







Small Island Research and Development for Island Sustainability (phase-2)

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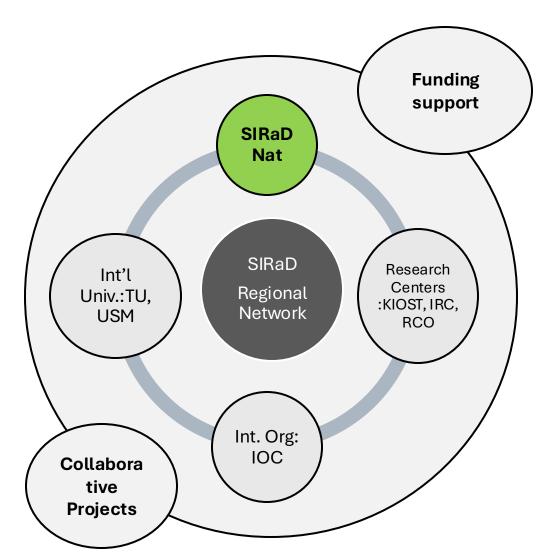
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- Strategic approach to empower small island communities
- Balancing economic growth with environmental preservation.

1. Why small island is important?

- Small islands can be found across geographic area of the member states of IOC Western Pacific Region. Each island has special geologic features, as a result they individually have distinct ecosystems and host unique biological community.
- Island development increases dramatically in the last 10 20 years; as a result, ecosystems associated with the islands are under pressures due to human development activities e.g., tourists, aquacultures, mining and fishing industries;
- Problems such as., coastal erosion, pollution, sea-level rise, habitat loss, and lack of clean freshwaters, as well as lack alternative livelihood are commonly found throughout the Westpac region.

2. Establishment of Working Group and Its Goals



• The goal of the Project under SIRaD Working Group and collaboration partners is to *facilitate* development resilience, inclusive growth, and sustainable prosperity.

SIRaD Project WG objectives

1. Communities-level shift

 Strategic management of water and living resources with stakeholders' participations

2. Policy-shift

- Policy adoption (to adopt policy changes for improvement of clean
- Implementation of actionable policy recommendation
- Replication of outputs to other communities

3. Regional knowledge sharing

Dissemination of best-practices through workshops and collaboration

3. What was the SIRaD activities/Output?





SIRaD workshop I (2023)



SC member meeting via zoom (2024)

International Island Forum (2023. 2024)

ELSEVIER

Marine Policy 167 (2024) 106266

Contents lists available at ScienceDirect

Marine Policy

journal homepage: www.elsevier.com/locate/marpol



Conference reports

Small island futures: A conference report on the pathways to resilience and development

ARTICLEINFO

eywords

Regional cooperation and community resil-

Sustainable industries and resource manage-

Island economy and management practices

ABSTRACT

Unsustainable governance has caused numerous challenges for some small islands, especially those where there is human activity. Addressing issues such as water security, environmental challenges, and unsustainable living are urgent concerns. Towards meeting the needs of effective management, National Research and Innovation Agency and Institute of Technology Indonesia jointly hosted the International Workshop on Small Island Research and Development on August 29–30, 2023 with sub-theme on 'Improving Knowledge of Water Security and Sustainable Living for Local Communities.' Representatives of government agencies, international organizations, academic institutions, and experts from a variety of countries attended the hybrid workshop. In addition to specific suggestions, the organizers recommended (1) establishing a regional network of experts on small island studies, and (2) attempting to promote sustainable development by giving governments policy briefings on crucial small Island development written by Island specialist.

Activities at national level



National workshop (2024)





Gili Ketapang Island (2025)



FGD with NGO (2024)

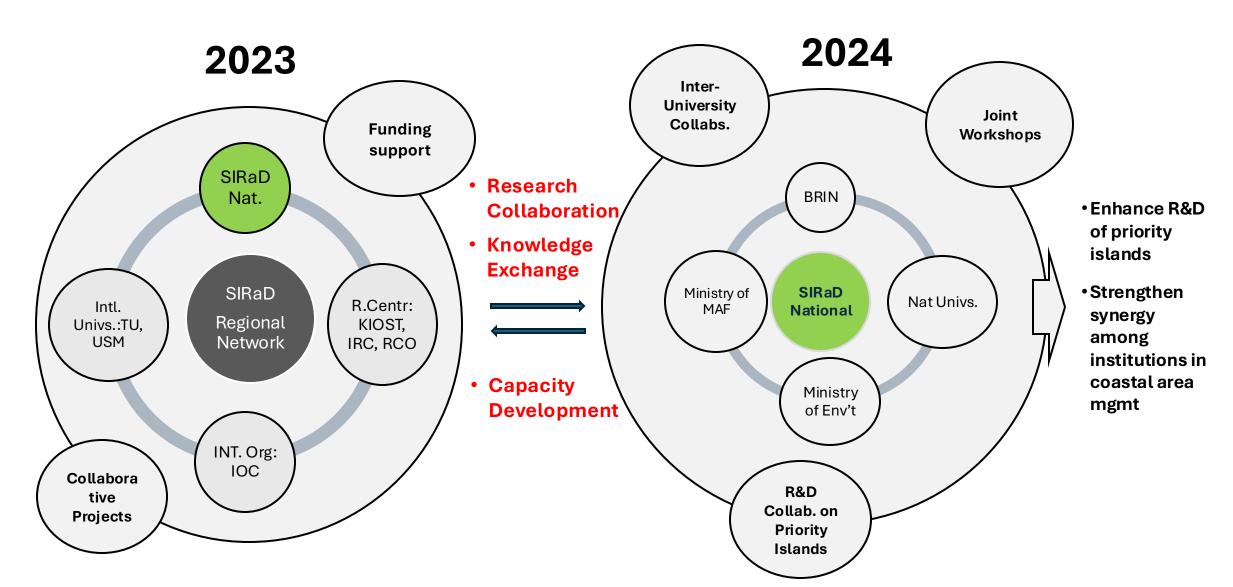


FGD of national SIRaD (2025)



MoU BRIN-UB (2025)

4. New Strategies and Plan



Proposed Activities (2025-2026)

Year	2025	2026
1. Socioeconomic condition	To investigate the livelihood systems within the context of social-ecological systems.	To evaluate the SES's resilience to external pressures, including anthropogenic factors like resource overexploitation and natural factors such as climate change.
2. Coastal Clean Index,	Mapping distribution and quantity of marine debris/plastic, Heavy metals in sediments, E-coli, THP,	Mapping and evaluating the distribution and quantity of marine debris/plastic, E-coli, THP, Heavy metals in sediments
3. Fisheries /Aquaculture	To Study Fish composition, Size change, Commercial fish/shellfish	
4. Waste Management	To evaluate the ongoing waste management	To provide recommendations for the best waste management
5. Clean water supply	To Study the island's ability to provide clean water resources	To provide technology recommendation for the local communities

Longterm Plan (2025-2030)

Phase 2 (2025-2026)

Baseline Understanding & Situation Analysis

Identifying the basic needs and challenges in small islands; analyzing initial conditions

Research activities:

- Mapping the socioeconomics conditions
- Study of natural resources
- Clean water supply capability
- Waste management practices
- Climate change adaptation

Phase 3 (2027 -2028)

Research-Based Solution Development

Developing innovative solutions and sustainable development strategies for small islands

Research activities:

- Marine & coastal ecosystem conservation project
- Climate change adaptation research
- Development sustainable fisheries/aquaculture technology
- Pilot projects

Phase 4 (2029)

Implementation & Capacity Development

Research-driven solutions & capacity development for communities

Research activities:

- Training & Dissemination of outputs for local communities
- Monitoring & evaluation of climate change impacts
- Collaboration with government and the private sector

Phase 5 (2030)

Evaluation, Replication, and Advanced Dev't

Evaluating the success of implemented solutions, expanding their reach, and enhancing sustainability

Research activities:

- Impact evaluation of pilot projects
- Replication of successful projects
- Developing sustainable funding systems

5. Member countries

- SC Country Members
 - Mr. Zainal Arifin
 - Ms. Aileen Tan
 - Mr. Hiroaki Saito
 - Mr. Hansan Park
 - Mr. Yucheng Deng
 - Mr. Wenxi Zhu (IOC Secret)
- Open to other Countries
- Involvement of Local Gov., Univs., NGO, Civil Soc.

No	Island (country)	Area, Pop (2023)	Note
1	JAPAN: Amami Islands	Area: 1,250 km² (8 inhabited islands), Pop: 100,000	World Natural Heritage sites (Amami Oshima Is and Tokunoshima Is, 2021) Amami Guntō National Park Tourism, sugar cane,
2	INDONESIA: Gili Ketapang	Area: 68 Ha (0.7 km) Pop: 7,600	Local Tourist Destination, Fishing
	Gili Matra, Lombok	Area:4,608.0 km ² Pop: 3,963,842	Global Tourist Destination, Aquaculture, Fishing AIC: Local Gov.; KKP; Min. Tourism,
3	SOUTH KOREA: Jeju	Area:1,833 km ² Pop: 700,000	Global tourism, WNH site, Global Geopark
4	MALAYSIA: Langkawi	Area: 469.0 km ² Pop: 99,000	Global tourism, AIC: Langkawi Development Authority.
5	PR CHINA: Pingtan Dao	Area: 371.0 km ² Pop: 381,000	Global tourism, Cultural heritage, marine economy, offshore wind power, pharmaceutical industry, Shipping route

Thank You