

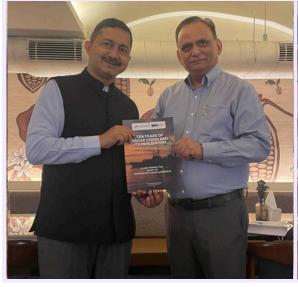


UDA

UNDERWATER DOMAIN AWARENESS

E-NEWSLETTER - 2025







3 QUARTER AT A GLANCE

25+

UDA Summer Interns from best colleges 380+

Social Media postings (across platforms) 4

UDA Webinars conducted 20+

Important Interactions and Participations 5

Latest UDA Digest articles

maritimeresearchcenter.com





THOUGHTS FROM THE EDITOR

"As we bring you this quarter's Newsletter, I am reminded of how important it is to see our oceans not as faraway spaces, but as essential to our growth, security, and well-being. The conversation around the Underwater Domain Awareness (UDA) Framework is steadily moving beyond research, it is now influencing policy, driving innovation, and encouraging regional cooperation. The updates we share this quarter highlight both our progress and our conviction that effective stewardship for UDA emerges when science, strategy, and society collaborate. I invite you to explore these pages and join us on our journey toward a secure and sustainable maritime future."



Nishtha Vishwakarma
Head of Communication and Outreach,
Maritime Research Center

TABLE OF CONTENTS

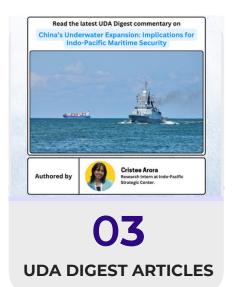
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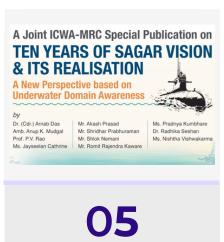
OT
UPDATES &
INTERACTIONS



WEBINARS







External Publications





07INTERNSHIPS & FELLOWSHIPS



Key highlights from our strategic visit to Tokyo, Japan





Our Founder & Director, Dr (Cdr.) Arnab Das participated in the 'Ocean Decade Fifth Foundations Dialogue' in Tokyo, Japan (3–5 Sept 2025). At a high-level roundtable, he emphasized Underwater Domain Awareness (UDA), community-driven action, and technology-enabled solutions as vital for sustainable ocean governance. The dialogue, hosted by the Sasakawa Peace Foundation in collaboration with UNESCO and its partners, brought together regional experts to advance collaboration.

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On 1 September 2025, Dr (Cdr.) Arnab Das visited the University of Tokyo and met with Ms. Harumi Sugimatsu and Mr. MAKI Toshihiro to discuss underwater platform systems and MRC's work on UDA. The engagement reinforced MRC's commitment to global collaboration and advancing underwater research.

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On the sidelines of the 'Ocean Decade Fifth Foundations Dialogue' in Tokyo, Japan, Dr (Cdr) Arnab Das met with Mr. Atsushi Sunami, President of the Sasakawa Peace Foundation. They discussed sustainable ocean governance, capacity building, and advancing the UN Ocean Decade objectives, reinforcing MRC's commitment to science-driven, inclusive, and collaborative ocean management.

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During his visit to Tokyo, Dr. Das engaged with JAMSTEC – Japan Agency for Marine-Earth Science and Technology, a global leader in ocean science. He explored pioneering technologies and discussed marine innovation and UDA with Dr. Dhugal Lindsay, Senior Staff Scientist. The interaction, joined by Mehul Sangekar and Leah Bergman, highlighted our commitment to international collaboration and sustainable maritime growth.

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At the 'Ocean Decade Fifth Foundations Dialogue' in Tokyo, Dr (Cdr.) Arnab Das met Mr. Yohei Sasakawa, Honorary Chairman of SPF/Nippon Foundation, and shared MRC's Marine Spatial Planning (MSP) Handbook. He also engaged with Mr. Vidar Helgesen, Executive Secretary of IOC-UNESCO, highlighting MRC's initiatives on Underwater Domain Awareness (UDA) and MSP for sustainable ocean governance.

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6



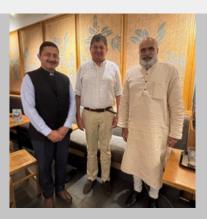
During the 'Ocean Decade Fifth Foundation Dialogue' in Tokyo, Dr. (Cdr) Arnab Das met Ms. Antonella Vassallo, Managing Director of the International Ocean Institute (IOI), to discuss strategic narratives related to the UDA. They also joined the UNESCO Ocean 'Ocean Dialogue meeting' to shape plans for the next five years of the UN Decade of Ocean Science, reinforcing MRC's commitment to sustainable and inclusive global ocean governance.

Key updates and interactions



We have signed a Memorandum of Understanding (MoU) with the Ratan Tata Maharashtra State Skills University to formally launch India's first-ever skilling program in Underwater Domain Awareness (UDA). The MoU was signed in the esteemed presence of Dr. Apoorva Palkar, Founding Vice Chancellor of RTMSSU, and Dr (Cdr) Arnab Das, Founder and Director of MRC. This is a significant step forward for India's maritime and underwater skill development.

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On July 24, 2025, Dr (Cdr) Arnab Das and our esteemed Adviser on Blue Economy, Shri Praful Talera had the distinct honour of meeting with Shri Amitabh Kumar, IRS, the Former Director General of Shipping, Government of India. It was a privilege to apprise Shri Kumar about the technological innovations being pioneered by the teams at MRC and Nirdhwani Technology Private Limited., particularly our significant advancements in the UDA sector.

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On July 24, 2025, Dr (Cdr) Arnab Das met with Dr Ajay Kumar, Honourable Chairperson of the Union Public Service Commission (UPSC), Government of India (Gol), in New Delhi. The UPSC Chairperson was particularly interested in our current initiatives in Marine Spatial Planning, and we were thrilled to share that talented students from the world's most prestigious colleges have joined us to spearhead this vital research.

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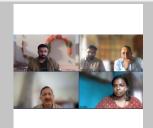
On August 13, 2025, Dr (Cdr) Arnab Das had the privilege of meeting Vice Admiral Gurcharan Singh, Commandant of the National Defence Academy (NDA). Dr Das shared insights on the collaborative work being undertaken by our team under the UDA Framework. The discussion spanned key focus areas, including maritime security. During the interaction, Dr Das also presented a book containing a chapter authored by him to the Commandant.

Key updates and interactions



On August 19, 2025, Dr (Cdr) Arnab Das held a significant interaction with Rear Admiral V. Ganapathy, Commandant of the Military Institute of Technology (MILIT), Pune. Dr Das engaged in a constructive discussion with the Commandant on deepening the collaboration between MRC and MILIT. We have already signed an MoU with MILIT for its capacity-building initiative and have provided specialized training for armed forces officers.

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Our team interacted with representatives from Saintgits College of Engineering as part of our ongoing efforts to expand academic and research partnerships. We are grateful to Mr. Punnoose George, Executive Chairman at Saintgits Group of Professional Institutions, and Mr Naveen John Punnoose, Chief Digital Officer at Saintgits College of Engineering, for acknowledging the vital role MRC plays in enhancing global awareness around UDA and fostering meaningful impact through science, technology, and policy.

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Our webinar report on 'India-Japan Regional Dialogue on Maritime Cooperation,' which was hosted to commemorate World Oceans Day 2025, was featured on the Sasakawa Peace Foundation's (Japan) homepage. This event brought together global thought leaders to explore critical issues in the maritime domain, with a focus on regional cooperation, sustainable ocean governance, and cutting-edge maritime technologies.

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The MRC team, led by Dr Das, held a meeting with Mr. Kodero Jiro, Counsellor (Economy and Development), and Mr. Sasaki Kie, Coast Guard Attaché (Political Affairs) at the Embassy of Japan in India, New Delhi, in July 2025.

During this interaction, our team shared the ongoing efforts and strategic research initiatives undertaken by our team in areas critical to the Indo-Pacific and Indian Ocean Region (IOR).

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Our team hosted Mr. Vishal Thakkar and Mr. Rahul Jain from Pune Angels, along with Mr. Roshan Talera, Executive Director of Dynamic Logistics, at the MRC's UDA Center in Pune. Led by our Founder & Director, Dr. (Cdr) Arnab Das, our on-ground research engineers showcased some of the cutting-edge technology we're developing under the UDA framework.

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Our team presented on "Underwater Domain Awareness (UDA)—driven Port Management in Tropical Waters of the Indian Ocean" at the South African High Commission, New Delhi, on September 5, 2025. The delegation from the Government of South Africa engaged with us on key developments in ports and harbours across India and the wider IOR. This exchange offered a valuable opportunity to strengthen India—South Africa maritime collaboration and advance sustainable, technology—driven port management across the IOR.

Important participations





MRC participated in the 'Indian Coastal Alliance Conference' on "Priorities and Challenges in the Indian Coastal Region: Environmental, Economic and Geopolitical Perspectives" held on August 21–22, 2025, in Kochi, Kerala.

This conference was organized by the Centre for Public Policy Research (CPPR) and The Asia Foundation. We participated in the Session 5 panel discussion on 'Advancing Maritime Domain Awareness, Port Infrastructure, Blue Economy, Energy, and Coastal Security.'

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We participated in the Brainstorming Workshop on 'Blue Economy Investments,' organised by the Ministry of Earth Sciences on July 25, 2025, in New Delhi.

Our team shared MRC's research insights on the importance of Marine Spatial Planning and the need for innovative financial instruments such as blue bonds, debt-for-nature swaps, and blended finance to support sustainable ocean development.

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We participated in the 'National Workshop on Strengthening the Science-Management Interface: Embedding Evidence and Technology in Marine Fisheries Governance,' held in Chennai on September 9–10, 2025. Dr (Cdr) Arnab Das contributed to Session 4: Emerging Concepts and Technologies in Fisheries, where he delivered a presentation on "Underwater Domain Awareness: Opportunities for Fisheries." His talk focused on how UDA can bridge critical knowledge gaps, strengthen decision-making, and provide innovative.

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We participated in the inaugural 'Shipbuilding Committee Meeting' convened by the DG Shipping, GoI, on July 25, 2025. This committee has been established under the International Maritime Organization's (IMO) GloNoise Project to address URN mitigation in the commercial shipping sector. The meeting reinforced the importance of active engagement in the Experience Building Phase, marking a key step toward positioning India as a global leader in sustainable maritime practices.

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Our team participated virtually in a Round Table Discussion hosted by the All-India Disaster Mitigation Institute (AIDMI) on "Coastal Disasters with a Focus on Extreme Heat: Perspectives on South Asia." Our team made an insightful presentation on 'UDA Framework – a comprehensive and inclusive approach to climate change collaboration.' Cathrine also highlighted ongoing research initiatives led by our team.

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Our team participated in the 7th International Conference on Ocean Engineering (ICOE 2025), hosted by the Department of Ocean Engineering, IIT Madras, from September 14–18, 2025. At the conference, our team presented MRC's research on: "APY Analysis – A Physical and Chemical Parameters—driven Framework designed to enhance aquaculture productivity with a focus on shrimp and seaweed farming."

Charting Progress: Mid-Internship insights from UDA Summer Interns from IITs- [PART 2] July 12, 2025



VIEW REPORT



Charting Progress: Mid-Internship Insights from UDA Summer Interns with Liberal Arts Background

JULY 29, 2025



VIEW REPORT



Startup Opportunities in the New Global Order – A New Perspective based on the Underwater Domain Awareness (UDA) Framework

Aug 16, 2025



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Celebrating 'World Maritime Day 2025' Marine Spatial Planning and the UDA Framework: Navigating the future for Safe, Secure and Sustainable Growth in the IOR

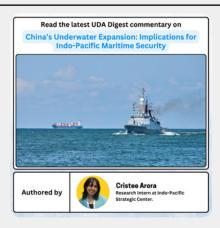
Sep 25, 2025



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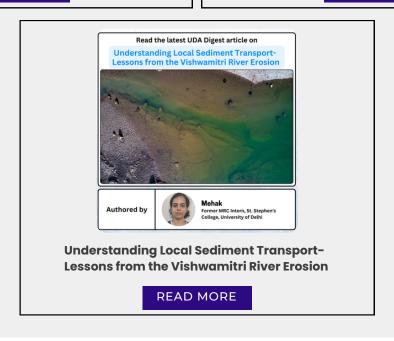


Uplifting Coastal Communities in the Philippines: Harnessing Underwater Technology and Innovations

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Harnessing Ocean Data for Smarter Fishing

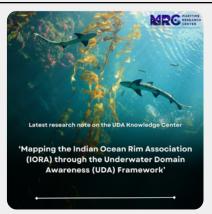


KNOWLEDGE CENTER RESEARCH ARCHIVES AND OTHER REPORTS



Marine Spatial Planning (MSP) as a Public Policy Instrument in the new Global Order

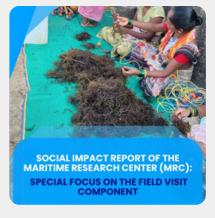
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Mapping the Indian Ocean Rim Association (IORA) through the Underwater Domain Awareness (UDA)

Framework

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Social Impact Report of the Maritime Research
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Digital Transformation and APY Tool Field Validation Report

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MRC's Report on
"UDA Skilling Ecosystem' 2024-2025"

EXTERNAL PUBLICATIONS

ICWA Special Publication 1000



A Joint ICWA-MRC Special Publication on

TEN YEARS OF SAGAR VISION & ITS REALISATION

A New Perspective based on **Underwater Domain Awareness**

bv

Dr. (Cdr.) Arnab Das Amb. Anup K. Mudgal Prof. P.V. Rao

Ms. Jayseelan Cathrine

Mr. Akash Prasad

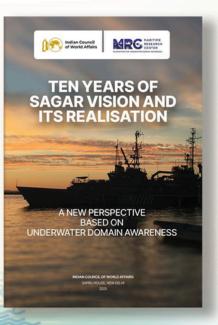
Mr. Shridhar Prabhuraman

Mr. Shlok Nemani

Mr. Romit Rajendra Kaware

Ms. Pradnya Kumbhare Dr. Radhika Seshan

Ms. Nishtha Vishwakarma



We are proud to share that the Indian Council of World Affairs, in collaboration with the Maritime Research Center, has released a Special Publication titled "Ten Years of the SAGAR Vision and its Realization – A New Perspective based on Underwater Domain Awareness (UDA)."

This compendium of eleven chapters integrates the UDA Framework into the **SAGAR doctrine, highlighting its role in:**

- 1. Maritime Security
- 2. Blue Economy
- 3. Climate Resilience and Resource Management
- 4. Regional Diplomacy
- 5. Community Empowerment through initiatives like '100 Warriors.'

This publication is more than a retrospective; it is a forward-looking roadmap for India's maritime future, blending strategy, sustainability, and innovation to shape the MAHASAGAR outlook in the decades ahead.

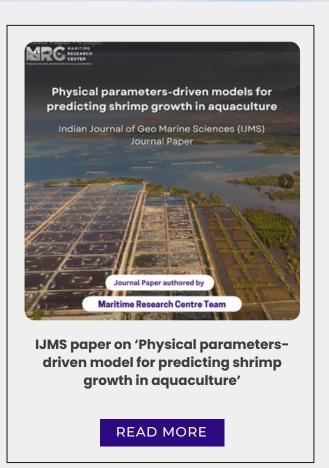
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Full Publication

EXTERNAL PUBLICATIONS



IJMS Paper on 'Transforming Sri Lanka's Maritime Future with UDA Framework'





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July 2025

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Digital Transformation through APY
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How is the UDA Framework redefining Coastal Management in the IOR?

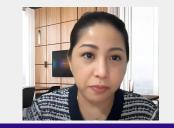
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MRC RESEARCH FELLOWS



PROF. MIMI FABE

National Police College,
Philippines



MS. JOAN ANDREA TOLEDO
Indo-Pacific Alliance,
Philippines



TEJASWINI KAKTIKAR

BSc. Anthropology at University College
London (UCL), United Kingdom (UK)

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MS. PRATHNA ANAND

B.A. in Public Policy and Leadership University of Virginia, USA

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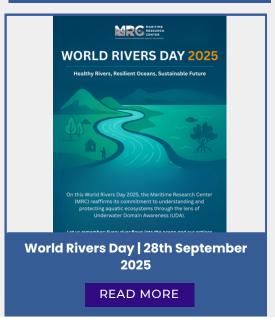
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IMPORTANT DAYS









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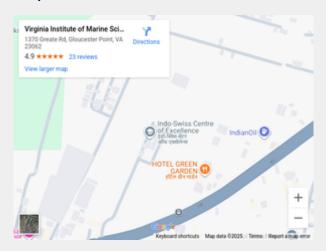
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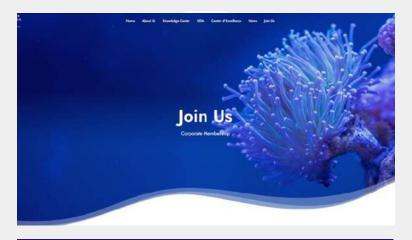
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