

### Online Workshop on World Environment Day-05 Jun 24

## Underwater Domain Awareness (UDA) Framework and the Opportunities for Young India in the New Global Era

The United Nations (UN) has declared this decade as the ***Decade of the Ocean Sciences for Sustainable Development***. The oceans and the freshwater systems are the primary regulators of the environment in the universe, and it is important that we generate significant understanding of the huge water bodies that exist. Thus, the Underwater Domain Awareness (UDA) framework should be the UN's priority agenda. The UDA framework, as proposed by the Maritime Research Centre (MRC), in collaboration with M/S NirDhwani Technology Pvt Ltd (NDT), facilitates nuanced policy & technology intervention along with acoustic capacity & capability building. The UDA framework encourages the pooling of resources and the synergising of efforts across the stakeholders and fosters cooperation across nations globally.

The tropical waters have unique characteristics on multiple fronts, namely political, economic, and physical. On one end, the political instability makes it easy for extra-regional powers to meddle in their domestic politics. Also, the non-state actors have a free run to disrupt peace and harmony. The socio-economic challenges, however, do not allow them to prioritize Science & Technology (S&T) to drive long-term sustainable development activities. The most critical factor is the physical challenge of sub-optimal Sonar performance in tropical waters. The Sonar technology developed by the West during the Cold War is suited for the Temperate and the Polar waters. The degradation of performance in tropical waters is close to 70%. However, the West continues to export these products to the nations in the Indian Ocean Region (IOR) at a very high cost, knowing that the performance is significantly degraded. The West generates the Security Bogey and pushes its military hardware to these poor nations. Field experimental R&D is important. However, it is highly resource-intensive, and thus, nations in the IOR find it difficult to encourage such efforts. The fragmented geopolitics ensured by the extra-regional powers further precludes any possibilities of cooperation. Local site-specific appreciation is the key to planning any initiative. Governance is a big causality as these nations cannot balance their expenditure and plan any long-term sustainable strategy.

The Gen Next has to take the agenda forward, and in keeping with the UN declaration, it is important to motivate the Young India to participate and drive the future. Multi-disciplinary projects are the best means to get students and young professionals involved in real-world problem-solving. The MRC has been conducting internships and fellowships to drive projects across multiple applications and support the UDA framework. The participants come from premium institutes that ensure highly innovative ideas are being progressed. The truly multi-disciplinary nature of the interaction makes the outcome far more balanced and comprehensive. The project outputs have also matured over multiple iterations, with numerous students contributing to the overall evolution of the idea. Some of the projects are now mature enough to be taken up by the Start-up ecosystem.

### Proposal

An online workshop was planned on World Environment Day on 05 Jun 2024 at 1600 hrs to encourage Young India to focus on the UDA initiative for enhanced Ocean Consciousness and Effective Maritime Governance. The workshop provided a broad exposure to the innovative projects driven by MRC under the UDA framework. Major participants at the World Environment Day webinar were domain experts, industry reps, research scientists, professionals, start-up mentors and policymakers.

### Program Details

The detailed program was planned as follows:

- 1600 hrs - **Welcome Address by Ms. Nishtha Vishwakarma**, Communications and Advocacy Lead at MRC.
- 1605 hrs - **Introductory Remarks by Dr (Cdr) Arnab Das**, Founder & Director MRC. UDA Framework in the New Global Order.
- 1630 hrs - Key Note Address on the UNESCO Perspective and their Initiatives. **Dr Benno Boer, Chief of Natural Sciences at UNESCO India Cluster.**
- 1645 hrs - Remarks on the Paris Climate Agreement and the New Global Order. **Mr. Joel Ruet, Founder of The Bridge Tank, Paris.**
- 1700 hrs - Chief Guest Remarks by **Cdr P K Srivastava (Retd)**, Sc G. at Ministry of Earth Sciences.
- 1715 hrs - Guest of Honour Remarks by **Shri Ganesh Natarajan, Chairman Honeywell Automation and 5F World.**
- 1730 hrs - **Intervention by Experts**  
**Mr Thibault Fournol, Research Fellow at Foundation for Strategic Research, Paris, France.**  
**Dr. Swayamprabha Das, Associate Vice President & Lead Policy and Planning at Development Alternatives, New Delhi.**
- 1745 hrs - **Closing Remarks by Amb Anup K Mudgal.**  
Member of the FICCI Blue Economy Task Force and Former member of the Steering Committee under the Prime Minister's Economic Advisory Committee on Blue Economy.
- 1800 hrs - Vote of Thanks by **Shri Praful Talera, Adviser Blue Economy at MRC.**

### Webinar Videos:

Full webinar video can be viewed here- [Full Webinar Video](#)

#### **Speaker Videos -**

1. [Mr. Joel Ruet](#) from the Bridge Tank, Paris
2. [Dr Benno Boer](#), from UNESCO South Asia Region
3. [Cdr P K Srivastava \(Retd\)](#), from the Union Ministry of Earth Sciences

4. [Shri Ganesh Natarajan](#), Chairman of Honeywell Automation
5. [Dr. Swayamprabha Das](#), from Development Alternatives, New Delhi
6. [Amb Anup K Mudgal](#), former Indian Diplomat
7. [Mr. Ashwin Shroff](#), from Excell Industries
8. [Dr \(Cdr\) Arnab Das](#), Founder and Director of the Maritime Research Center, Pune, India