





# UN23: Accelerating transformations in capacity development in the Western Pacific

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**IOC Sub-Commission for the Western Pacific (WESTPAC)** 



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## **Presentation outline**





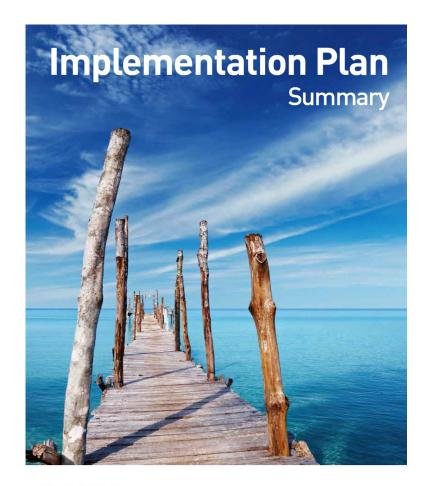


- Justification for the Decade Action Brief descriptions of the Decade Action, including its objectives, lifetime, expected outputs/outcomes, and major activities.
- Main progress made since it was accepted as the Ocean Decade Action in June 2022
- Activities tentatively planned for May 2023- April 2025
- Recommendations, if any









The United Nations
Decade of Ocean Science
for Sustainable Development
(2021-2030)





Capacity development initiatives during the Ocean Decade aim to develop individual and institutional skills. It also aim to improve equitable access to data and knowledge, technology, and infrastructure.

Capacity development initiatives target a diverse range of stakeholders, including generators and users of knowledge and privilege long-term partnerships that build on existing resources and networks.







# Accelerating transformations in capacity development in the Western Pacific Regional Network of Training and Research Centers (RTRCs) on Marine Science

- > RTRC was initiated in 2008: it **aims** to improve national and regional capability and capacity for marine science in a sustainable and systematic manner and <u>integrate research with training</u>.
- The RTRCs were established based on the specialized areas of the host institutes within the region.
- It employs a co-design and co-development approach in tailoring capacity development to suit stakeholder needs, building on mutual assistance among countries in the region and providing high-quality training, research opportunities, and sustainable long-term service.









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## Main objectives:

"Accelerate transformations in capacity development, improve and sustain required capacity for ocean sustainability in the region, through the establishment of RTRCs in national ocean institutions, and provision of regular training and research opportunities in RTRCs on their specialized areas to young scientists and other relevant ocean stakeholders mainly from developing countries within and outside the region".











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#### Timeframe: June 2022 to Dec 2030

- > Ocean basins: covering the region of RTRCs
  - Indian Ocean
  - North Pacific Ocean
  - South Pacific Ocean
- Sustainable Development Goal(s) (SDG)
  - GOAL 13: Climate Action
  - GOAL 14: Life Below Water
  - GOAL 17: Partnerships to achieve the Goal









#### Moving from the ocean we have to the ocean we want



UN Decade of Ocean Science for Sustainable Development











- Understand and beat marine pollution
- Protect and restore ecosystems and biodiversity
- 3 Sustainably feed the global population
- 4 Develop a sustainable and equitable ocean economy
- 6 Unlock ocean-based solutions to climate change
- micrease community resilience to ocean hazards
- 7 Expand the global ocean observing system
- 8 Create a digital representation of the
- Skills, knowledge and technology for all
- (11) Change humanity's relationship with the ocean









#### **RTRCs**

**Objectives** – to serve the **UN Ocean Decade** Objective

**Decade Challenges –** to be achieved

**Outcomes** – society outcomes (the ocean we want)







## Reginal Capacity Building: IOC/WESTPAC

# "UNESCO/IOC Regional Network of Training and Research Centers (RTRC) on Marine Science in the Western Pacific and its adjacent regions"

- **1. Reef Management and Restoration**, University of the Philippines, Philippines, 2019-
- **2. Marine Toxins and Seafood Safety**, Institute of Oceanography, Vietnam, 2019-
- **3. Marine Plastic Debris and Microplastics**, East China Normal University, China, 2019-
- **4. Marine Biodiversity and Ecosystem Health**, National Research and Innovation Agency (BRIN), Indonesia, 2016 -
- **5. Ocean Dynamics and Climate**, First Institute of Oceanography, China, 2010 -

The RTRC initiative is <u>tailored to national and regional needs</u>, building on mutual assistance among countries in the region and providing high-quality training, research opportunities, and sustainable long term service.







Build on the expertise of the host Institutes

### □ RTRC on Ocean Dynamic and Climate (RTRC-ODC):



10th anniversary of the UNSCO/IOC-RTRC-ODC center on 5 July 2021



The 10th training course on Regional Application of Coupled Climate Models Qingdao, China, 5-16 July 2021



The 2<sup>nd</sup> CLIVAR-FIO summer school on Ocean The 11<sup>th</sup> training course on Prediction Macroturbulence and Its Role in Earth's and Projection of Climate, Qingdao Climate Qingdao China, 14-21 August 2022



China 22-28 August 2022

2017

- 2023: 12th training course on Ocean model and data assimilation, Qingdao, China, July
- 2024: 13th training course on Modeling of Ocean Ecosystem
- 2025: 14th training course on Application of Ocean Forecast System

extended agreement between IOC and FIO

2021



Marine Scientists in 2021 (on 15 Apr., 30 Sep. and 25 Nov.)



2018

Two sessions of ODC International Forum for Young Marine Scientists in 2022 (on 27 Apr. and 15 Nov.)

2022

After 2025, will be arranged according to

2016



Postponed due to COVID-19

dynamics and air-sea interactions



The 8th training course on ocean forecast system, Qingdao China, 1-7 Jul 2018



Joint research on Sri Lanka regional ocean modeling during 3-20 Jan 2017



2023 +

The 6<sup>th</sup> training course on ocean dynamics and multi-scales interaction. Qingdao, China, 05-16 Sep. 2016



Joint Research on Ocean Modeling and Forecasting in Souths Asia From 1-16 Jul 2019



The 1st CLIVAR-FIO summer school on past, present and future sea level changes Qingdao, China, 25-30 Jun 2018



The 7th training curse on development of coupled regional ocean models Oingdao, China, 12-23 Jun 2017



LIPI Delegation Visited ODC Center



Officially launched in Qingdao, 9 Jun 2011



Issuing Prof. Fangli Qiao a certification of the director of ODC, 10 May 2012



Dr. Wendy Watson-Wright, Executive Secretary of IOC visited ODC on 30 Oct 2013



Prof. Yutaka MICHIDA from University of Tokyo visited ODC Center on 3 Sep 2014



Joint workshop on 16 Sep 2015

Joint workshop between WCRP/CLIVAR and IOC/WESTPAC had been held focused on "Advancing Ocean Climate Observation and Studies in the Indo-Pacific".

2015

2010 2011

Ceremony for signing agreement on the establishment of ODC 11 May 2010



The 1st training course on ocean



The 2nd training curse on ocean models, Qingdao, China, 10-16 Jun dynamics, Qingdao, China, 16-22



The 3rd training course on air-sea interaction and modeling Qingdao, China, 12-23 Aug 2013



models, Qingdao, China, 03-14 Nov. 2014



The  $4^{th}$  training course on climate  $\phantom{a}$  The  $5^{th}$  training course on climate change Qingdao, China, 07-18 Sep 2015

national and regional research capacity on ocean dynamics, airsea interactions, climate change, and numerical modeling

**Aims** to enhance

## Contribution to UN Ocean Decade challenges:

Challenge 5: Unlock ocean-based solutions to climate change

Challenge 9: Deliver data, knowledge and technology for all







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□ RTRC on Marine Biodiversity and Ecosystem Health (RTRC-MarBEST):

Aims to develop and strengthen the capacity and capability of human resources, particularly for young scientists in the Indo-West Pacific region and beyond; establish and develop a common platform for methodologies in monitoring marine ecosystem health; promote scientific collaborations among experts in the region and beyond; and facilitate the transfer of knowledge.









# Contribution to UN Ocean Decade challenges:

**Challenge 2**: Protect and restore ecosystems and biodiversity

**Challenge 3**: Sustainable feed the global population

**Challenge 9**:Deliver data, knowledge and technology for all







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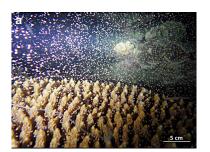
Reef Management and Restoration, University of the Philippines, Philippines

Aims to enhance the capacity of young scientists and young lecturers; strengthen the network of scientists on reef management and restoration in the Western Pacific; and contribute to the sustainable development and conservation of marine and coastal resources through research and training.









# Contribution to UN Ocean Decade challenges:

Challenge 2: Protect and restore ecosystems and biodiversity

**Challenge 3**: Sustainable feed the global population

**Challenge 9**:Deliver data, knowledge and technology for all







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Marine Toxins and Seafood Safety, Institute of Oceanography, Vietnam, 5 years (2019-2023)

**Aims** to enhance the capacity for <u>toxin detection</u>, <u>identification</u>, <u>and analysis</u> through the development and operation of professional training and expert exchanges; and to promote cooperation and conduct joint studies on marine toxin research and seafood safety among scientists, institutions and countries in the region and beyond.









# Contribution to UN Ocean Decade challenges:

**Challenge 3**: Sustainable feed the global population

**Challenge 9**:Deliver data, knowledge and technology for all







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□ Plastic Marine Debris and Microplastics (2019-2026), East China Normal University, Shanghai, China







Aims to improve the research and monitoring capacity of countries in the region for plastics and microplastics, including sampling techniques, measurement, modeling, and impact assessment, and to develop and cultivate a network of talented young researchers on plastics and microplastics.

# Contribution to UN Ocean Decade challenges:

Challenge 1: Understand and beat marine pollution

**Challenge 9**:Deliver data, knowledge and technology for all







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#### **Challenges:**

- 2019-2022: A difficult time to implement RTRC activities efficiently, only the RTRC-ODC and -MarBEST could conduct the hybrid training courses
- Generally, financial support for ocean science research declined during the pandemic and the post-pandemic, which could affect the operation of RTRCs,
  - Work very closely with the partners and look for funding sources to secure and sustainable operation of RTRCs
  - However, with the strong support of all RTRCs, they have proposed to conduct the training program for the next intersessional period (2023-2025).







#### Accelerating transformations in capacity development in the Western Pacific Regional

Network of Training and Research Centers (RTRCs) on Marine Science

#### **Forwards:**

- Encouraging the Member States to join an effort with the WESTPAC to establish the new RTRCs to cover more diverse subjects in supporting the UN Decade Objectives to achieve the ocean we want.
- Encouraging the Member States to participate actively and support the RTRCs activities, including the initiative of ocean science research and monitoring in the countries in collaborating with RTRCs, which will give an opportunity for young scientist in the countries to improve their knowledge and skills of ocean science research.







# **ThankYou**

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