo Benitez Ponce, Senior Environmental Economist, World Bank
13.	Sustainability issues in Marine Fisheries	Dr. M. P. Remesan, Pr. Scientist, Fishing Technology Division, ICAR-CIFT, Kerala
14.	Development of Marine Fisheries in India and Gender Equity and Livelihood Implications (Online)	Dr. Shyam S Salim, Principal Scientist, Central Marine Fisheries Research Institute (CMFRI), Kochi
15.	Impact of Shipping and Marine Transport on Marine Environment	Vice Admiral Pradeep Chauhan, Director General & Dr. Chime Youdon, Research Fellow, National Maritime Foundation (NMF), New Delhi
16.	Understanding Over and Under-Fishing and the Need for Sustainable Marine Fisheries: Global Framework	Dr. Leela Edwin, Principal Scientist & Head, Fishing Technology Division, CIFT
17.	Marine Renewable Energy and Mineral Resources	Dr Kapil Narula, Consultant, United Nations
18.	Application of Tools and Techniques of Remote Sensing and Geo Information Systems in Auditing Blue Economy Sector	Dr. P. V. Nagamani, Group Head, OSG/ECSA, NRSC, Hyderabad
19.	Audit of Marine Fisheries: Experience Sharing	Shri Mohd. Ashraf J S, Sr. DAG, O/o the Pr.AG (Audit)-II, Tamil Nadu & Puducherry, Chennai

Further, a shopping tour to Bapu Bazar, a traditional artisanal market of Jaipur, was also organized. Bapu Bazaar is a shopping destination located on MI Road in the heart of Jaipur. It is one of the oldest markets in Jaipur. The market is known for its exotic Rajasthani craft products which include handlooms, handicrafts, brass work, and precious stones.

Team Wise Exercise-Team Wise Exercise was also given to the participants. All participants were divided into four groups of five participants in each group.



Ms Sayantani Jafa, ADAI & DG, iCED , Dr. Nanda Dulal Das, Director (T&R), iCED and Dr. Deen Dayal Verma Director (Admn.), iCED with the participants during Group Presentation

Shri Shri P. K. Lalu, Sr. DAG; Shri P. K. Reddy R., DAG; Shri Sathish M, DAG and Ms. Radhika Suresh, DAG represented their groups during this team exercise session.

Ms. Sayantani Jafa, ADAI & DG, 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 and facilities available at iCED was also collected from the participants through the SAI Portal. The average feedback of the participants was 9.51 out of 10, which is very encouraging. Session on Blue Economy - Role of Ocean Governance, Science, Information Services and Ocean Accounting ” was rated as the best.

Summing-up and valediction:

Ms Sayantani Jafa, Additional Deputy Comptroller and Auditor General & Director General, iCED graced the valedictory session of the National Training Programme.

Further, ADAI Madam, in her valedictory address highlighted that the Blue Economy is a labyrinthian and multifaceted area which is driving economic growth and innovation. Its vital importance is thus opening up now frontiers for auditing; and the need for upscaling capacity building and research has thus formed a key theme of the SAI 20 Engagement Group under the Presidentship of SAI India this year.

She thanked all the experts and participants for their contributions in making this event a success and desired to organize more sessions in the near future to understand the topic more broadly.