



2024 ECOP Malaysia Report



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EXECUTIVE SUMMARY

Malaysia, strategically located in Southeast Asia, is home to rich marine ecosystems but faces challenges in raising societal awareness about marine conservation. Since 2022, membership in the UN Ocean Decade–endorsed ECOP Programme has notably increased, positioning Malaysia as the fifth-largest ECOP community in Asia. To enhance our understanding of local challenges and needs, connect stakeholders, and foster new leadership, a national ECOP survey was conducted in Malaysia from December 2023 to February 2024. The online survey targeted a diverse audience, including existing ECOP members, academics, private sector professionals, NGOs, and social media users. The survey highlights diverse expertise among respondents, primarily from the academic sector, with over 85% holding higher tertiary qualifications. Overall, 70% of Malaysian respondents were aware of the UN Decade of Ocean Science for Sustainable Development (2021-2030), but only 13% were active participants. A total of 30% and 50% of survey respondents had never heard of the UN Ocean Decade and ECOP Programme, respectively, which is comparatively higher than what we’ve observed in East and South Asian countries, substantiating room for improvement. Encouragingly, 68% and 79% of survey participants expressed high interest in joining the ECOP Malaysia node and Ocean Decade Movement, respectively. In terms of Ocean Decade Challenges, Malaysian ECOPs are actively contributing towards Challenges #2: ‘Protect and restore ecosystems and biodiversity’ (75%) and #1: ‘Understand and beat marine pollution’ (71%). While each of the seven Ocean Decade Outcomes have been prioritized by at least half of the survey respondents, they are particularly eager to achieve Outcomes #2 ‘A healthy and resilient ocean’ (83%), #1 ‘A clean ocean’ (70%), and #6 ‘An accessible ocean’ (65%). Furthermore, the survey identified the scarcity of job opportunities (85%), low salary prospects (77%), and the lack of professional/social networks as the most significant systemic barriers in the country. Respondents expressed a desire for improvements, prioritizing research collaboration opportunities (88%), funding (80%), and better remuneration/salaries (78%). When discussing funding priorities, survey participants emphasized the importance of scholarships, bursaries, and research grants (79%), alongside international volunteer grants/scholarships (66%) and start-up funds for ocean ventures (62%). These findings suggest that the identified barriers, desired improvements, and funding priorities are logically interconnected. The future of Malaysia's marine sector is promising. Set to be established in early 2025, the ECOP Malaysia node aims to address local challenges in sustainability, conservation, and capacity building. It will include diverse stakeholders and foster connections at the science-policy-society interface.

1 INTRODUCTION

1.1 Maritime background of Malaysia

Strategically sitting at the heart of Southeast Asia, Malaysia enjoys a tropical rainforest climate. As part of the Coral Triangle, the country is home to remarkably diverse marine ecosystems, teeming with an extraordinary variety of species and habitats. These amazing environments support some of the most exquisite marine organisms such as dugongs and dolphins (ADB, 2014). The country further houses seven Ramsar sites, a designated recognition towards wetlands of international importance for biodiversity (RAMSAR, 2024). Nevertheless, there lies a huge gap between the marine environment in Malaysia and societal awareness about its presence.

1.2 Historical, geographical and cultural aspects of Malaysia

Malaysia is a maritime nation and a coastal state recognized by the United Nations Convention on the Law of the Sea (UNCLOS 1982). The nation relies heavily on its marine environment and resources for livelihoods, with the maritime industry contributing 40% to the Gross Domestic Product (GDP) of the country's economy (Nik Mat et al., 2023). Coastal communities may include small-scale fisheries to large-scale industries such as seaports along the coastline of Malaysia or offshore oil rigs.

Ocean knowledge is a niche field of study among Malaysians, and the lack of exposure to marine information within the broader community contributes to low environmental awareness. This stems from the government's and educational sector's weak emphasis on the protection and conservation of marine resources. As a developing, upper middle-income country, Malaysia prioritizes economic gains over environmental conservation. A prominent example is the import of plastic waste, which has caused the country to top the global list of plastic pollution contributors since 2017 (Kong, 2024).

1.3 The chronology of Malaysia in the ECOP Programme

According to [ECOP Asia's Intermediary Report](#), Malaysians constituted less than 5% of the respondent pool in a regional ECOP survey conducted in 2021. In addition, as of March

2022, only 13 ECOPs from Malaysia were listed as members in the global ECOP registry¹. Subsequently, the ECOP Asia team conducted a second, more in-depth regional survey in the spring of 2022, which included a total of 46 respondents from Southeast Asia, 22 of whom were Malaysians. At the country level, the percentage of responses from Malaysia (16%) was the second highest, following Japan (21%) (Roman, 2023). Additionally, the [2022-2023 ECOP Asia Report](#) noted that, as of June 2023, 31 ECOP members from Malaysia had registered with the ECOP Programme, highlighting Malaysia as having the highest growth rate in membership among Southeast Asian nations. By August 2024, following the completion of our national ECOP survey for Malaysia, the ECOP Programme's global registry listed 86 members from Malaysia, representing a near four-fold increase compared to 2022. Malaysian ECOPs are now the fifth largest ECOP community in Asia, trailing India (n=312), China (n=210), Bangladesh (n=154), and the Republic of Korea (n=118)².

2 OBJECTIVES

The national ECOP survey for Malaysia aimed to:

- (a) Understand ECOPs in Malaysia as we set up a national chapter/node for the country,
- (b) Identify the challenges and struggles faced by Malaysian ECOPs working in the ocean space,
- (c) Nurture a sense of belonging for the new generation of ocean leaders,
- (d) Connect higher level decision makers, the scientific community (including ECOPs) and other stakeholders throughout the country,
- (e) Initiate future domestic and regional activities and events working towards ocean sustainability under the framework of the United Nations Decade of Ocean Science for Sustainable Development (2021-2030).

¹ For more information about the global ECOP registry, please refer to the following resource: <https://www.ecopdecade.org/wp-content/uploads/2023/12/ECOP-Programme-Onboarding-Handbook-Final-Version-2.pdf>

² The most up-to-date ECOP Asia membership distribution map can be accessed at: <https://www.ecopdecade.org/asia/>

3 METHODOLOGY

This survey was prepared and disseminated in both Bahasa Malaysia (the national language) and English (see *Appendix*). Using previous national ECOP surveys as guidance (e.g., China, India, Republic of Korea, Japan, and Italy)³, the survey questions were designed and formulated to be relevant to the Malaysian context. Before launching the survey, our team learned that Malaysians' exposure to and participation in the UN Ocean Decade framework had been relatively low, with fewer than a handful of Decade activities and projects endorsed by lead institutions in Malaysia. In March 2023, there was only one endorsed project from the country (Roman, 2023).

The survey was available online for three months, opening in December 2023 and closing in February 2024. We distributed the survey via email invitation to (1) the existing Malaysian members of the ECOP Programme's registry, (2) academicians and individuals working in the private sector (limited to our existing connections), (3) non-governmental organizations (NGOs), including the [Sustainable Ocean Alliance](#)'s Malaysia Hub, and (4) through social media channels, such as Facebook, LinkedIn and Instagram.

³ Previously published ECOP survey reports can be accessed here: <https://www.ecopdecade.org/ecopreports/>

4 RESULTS

4.1 Socio-Demographic Characteristics

4.1.1 Geographical and gender distributions and educational background

The sample size for this report is $n=100$, which is lower than the previously reported figure of $n=109$ (Roman, 2024). In this report, we have excluded non-Malaysians, including international students and expatriates working in Malaysia's ocean space, to concentrate exclusively on responses from Malaysians. This approach aims to strengthen the robustness of the findings and ensure they more accurately reflect the perspectives of Malaysians.

Out of 100 Malaysians, 94% live in Malaysia, while 6% reside abroad (e.g., Japan, Singapore and Australia) (*Figure 4.1*). Notably, 81% of the local respondents reside in Peninsular or West Malaysia, while the remaining 13% live in the Eastern or Borneo region of Malaysia. Meanwhile, the gender composition of this survey is slightly female-dominated at 55%, whereas male accounts for 44% of the respondent pool with 1% preferring not to say (*Figure 4.2*).

Most of our respondents reside in states where marine higher learning institutions are located. Respondents from Peninsular Malaysia predominantly originate from the west coast and central region, including the Federal Territory of Kuala Lumpur (FTKL), where [Universiti Malaya \(UM\)](#), ranked as one of the top public universities in Malaysia, is headquartered, as well as from various universities and governmental research institutes distributed throughout the state of Selangor. Respondents from the northern region of Peninsular Malaysia mainly hail from [Universiti Sains Malaysia \(USM\)](#), another important and the oldest marine research institute in the country. Meanwhile, our respondents based on the east coast of Peninsular Malaysia mostly come from the state of Terengganu, where [Universiti Malaysia Terengganu \(UMT\)](#), a well-established marine research institute, is located. On the Borneo side, [Universiti Malaysia Sabah \(UMS\)](#) is the leading institution for marine research in East Malaysia.

Regarding the educational background of respondents, a majority (49%) are pursuing or have obtained an undergraduate degree. It is then followed by PhDs (21%), Master's degrees (17%), High school certificates (11%), and finally Matriculation—a preparatory program for students who intend to enrol in tertiary studies—and 'Prefer not to say', both at 1% (*Figure 4.3*).

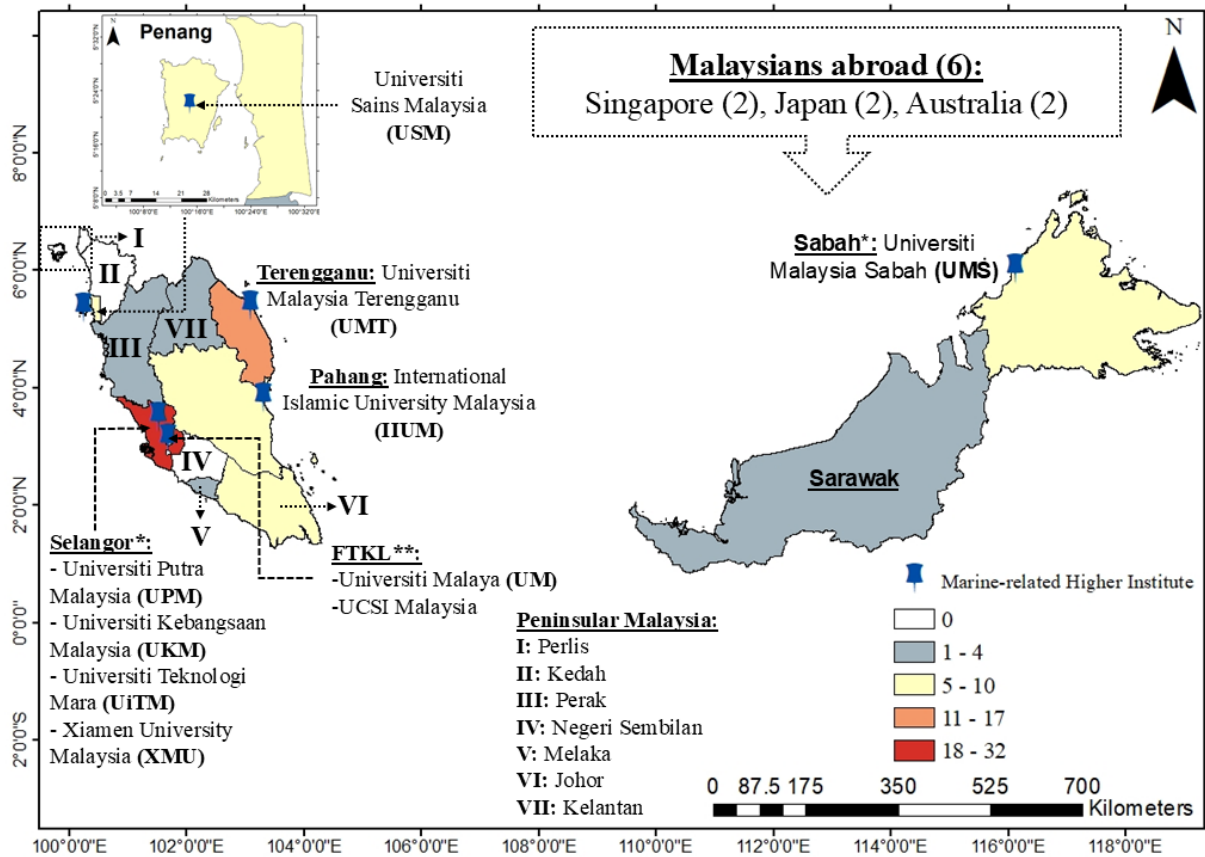


Figure 4.1 Geographical distribution of Malaysian respondents by state, alongside locations of marine higher education institutes affiliated with survey respondents. A more exhaustive list of institutional affiliations can be accessed in **Table 4.1**.

Note*: Federal Territory of Putrajaya and Federal Territory of Labuan are in the states of Selangor and Sabah, respectively.

Note:** FTKL stands for Federal Territory of Kuala Lumpur, located inside the state of Selangor.

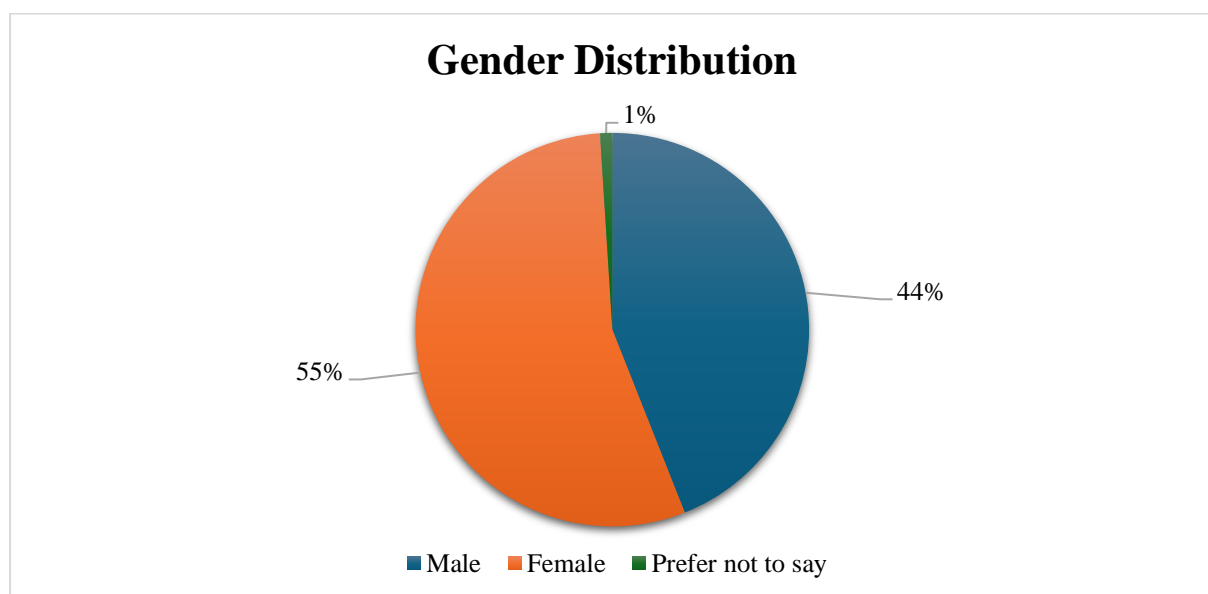


Figure 4.2 Gender distribution of the respondents.

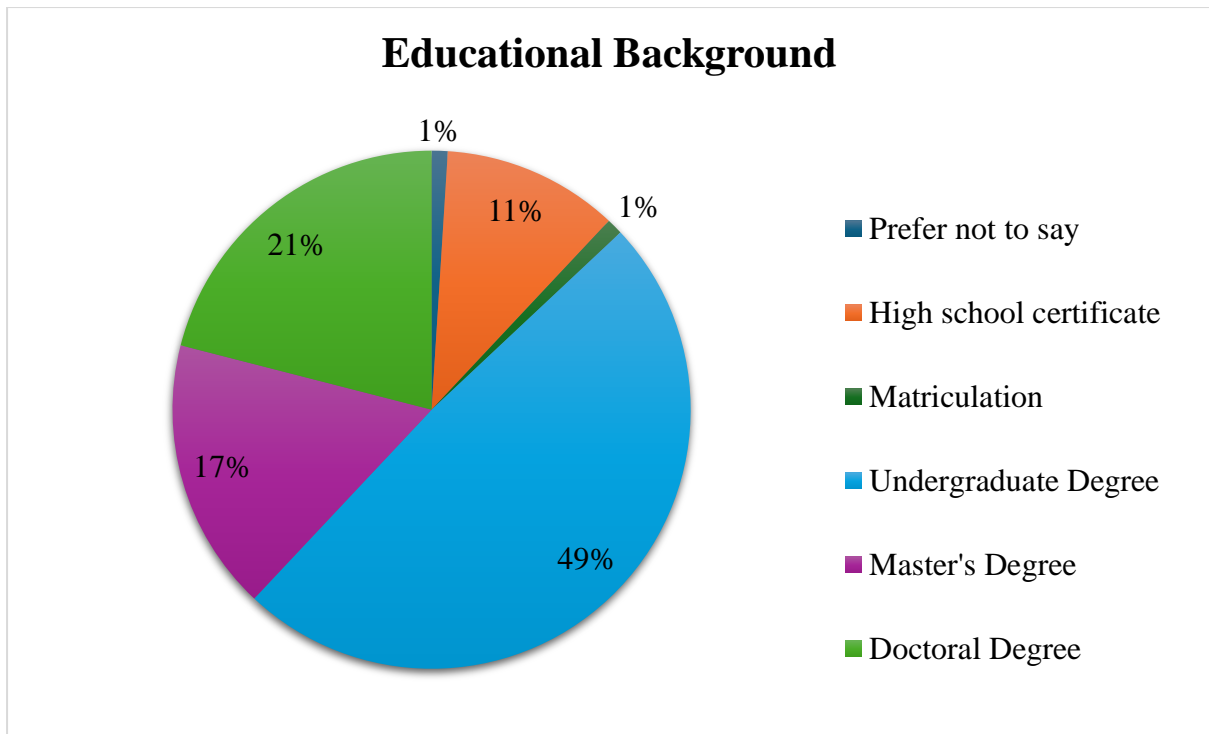


Figure 4.3 Educational background of the respondents.

4.1.2 Work sectors and areas of expertise/interest

The top three sectors that our respondents are involved in include academia (~ 71%), Research & Development (R&D) (~ 27%), and NGOs (~ 21%) (**Figure 4.4**). Meanwhile, 10% and 11% of respondents are working in the private and government sectors, respectively, and less than one percent (< 1%) are involved in law and foundations/philanthropic organizations. One respondent who selected ‘Others’ commented that they ‘Can’t decide yet’.

To gather information on the respondents’ expertise and/or area(s) of interest, the question was designed for open-ended short answers (e.g., keywords). The two most highly mentioned keywords were ‘marine’ and ‘oceanography’, followed by ‘climate’, ‘ecology’, ‘management’, ‘conservation’, and ‘economy’. Other keywords mentioned by respondents are further illustrated as a word cloud in **Figure 4.5**.

Sectors Involved by Respondents

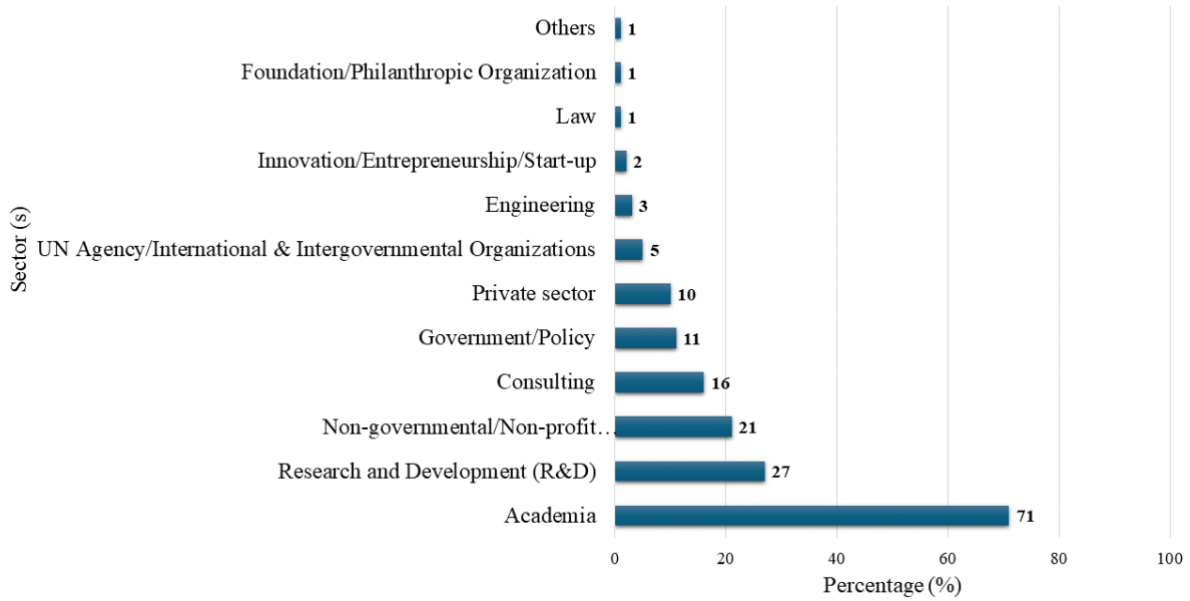


Figure 4.4 Distribution of respondents by sector (multiple selections allowed).

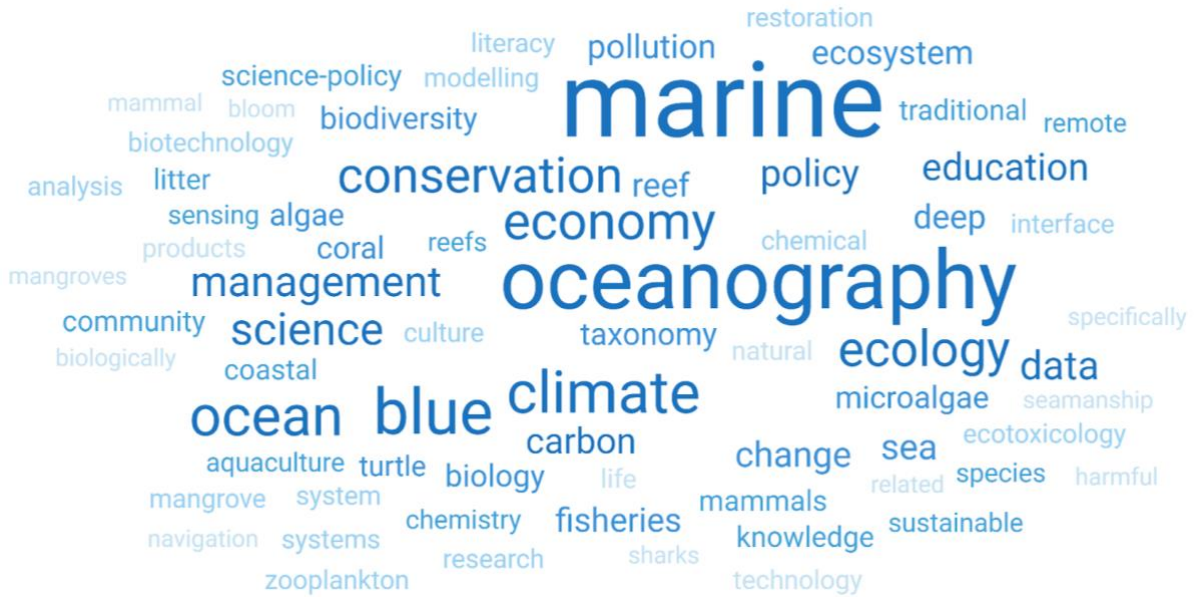


Figure 4.5 A word cloud representing the expertise or area(s) of interest of the respondents (Generated via freecloudgenerator.com). Note: The more frequently a word was mentioned, the larger it appears in the word cloud.

4.1.3 Experience and employment status in the ocean space

As shown in *Figure 4.6*, most respondents (38%) have been studying, working, or volunteering in the marine field for one to three years (1~3), while respondents with four to six years (4~6) of experience constitute the second largest portion at 29%. People with less than one year (< 1), seven to nine years (7~9), and more than 10 years (>10) of experience in the ocean space were recorded at 10%, 12%, and 11% respectively.

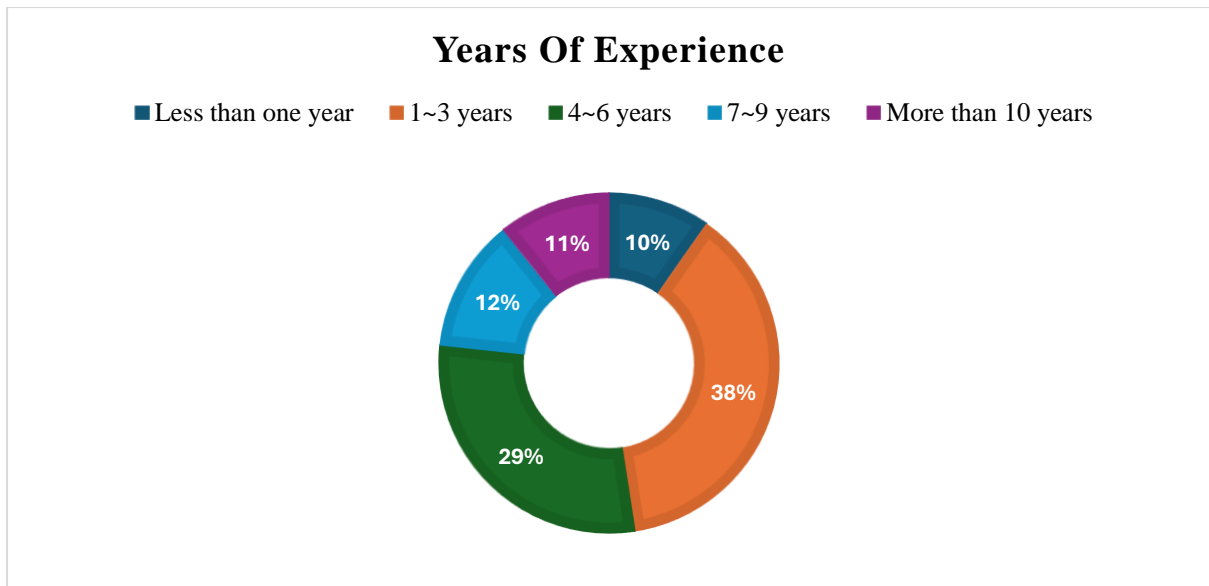


Figure 4.6 Years of experience of respondents involved in the ocean space.

Regarding the employment status of our respondents, more than half (52%) are currently studying, which includes internships, as internship experience is a prerequisite for tertiary education in Malaysia, while the other 48% are currently working (*left, Figure 4.7*). We further asked respondents if they are interested in advancing their education related to the marine field (*right, Figure 4.7*). Specifically, 66% expressed interest in furthering their studies, while 21% are not considering it. A small proportion of the respondents (13%) may have already achieved their highest educational level (e.g., PhD) as they selected the ‘Does not apply to me’ option.

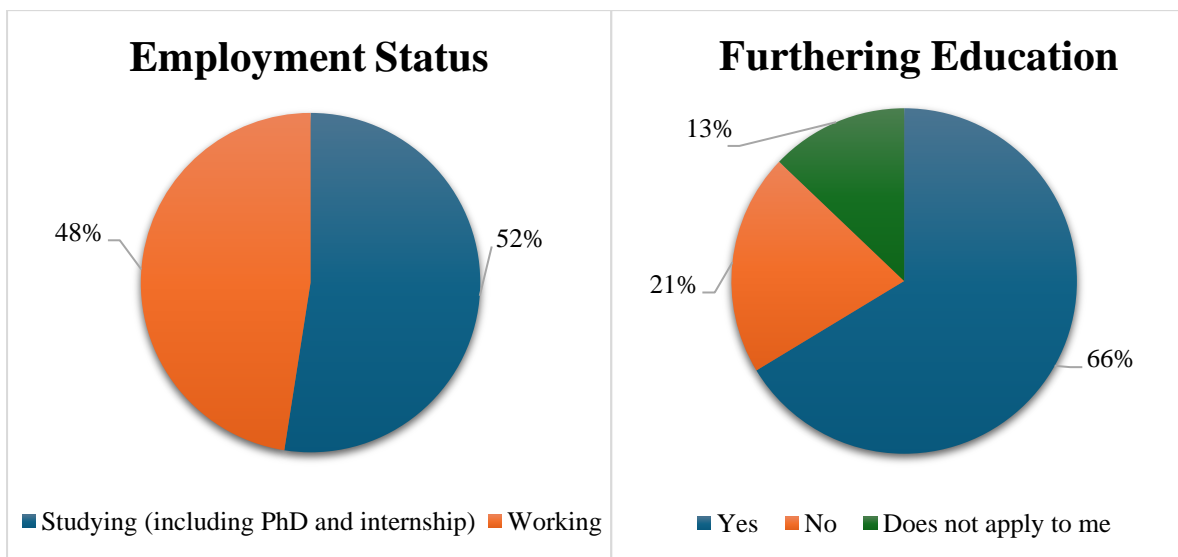


Figure 4.7 Employment status (*left*) and percentage of respondents wishing to further their education (*right*).

4.1.4 Institutional affiliations of respondents

Table 4.1 below presents an exhaustive list (n=39) of the respondents' affiliations, which are mainly related to marine science or environmental conservation. The list includes higher learning institutions, government research centres, private companies, and non-governmental organizations in Malaysia.

Table 4.1 *List of affiliations of respondents relevant to the ocean field in Malaysia.*

No.	List of affiliations in alphabetical order with embedded link
1	Akademi Perikanan Malaysia
2	Antaragrafik Systems Sdn Bhd
3	Centre for Marine and Coastal studies (CEMACS) @ Universiti Sains Malaysia (USM)
4	Department of Fisheries Malaysia
5	Earth Science and Environment Programme @ Faculty of Science and Technology (FST), Universiti Kebangsaan Malaysia (UKM)
6	Faculty of Science and Marine Environment @ Universiti Malaysia Terengganu (UMT)
7	Fisheries Research Institute, Department of Fisheries Malaysia
8	Institut Penyelidikan Marin Borneo, Sabah
9	Institute of Climate Change @ Universiti Kebangsaan Malaysia (UKM)
10	Institute of Ocean and Earth Sciences (IOES) @ Universiti Malaya (UM)
11	Institute of Oceanography and Environment (INOS) @ Universiti Malaysia Terengganu (UMT)
12	Institute of Oceanography and Maritime Studies (INOCEM) @ International Islamic University Malaysia (IIUM)
13	International Islamic University Malaysia (IIUM)
14	IUCN SSC Seahorse, Pipefish & Seadragon Specialist Group (SPS SG)
15	Jabatan Perikanan Negeri Johor
16	Kapas Conservation Society
17	Malaysia Ocean Research Alliance (MORA)
18	MareCet Research Organization
19	Marine Research Foundation (MRF)
20	Maritime Institute of Malaysia (MIMA)
21	Minconsult Sdn Bhd

-
- 22 [Ministry of Natural Resources and Environmental Sustainability Malaysia](#)
 - 23 [Reef Check Malaysia](#)
 - 24 [Save Our Seahorses \(SOS\) Malaysia](#)
 - 25 [School of Civil Engineering, College of Engineering, Universiti Teknologi MARA \(UITM\)](#)
 - 26 [Selangor Research Institute \(SRI\)](#)
 - 27 [Southeast Asian Fisheries Development Center \(SEAFDEC\)](#)
 - 28 [China-ASEAN College of Marine Sciences \(CAMS\), Xiamen University Malaysia \(XMUM\)](#)
 - 29 [Biodiversity Management, Group Health, Safety and Environment, PETRONAS](#)
 - 30 [Tengah Island Conservation](#)
 - 31 [UCSI University](#)
 - 32 [Universiti Malaya \(UM\)](#)
 - 33 [Universiti Malaysia Sabah \(UMS\)](#)
 - 34 [Universiti Malaysia Terengganu \(UMT\)](#)
 - 35 [Universiti Putra Malaysia \(UPM\)](#)
 - 36 [Universiti Sains Malaysia \(USM\)](#)
 - 37 [Universiti Sultan Zainal Abidin \(UniSZA\)](#)
 - 38 [Xiamen University Malaysia \(XMU\)](#)
 - 39 [YTL-SV Carbon Sdn Bhd](#)
-

4.2 The ECOP Programme and UN Ocean Decade in Malaysia

4.2.1 Self-identification as ECOP

For the purpose of the ECOP Programme, an ECOP is a person who *self-identifies as being early in their career, within 10 years or less of professional experience in any field related to the ocean. This definition includes post-secondary students and any volunteer roles, so not only employed/paid positions. The term ‘professional’ is used in order to be inclusive of professionals from various sectors of society* (Roman et al., 2024). Based on this definition, more than half of the respondents (63%) identified themselves as ECOPs, 25% were unsure, and the remaining 12% did not identify as ECOPs (**Figure 4.8**).

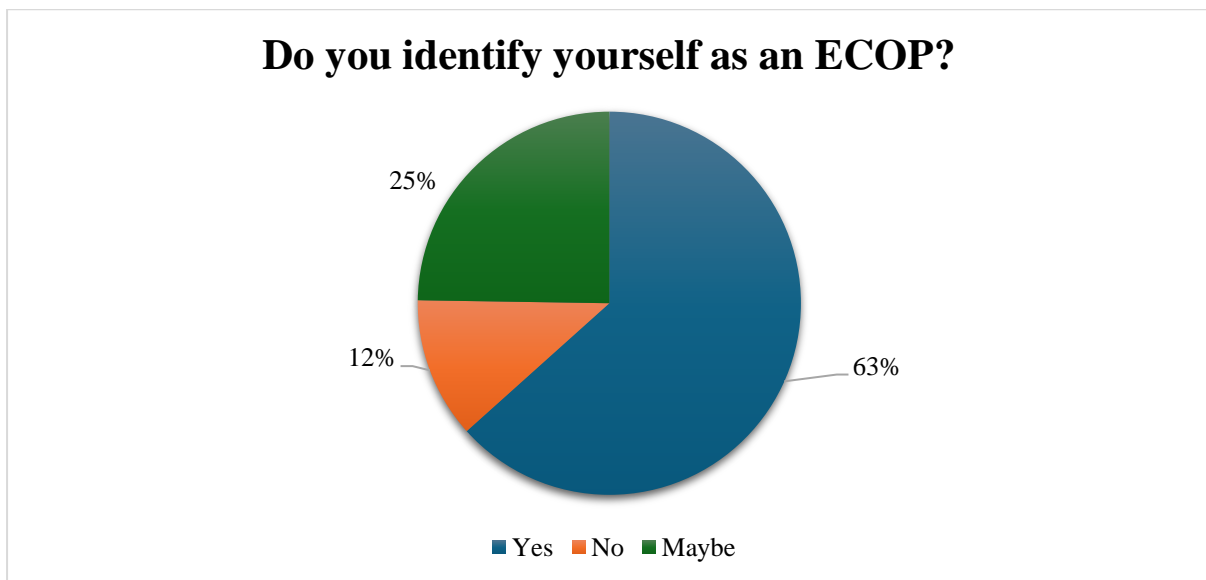


Figure 4.8 Proportion of respondents identifying themselves as ECOPs.

4.2.2 Visibility of the ECOP Programme and UN Ocean Decade in Malaysia

According to **Figure 4.9**, half of our respondents (50%) have never heard of the ECOP Programme, 45% have heard of it, and the remaining 5% were unsure.

Have you heard of the ECOP Programme?

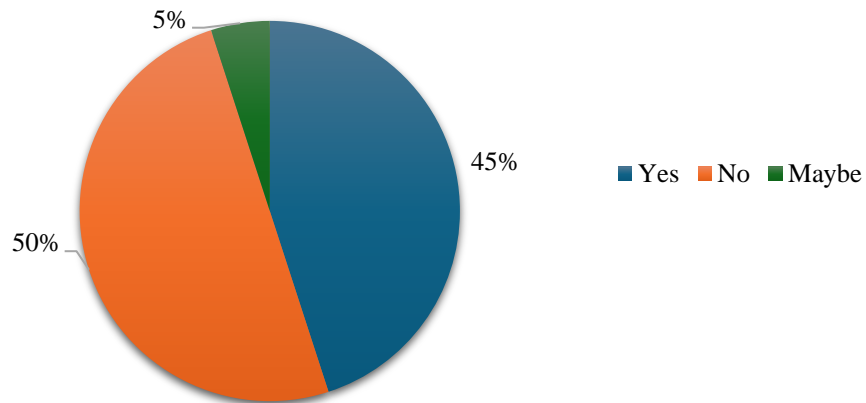


Figure 4.9 Visibility of the ECOP Programme in Malaysia.

Overall, our respondents demonstrated a relatively weak awareness and understanding of the UN Ocean Decade in Malaysia (Figure 4.10; Table 4.2), with 30% having ‘never read or heard’ of this global ocean initiative before. While the majority of respondents (70%) have read about the UN Ocean Decade, only 13% participated in it. The other 57% either never got the opportunity to participate in relevant activities/programs (48%), or they ‘never tried to learn more’ about the UN Ocean Decade (9%).

Have you heard of the UN Ocean Decade?

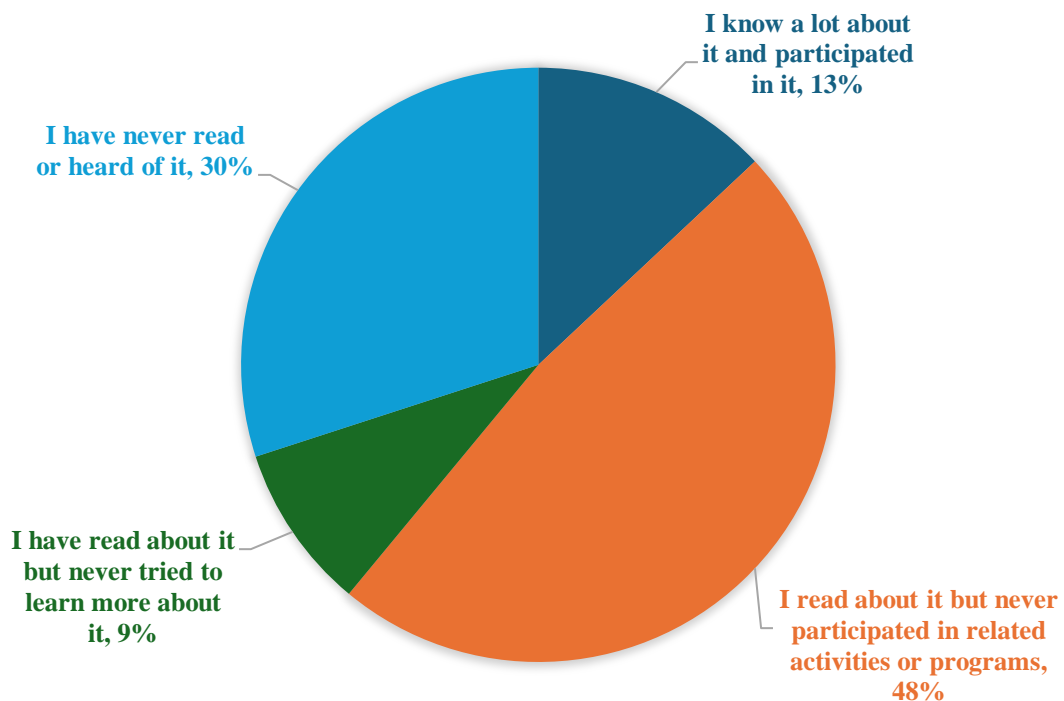


Figure 4.10 Visibility of the UN Ocean Decade in Malaysia.

We further cross-examined our findings with other Asian countries, including Bangladesh (Shahadat & Roman, in prep), China (Jiang & Roman, 2023), India (Debarati & Roman, 2023), Japan (Tanaka & Morioka, 2024), and the Republic of Korea (Bumsoo et al., in prep). **Table 4.2** below shows a detailed comparison of those countries. Specifically, Malaysia has the highest proportion of respondents who have ‘never read or heard’ of the UN Ocean Decade (30%) and the lowest proportion of respondents who ‘know a lot about it and have participated in it’ (13%).

Table 4.2 Comparison on the visibility of the UN Ocean Decade framework among respondents of different Asian countries, based on previous national ECOP surveys.

Feedback of respondents	Country (%)					
	Malaysia	China	India	Japan	Bangladesh	Korea
I know a lot about it and participated in it	13	17	16	24	17	14
I read about it but never participated in related activities or programs	48	45	66	49	53	34
I have read about it but never tried to learn more about it	9	22	10	9	18	32
I have never read or heard of it	30	16	8	18	12	20

4.2.3 Malaysians’ interest and openness towards the ECOP Programme and UN Ocean Decade framework

Although our respondents’ exposure to the ECOP Programme and UN Ocean Decade is comparatively lower than in other Asian countries, our survey indicates a strong willingness to join the ECOP Malaysia node (68%) and Ocean Decade movement (79%), with 32% and 21% of respondents, respectively, considering participation after receiving more information about each initiative (**Figure 4.11**).

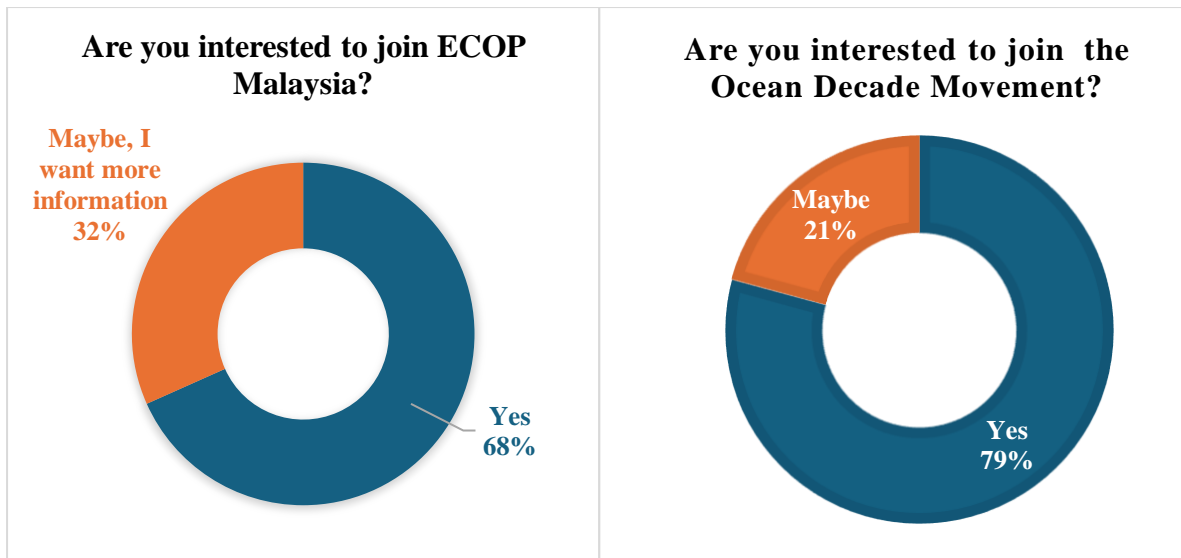


Figure 4.11 Interest of Malaysian respondents to join ECOP Malaysia (left) and the UN Ocean Decade movement (right).

4.2.4 Bringing the UN Ocean Decade Challenges and Outcomes to Malaysia

Our survey further investigates how the respondents' current research and interest align with the ten Challenges and seven Outcomes of the UN Ocean Decade framework. When it comes to the Challenges⁴ they are working on or that matter most to them, the most frequently mentioned ones were Challenges C2: *Protect and restore ecosystems and biodiversity* (75%) and C1: *Understand and beat marine pollution* (71%). These were followed by C9: *Skills, knowledge and technology for all* (49%), C5: *Unlock ocean-based solutions to climate change* & C10: *Change humanity's relationship with the ocean* (both at 48%), C3: *Sustainably feed the global population* (41%), C8: *Create a digital representation of the ocean* (40%), C6: *Increase community resilience to ocean hazards* (38%), C4: *Develop a sustainable and equitable ocean economy* (36%), and C7: *Expand the Global Ocean Observing System* (30%), while only 5% did not know which challenge(s) is(are) the most important to them (**Figure 4.12**).

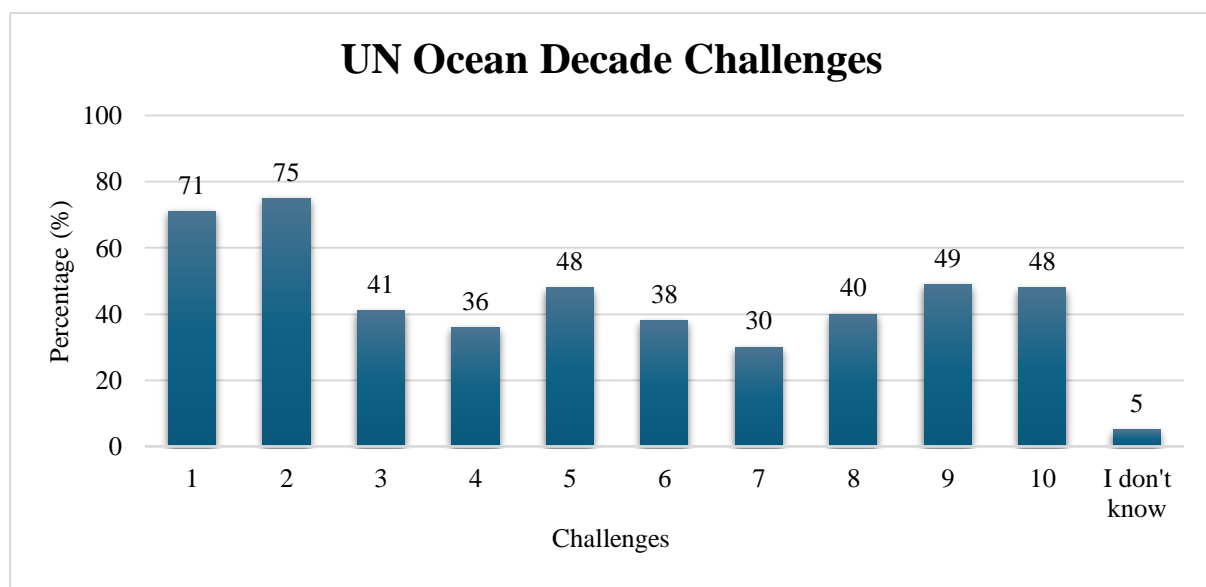


Figure 4.12 Priorities of Malaysian respondents towards the UN Ocean Decade Challenges (multiple selections allowed).

Regarding the UN Ocean Decade Outcomes⁵, we asked a similar question and found that the most significant Outcome for Malaysian respondents was *A healthy and resilient ocean* (83%), followed by *A clean ocean* (70%), *An accessible ocean* (65%), *A productive ocean* (58%), *An inspiring and engaging ocean* (57%), *A safe ocean* (55%), and *A predicted ocean* (51%), while 7% of respondents did not know what to answer (**Figure 4.13**).

⁴ For more information about the Ocean Decade Challenges: <https://oceandecade.org/challenges/>

⁵ Further details about the Ocean Decade Outcomes can be found here: <https://oceandecade.org/vision-mission/>

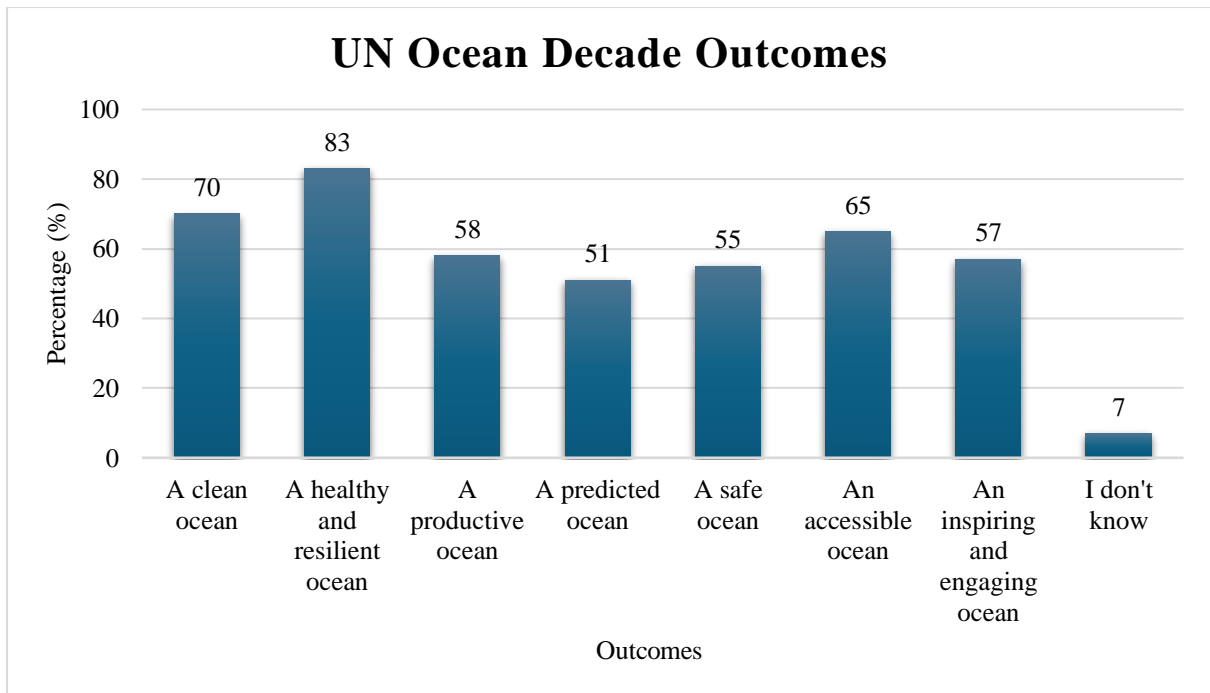


Figure 4.13 *Priorities of Malaysian respondents towards the UN Ocean Decade Outcomes (multiple selections allowed).*

4.3 Future Prospects of the Respondents

4.3.1 Career advancement and continuity

We asked the respondents whether they wished to continue working in an ocean-related field in the future, including students after graduation. A total of 88% of them answered ‘Yes’, with only 11% answering ‘Maybe’ and 1% answering ‘No’ (**Figure 4.14**).

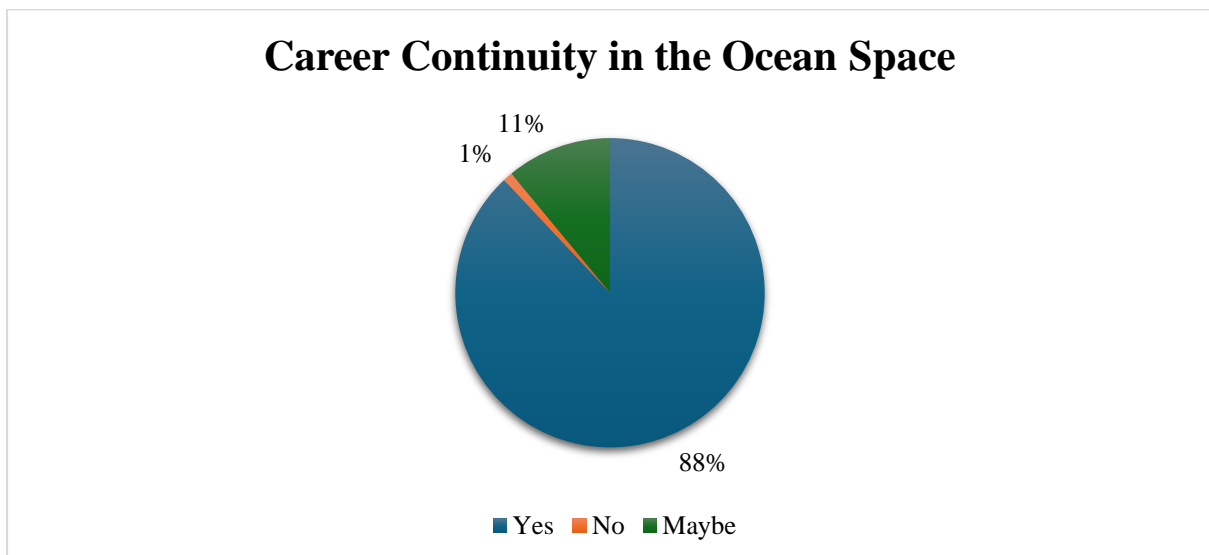


Figure 4.14 Career continuity of Malaysian respondents in the ocean space.

4.3.2 Barrier(s) Malaysian ECOPs face in pursuing an ocean career

While most respondents expressed a desire to continue a future career in the ocean field, they also identified a lack of job opportunities (85%) and low salary prospects (77%) as the two most significant barriers (> 75%) to pursuing such a career, closely followed by a lack of professional and social networks (65%) (**Figure 4.15**). Meanwhile, financial issues and a lack of public awareness/support were minimal constraints (1%) for Malaysian ECOPs. Here, ‘financial issues’ refer to the insufficient financial resources necessary to support any academic endeavour (e.g., no study loans, being a breadwinner).

Additionally, a few insightful open-ended comments from respondents complemented the pre-selected list of options, highlighting the following barriers: ‘government policy that weakly encourages marine scientists to grow and develop’, ‘lack in funding research, projects and initiatives’, ‘lack of awareness and openness towards the importance of oceanography’, ‘lack of guarantee[d] permanent position and work-life balance’, and ‘long separation from family and friends’.

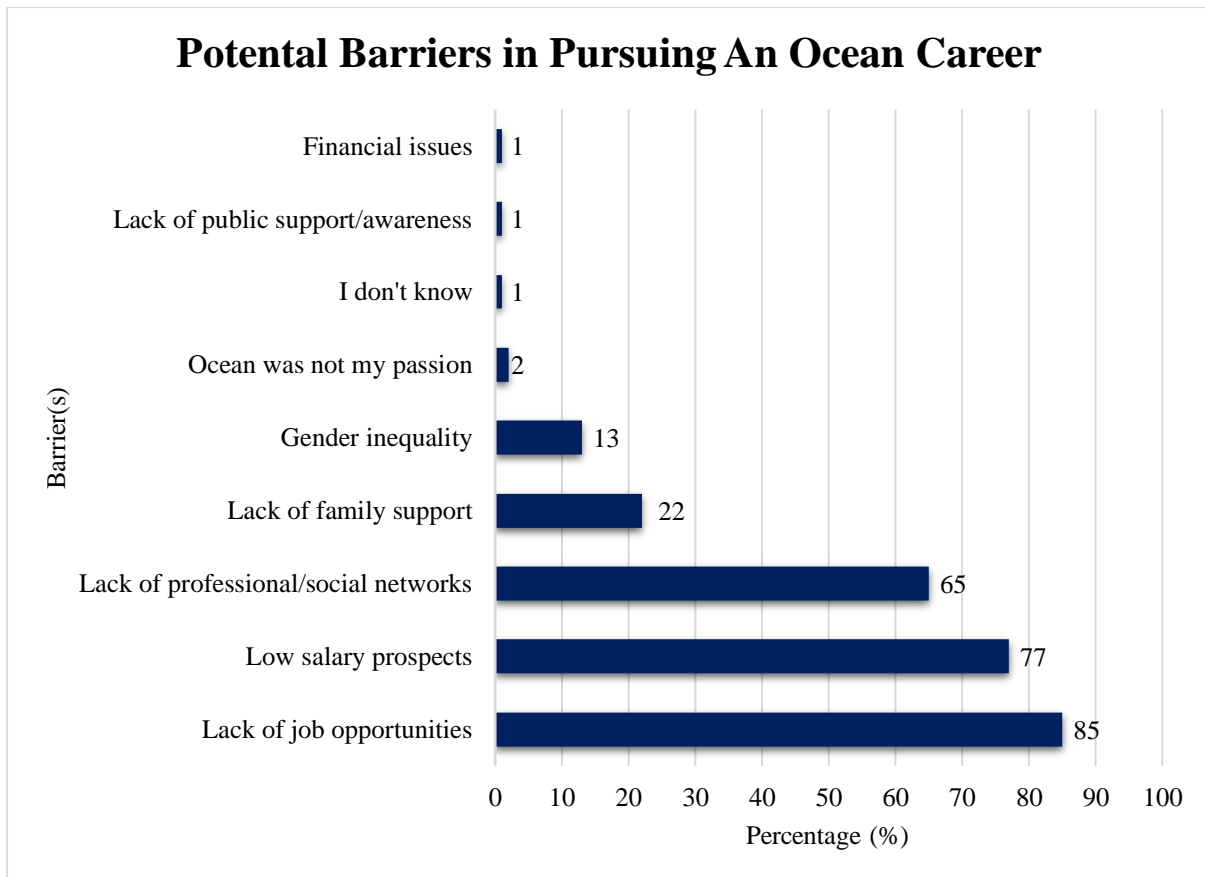


Figure 4.15 Potential barriers in pursuing an ocean career in Malaysia based on a pre-selected list of options (multiple selections allowed).

We further asked the respondents what future improvements they wish to see in Malaysia’s ocean science sector. According to **Figure 4.16**, they strongly emphasized the need to improve ‘Research collaboration opportunities: including exchange programs & internships’ (88%), ‘Funding’ (80%) and ‘Better remuneration/salaries’ (78%). Other listed improvements demonstrated a fairly balanced response rate ranging between 56-66%, including: ‘Laboratory facilities’ (66%) > ‘Greater exposure to inter- and trans-disciplinary research practices’ (65%) > ‘Mentoring opportunities’ & More contacts with policymakers and the private sector’ (both at 64%) > Soft-skill training (56%). Additionally, one of our respondents highlighted the need to improve ‘ocean science data accessibility for scientist[s], government sectors or even [the] public’.

Anticipated Improvements by Malaysian ECOPs

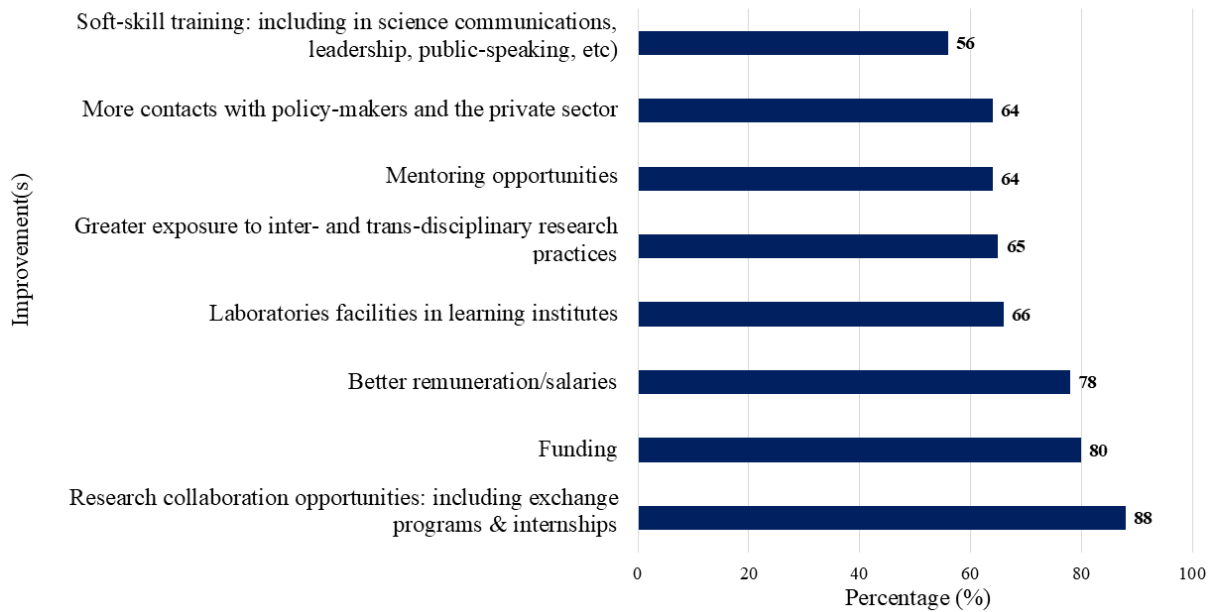


Figure 4.16 Anticipated improvements in Malaysia’s ocean sector based on a pre-selected list of options (multiple selections allowed).

4.3.3 The importance of funding for Malaysian ECOPs

Delving deeper into funding priorities, we assessed the relative importance of five key funding areas for the personal growth and career development of ECOPs, including: (i) ‘Paid internships’, (ii) ‘Scholarships, bursaries, and research grants’, (iii) ‘Travelling expenses and registration fees for conferences, training and workshops’, (iv) ‘International volunteer grants/scholarships’, and (v) ‘Start-up funds for ocean ventures’ (**Figure 4.17**). Overall, Malaysian ECOPs placed greater emphasis on ‘Scholarships, bursaries, and research grants’ (79%), ‘International volunteer grants/scholarships’ (66%), and ‘Start-up funds for ocean ventures’ (62%), based on the percentage of respondents who rated these funding options as ‘highly important’.

Furthermore, we examined the underlying relationships between common barriers (**Figure 4.15**), anticipated improvements (**Figure 4.16**), and funding priorities (**Figure 4.17**) that the survey respondents identified. We found that their responses are logically connected and tend to compensate for each other’s shortcomings, as depicted in **Figure 4.18**.

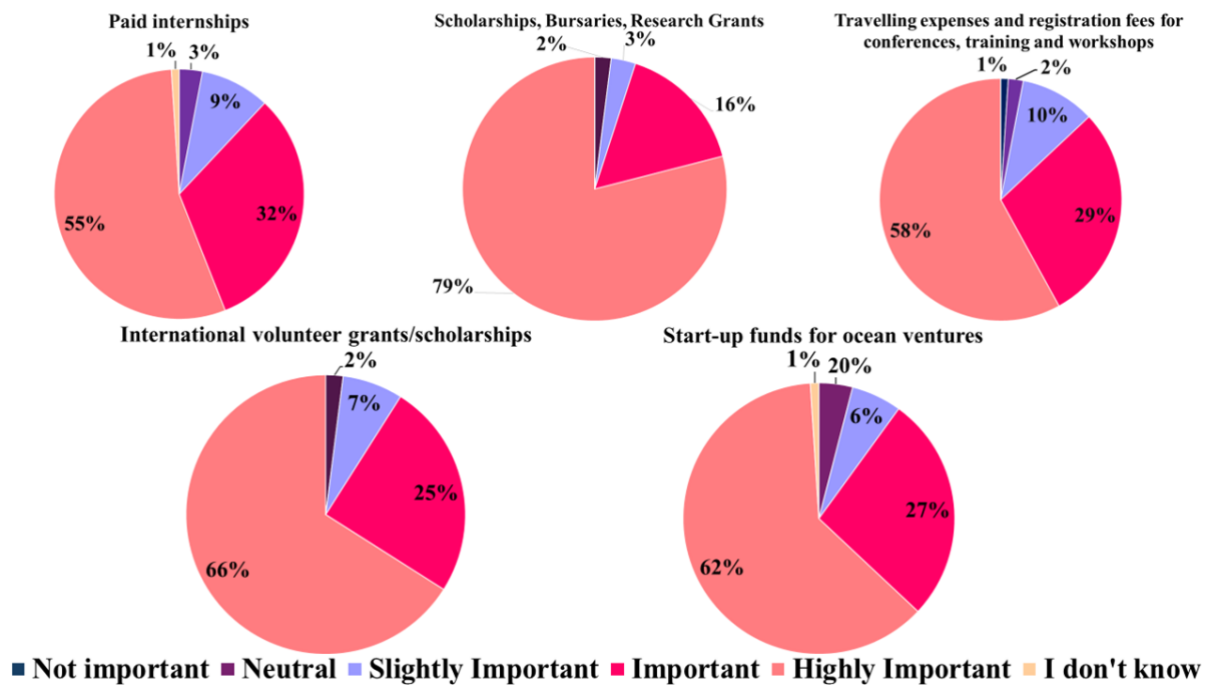


Figure 4.17 Comparison of the importance assigned to five funding priority areas, based on a 6-point Likert scale.

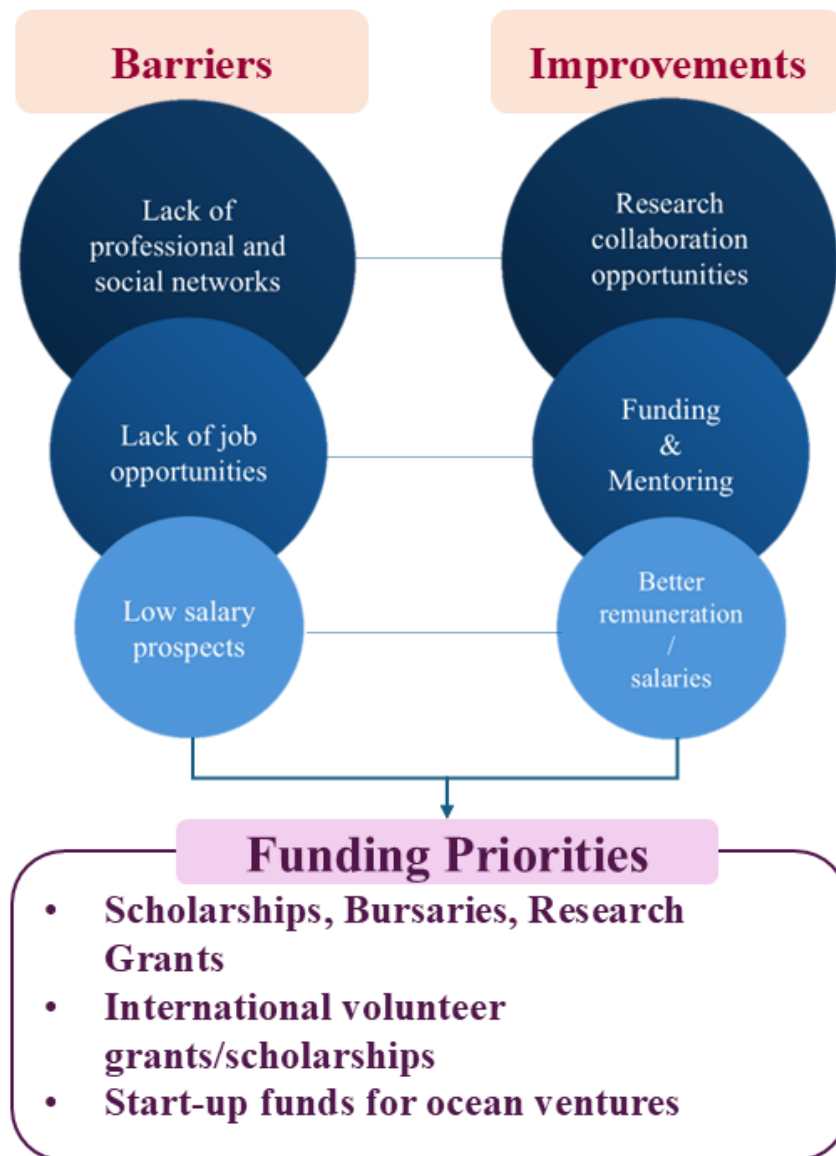


Figure 4.18 Interconnected relationships between most common barriers, anticipated improvements, and funding priorities selected by Malaysian respondents.

5 DISCUSSION

5.1 Personal information of respondents

Our respondents' expertise and areas of interest are highly diverse, with a significant concentration in the academic sector (*Figure 4.4*). Indeed, it's important to note that because our survey was primarily distributed through academic channels, our audience is therefore biased towards this sector. This is also reflected in the educational level of our respondents, with over 85% holding higher tertiary qualifications, including 49% who are either pursuing or have completed an undergraduate degree as their highest educational achievement so far (*Figure 4.3*). Additionally, since most respondents are students with one to six years of experience in the ocean space (*Figure 4.6*), they expressed a strong interest in furthering their studies if the opportunity arises (*Figure 4.7*).

5.2 The ECOP Programme and UN Ocean Decade in Malaysia

In Malaysia, the overall awareness of the ECOP Programme (45%; *Figure 4.9*) and UN Ocean Decade framework (70%; *Figure 4.10*) is relatively good but could be enhanced further. In fact, to the best of our knowledge at the time of writing this report, there have only been a handful of UN Ocean Decade–endorsed Actions in Malaysia⁶. Encouragingly, our respondents are highly motivated, with a majority expressing a willingness to join activities or movements related to the Ocean Decade (*Figure 4.11*). Anecdotal evidence from social media and international conference participation also suggests that significant momentum is building in Malaysia—a momentum we hope this report will help sustain. Compared to their counterparts in Bangladesh, China, India, Japan, and the Republic of Korea, Malaysian ECOPs demonstrated relatively lower awareness and involvement with the UN Ocean Decade (*Table 4.2*). This underscores the need to elevate and strengthen concrete Decade engagement pathways for ECOPs within Malaysia.

Specifically, our respondents are actively working towards or eager to contribute to Ocean Decade Challenges #2: 'Protect and restore ecosystems and biodiversity' (75%) and #1: 'Understand and beat marine pollution' (71%) (*Figure 4.12*), as well as to achieving Ocean

⁶ As per the latest information (July 2024) made publicly available by the Decade Coordination Unit [see: <https://oceanexpert.org/document/29188>], two Decade Projects led by institutions based in Malaysia—namely (1) World Fish Center and (2) Fisheries Research Institute Malaysia—have been endorsed in 2021 and 2023. A few Decade Activities—one-off standalone initiatives—including some led by Malaysian ECOPs, have also been endorsed in recent years, although the exact number is currently unknown.

Decade Outcomes #2: ‘A healthy and resilient ocean’ (83%) and #1: ‘A clean ocean’ (70%) (*Figure 4.13*). Their choices greatly reflect the status of Malaysia as a developing, upper middle-income country with intensifying terrestrial development and human activities, as part of the race towards globalization. This suggests they have a strong awareness and understanding of marine ecosystems and biodiversity degradation in the country, likely due to inadequate enforcement or conservation efforts. Similar results echoed through the ECOP surveys conducted in Bangladesh, India, Japan, Republic of Korea, and China, where Outcome #2: ‘A healthy and resilient ocean’ consistently ranked as either the first or second greatest priority. Regarding Ocean Decade Challenges⁷, Bangladeshi ECOPs also ranked Challenges #1 and #2 as the most important ones (Shahadat & Roman, in prep).

Malaysian ECOPs are aware of what is needed to safeguard the ocean and work towards the Decade’s challenges and outcomes. Thus, ECOP Malaysia must fill in these knowledge gaps by disseminating the framework’s values into scientific research and community work throughout the country. Importantly, they need to involve youth in bridging with the community to promote awareness and participation.

5.3 The future of Malaysian ECOPs in the marine field (barriers, improvements, and funding priorities)

Overall, most survey findings are strongly connected to each other (*Figure 4.18*). Indeed, the greatest improvements our respondents wish to see—more research collaboration opportunities, better funding, and higher salaries (*Figure 4.16*)—directly reflect and may ‘compensate’ the main barriers they identified, including a lack of professional/social networks, low salary prospects, and a scarcity of relevant job opportunities (*Figure 4.15*). Additionally, respondents highlighted other challenges in the ocean sector, such as occasional heavy workload, harsh working conditions on-board ships/vessels with unavoidable long separation time from family—especially in comparison to ordinary nine to five office jobs—gender inequality, lack of family support, and inadequate/insufficient remuneration, which may all further hinder Malaysian ECOPs from continuing their carrier in the marine field.

Other anticipated improvements suggested by survey respondents include greater access to and more laboratory facilities, increased exposure to inter- and trans-disciplinary research

⁷ Since the question on Ocean Decade Challenges was only recently added to the 2024 ECOP Asia surveys, we currently have comparable data only from the questionnaires circulated in Bangladesh and Malaysia.

practices, mentoring opportunities, soft-skill training, and stronger connections with non-academic stakeholders, including policymakers and the private sector (*Figure 4.16*).

When it comes to funding priorities, ‘Scholarships, bursaries, and research grants’, ‘International volunteer grants/scholarships’, and ‘Start-up funds for ocean ventures’ were rated as the three most important (*Figure 4.17*). These funding options can effectively facilitate networking, enhance international connections, and contribute to the professional development of ECOPs. In addition, start-up funds provide an opportunity to operate and sustain a business that could offer more flexible working hours and achieve better work-life balance.

Prior to 2023, Malaysia lacked a centralized system or entity responsible for overseeing ongoing ocean-related research among private sector stakeholders, governmental bodies, NGOs, non-profits, and international organizations. The majority of marine research and conservation initiatives operated as independent efforts, resulting in fragmented and isolated patterns of marine research and associated activities that were not readily visible to the public. This situation ultimately prompted the formation of the [Malaysia Ocean Research Alliance \(MORA\)](#) by the nation’s marine researchers in 2024, with the objective of consolidating and centralizing ocean research across the country while fostering strategic collaborations.

Overall, the outlook for Malaysia appears promising, as a significant number of our respondents expressed a desire to pursue careers in the marine sector and showed keen interest in participating in both the Ocean Decade movement (79%) and future ECOP Malaysia node (68%) (*Figure 4.11*).

6 CONCLUSION

6.1 Summary

In conclusion, we found that Malaysian ECOPs are eager to participate in activities, projects, or programmes that are related to the UN Ocean Decade framework. They also demonstrated a solid sense of responsibility and ownership when it comes to ocean conservation and protection. The enthusiasm and active engagement of ECOPs should be recognized by high-level marine research institutes and personnel in the country to strengthen Malaysia's involvement in the Ocean Decade. Importantly, this survey enabled the ECOP Programme to gain a clearer understanding of the challenges faced by Malaysian ECOPs and, for the first time, examined how the outreach of the UN Ocean Decade and ECOP Programme has progressed in Southeast Asia. The findings from this survey will help establish a future national ECOP node specifically designed to cater to the needs of Malaysian ECOPs, while strategically disseminating information about the UN Ocean Decade and ECOP Programme within the country. By comparing the Malaysian survey results with those from previous national ECOP surveys conducted in Bangladesh, China, India, Japan, and the Republic of Korea, we aim to offer a new perspective on cultural influences, hoping to foster multilateral cooperation and collaboration on ocean sustainability.

6.2 The future of ECOP Malaysia

The initiative to establish an ECOP Malaysia node began in early 2024. We were privileged to welcome both academicians and divemasters to our advisory and coordinating teams, which will be unveiled later in 2024. ECOP Malaysia aims to be both diverse and inclusive, engaging stakeholders from various sectors within the ocean domain. Our vision for this ECOP chapter in Malaysia includes leadership from a combination of scientists and professionals outside academia. Moving forward, we plan to broaden our network by inviting more non-academic stakeholders, such as marine engineers and fishers, to join our ECOP Malaysia team. We aspire for this initiative to mitigate the predominance of academic perspectives within the national node, foster connections between ocean science and society, and generate a variety of innovative ideas and viewpoints for future transformative endeavours.

7 ACKNOWLEDGEMENT

We would like to thank Evgeniia Kostiana, the Global ECOP Programme Coordinator, and Natalie Fox, the ECOP Programme Communications Manager, for their support, feedback, and encouragement throughout the entire process. We would like to further extend our deepest appreciation to Dr Norlaila Binti Mohd Zanuri for providing constructive feedback in reviewing the ECOP Malaysia questionnaire.

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9 APPENDIX


2023 ECOP Malaysia Survey

Note (1): * (*Red asterisk*) indicates a question that respondents are required to answer.

Note (2): the questionnaire was circulated in two languages: English and Bahasa Malaysia.

Both versions are available below.

[ENG Version]


This online survey is brought to you by the Asian node of the **Early Career Ocean Professionals (ECOP) Programme**  (<https://www.ecopdecade.org/asia/>), which was endorsed by the UN Decade of Ocean Science for Sustainable Development in 2021. The ECOP Programme is established to empower ECOPs, who self-identify as being early in their career in any field and sector related to the Ocean (including students).

This survey aims to better understand ECOPs in Malaysia as we set up a national chapter in our country. Specifically, we want to hear from ECOPs themselves about their challenges and struggles working in the ocean space, and help nurture a sense of belonging for the new generation of ocean leaders! The ECOP Network in Malaysia also aims to connect higher level decision makers, the scientific community (including ECOPs) and stakeholders throughout the country, to help initiate future activities and events working towards ocean sustainability and the framework of the [UN Ocean Decade \(2021-2030\)](#).

Thank you in advance for participating in this survey, which **would take between 5-10 minutes** to complete. Rest assured that responses in this survey will be kept confidential. We will make sure to report results, insights and impacts back to you! You can already give a look at some of the previous ECOP reports our global team published [here](#).

For any inquiries on the survey and our ECOP Asia node, please contact us: asia@ecopdecade.org.

[Versi BM]

Tinjauan dalam talian ini disediakan oleh **Program Early Career Ocean Professionals (ECOP)** , yang disokong oleh Persatuan Bangsa-Bangsa Bersatu (PBB) 'Decade of Ocean Science for Sustainable Development' pada tahun 2021. Matlamat Program ECOP adalah untuk memperkasakan ECOP, iaitu individu yang menganggap diri mereka baru mulai belajar/bekerja/meneroka bidang sains samudera.

Tujuan tinjauan ini adalah untuk lebih memahami cabaran yang dihadapi oleh ECOP di Malaysia dan menyediakan sebuah platform (ECOP nod Malaysia) yang boleh mewakili dan memupuk mereka dalam menerajui sektor sains samudera di dalam negara. ECOP di Malaysia juga akan menjalin hubungan dan mengukuhkan kerjasama dengan agensi penguatkuasaan undang-undang dan pakar-pakar dalam bidang sains samudera untuk merancang dan melaksanakan aktiviti/program berasaskan konsep kelestarian laut dan berpandukan [UN Ocean Decade \(2021-2030\)](#).

Kami mengucapkan terima kasih terlebih dahulu atas kesudian anda untuk mengambil tinjauan ini, yang akan mengambil masa sebanyak **5-10 minit**. Kami akan melaporkan hasil dan pandangan daripada penyiasatan tinjauan ini dan anda boleh membaca laporan lepas ECOP di [sini](#).

Jika anda mempunyai sebarang soalan tentang tinjauan ini atau ECOP nod Asia, sila hubungi kami: asia@ecopdecade.org.

[QUESTIONS]

What is your preferred language? Sila pilih bahasa utama anda. *

- English
- Bahasa Malaysia

English Version

Section I. Basic Information

1. What is your gender? *

- Female
- Male
- Prefer not to say

2. What is your nationality? *

- Malaysian
- Other:

3. What is your country of residence? (Please state if it's outside Malaysia) *

- Malaysia
- Other:

4. If you currently live in Malaysia, which state are you based in? *

-Choose from drop-down list-

5. What is your highest educational level completed? *

- High school certificates (SPM/STPM)
- Undergraduate Degree
- Master's Degree
- Doctoral Degree
- Prefer not to say
- Other:

6. Are you studying or working at the moment? *

- Studying (including PhD & internship)
- Working

7. What is your studying, internship or working affiliation? (please list them all if you have more than one) *

-Short answer-

8. Are you interested to further your studies to a higher level related to Ocean Science? *

- Yes
- No
- Maybe
- Does not apply to me

9. Select your current field(s) or sector(s) of involvement in the ocean space [you may choose more than 1]: *

- Academia
- Consulting
- Government/Policy
- Engineering
- Foundation/Philanthropic Organization
- Innovation/Entrepreneurship/Start-up
- Law
- Logistics
- Non-governmental/Non-profit Organizations/Initiative/Projects
- Private sector
- Research and Development (R&D)
- UN Agency/International & Intergovernmental Organizations
- Other:

10. What are your areas of expertise or interest when it comes to the ocean? (e.g., oceanography, Blue Economy, science-policy interface, climate science, data, education, traditional knowledge, deep sea, etc.). *

-Short answer-

11. How many years have you been involved (e.g., studying/working/volunteering) in an ocean-related field or sector? *

- Less than one year
- 1~3 years
- 4~6 years
- 7~9 years
- More than 10 years

Section II. ECOPs and the UN Ocean Decade in Malaysia

12. Do you identify yourself as an ECOP (Early Career Ocean Professional)?

For the purpose of the ECOP Programme, an ECOP is a person who self-identifies as being early in their career, within 10 years or less of professional experience in any field related to the ocean. This definition includes post-secondary students and any volunteer roles, so not only employed/paid positions. The term ‘professional’ is used in order to be inclusive of professionals from various sectors of society. *

- Yes
- No
- Maybe

13. Have you heard of the ECOP Programme before? *

- Yes
- No
- Maybe

14. What about the UN Decade of Ocean Science for Sustainable Development (2021-2030)? (or ‘Ocean Decade’ for short) *

- I know a lot about it and participated in it
- I read about it but never participated in related activities or programs
- I have read about it but never tried to learn more about it
- I have never read or heard of it

15. If you have already participated in the Ocean Decade, could you tell us more about it? [Optional]

-Short answer-

16. Would you be interested in joining the Ocean Decade movement and participating in future activities? *

- Yes
- No
- Maybe

17. In which of the seven UN Ocean Decade Outcomes have you been involved or wish to be? [Select all that apply] *

- #1: A clean ocean where sources of pollution are identified and reduced or removed.
- #2: A healthy and resilient ocean where marine ecosystems are understood, protected, restored and managed.
- #3: A productive ocean supporting sustainable food supply and a sustainable ocean economy.
- #4: A predicted ocean where society understands and can respond to changing ocean conditions.
- #5: A safe ocean where life and livelihoods and protected from ocean-related hazards.
- #6: An accessible ocean with open and equitable access to data, information and technology and innovation.

- #7: An inspiring and engaging ocean where society understands and values the ocean in relation to human well-being and sustainable development.
- I don't know

18. What about UN Ocean Decade Challenges? Among the 10 Challenges listed below, which one(s) are you focusing on and matter to you? [Select all that apply] *

- Challenge 1: Understand and beat marine pollution
- Challenge 2: Protect and restore ecosystems and biodiversity
- Challenge 3: Sustainably feed the global population
- Challenge 4: Develop a sustainable and equitable ocean economy
- Challenge 5: Unlock ocean-based solutions to climate change
- Challenge 6: Increase community resilience to ocean hazards
- Challenge 7: Expand the Global Ocean Observing System
- Challenge 8: Create a digital representation of the ocean
- Challenge 9: Skills, knowledge and technology for all
- Challenge 10: Change humanity's relationship with the ocean
- I don't know

III. ECOP Needs, Challenges and Opportunities in Malaysia

19. Would you like to keep working in an ocean-related field in the future? (after graduation for students) *

- Yes
- No
- Maybe

20. What are the most important barrier(s) that Malaysian ECOPs face in pursuing an ocean career? (whether in ocean science, policy, industry, etc.) [you may choose more than 1] *

- Lack of family support
- Lack of job opportunities
- Lack of professional/social networks
- Low salary prospects
- Gender inequality
- The ocean was not my passion
- I don't know
- Other:

21. What improvement(s) would you like to see in the field of Ocean Science in Malaysia? [you may choose more than 1] *

- Funding
- Mentoring opportunities
- Laboratory facilities in learning institutes
- Research collaboration opportunities: including exchange programs & internships

- Greater exposure to inter- and trans-disciplinary research practices
- Better remuneration/salaries
- More contacts with policy-makers and the private sector
- Soft-skill training: including in science communications, leadership, public-speaking, etc)
- Other:

22. How important do you think are the following funding options for ECOPs in Malaysia? *

Note: The rating is a six-point Likert scale: ‘*Not Important, Neutral, Slightly Important, Important, Highly important, I don't know*’

- Scholarships, Bursaries, Research Grants
- Paid internships
- Travelling expenses and registration fees for conferences, training and workshops
- International volunteer grants/scholarships
- Start-up funds for ocean ventures

23. Suggest any aspect that requires funding other than the above mentioned [Optional]

-Short answer-

24. Have we missed anything regarding ECOP needs and challenges in Malaysia? What changes would make you consider continuing a career in Ocean Science? [Optional]

-Short answer-

IV. ECOP Malaysia: how to join and future activities

25. Would you be interested in joining us and taking part in the development of our future national ECOP node for Malaysia? *

- Yes
- No
- Maybe, I want more information

26. What would be your preferred channel to connect with fellow ECOPs in Malaysia and/or receiving updates from the ECOP Programme? [you may choose more than 1] *

- Facebook (Groups/Pages)
- WhatsApp
- Instagram
- X (formerly Twitter)
- Email
- LinkedIn
- Newsletter
- I'm not interested in joining
- Other:

27. What activities or projects should ECOP Malaysia focus on in the future? What would interest you the most? [you may choose more than 1] *

- Collaborations with other national & international ocean institutes
- Mentor/mentee program
- Webinar series
- ECOP/Ocean Decade side-events, sessions or workshops during scientific conferences
- Community engagement/services/volunteering
- Online meetings and networking with national & international ECOP groups
- Exchange programs and internships
- Opportunities for academic and career developments
- Field work support and logistics
- Other:

28. Finally, please feel free to share with us any other thoughts, comments or questions you may have. [Optional]

Versi BM

Bahagian I. Maklumat Peribadi

1. Sila pilih jantina anda. *

- Perempuan
- Lelaki
- Tidak ingin memberitahu

2. Sila pilih kewarganegaraan anda (Sila nyatakan jika bukan Malaysian). *

- Malaysian
- Lain-lain:

3. Sila pilih negara bermastautin anda (Sila nyatakan jika tidak berada di Malaysia).*

- Malaysia
- Lain-lain:

4. Sila pilih negeri bermastautin anda di Malaysia. *

-Choose from drop-down list-

5. Sila pilih tahap pendidikan tertinggi anda. *

- Sijil Sekolah Menengah (SPM/STPM)
- Ijazah Sarjana Muda
- Ijazah Sarjana
- Doktor Falsafah
- Tidak ingin memberitahu
- Lain-lain

6. Sila pilih status pekerjaan anda. *

- Belajar (termasuk Doktor Falsafah dan latihan industri)
- Bekerja

7. Sila nyatakan nama institusi pembelajaran atau syarikat (latihan industri/berkerja) anda. (Nyatakan semua jika lebih daripada satu) *

-Short answer-

8. Adakah anda berminat untuk menyambung pengajian peringkat seterusnya dalam bidang sains samudera? *

- Ya
- Tidak
- Mungkin
- Tidak berkenaan dengan saya

9. Sila pilih sektor penglibatan anda dalam bidang sains samudera [pilihan boleh lebih daripada satu]: *

- Akademik
- Perundingan
- Kejuruteraan
- Yayasan/Pertubuhan Dermawan
- Inovasi/Keusahawanan/Start-up
- Perundangan
- Logistik
- Badan bukan kerajaan/bukan untung/inisiatif/projek
- Sektor swasta
- Penyelidikan dan Pembangunan (P&P)
- Agensi PBB/Pertubuhan Antarabangsa dan Antara Kerajaan
- Lain-lain:

10. Sila nyatakan kepakaran/minat anda dalam bidang sains samudera. (Contohnya oseanografi, ekonomi biru, dasar sains laut, sains iklim, data, pendidikan, pengetahuan tradisional, deep-sea) *

-Short answer-

11. Sila pilih jumlah tahun penglibatan anda dalam bidang/sektor sains samudera (termasuk belajar/bekerja/aktiviti sukarela). *

- Kurang daripada satu tahun
- 1~3 tahun
- 4~6 tahun
- 7~9 tahun
- Lebih daripada 10 tahun

Bahagian II. ECOP dan PBB Ocean Decade di dalam Malaysia

12. Adakah anda menganggap diri seorang ECOP (Early Career Ocean Professional)?

Dalam konteks program ini, ECOP ialah individu yang menganggap diri mempunyai pengalaman profesional kurang daripada 10 tahun dalam mana-mana bidang yang berkaitan dengan sains samudera. Ini juga termasuk pelajar lepasan sekolah menengah dan sukarelawan yang (pernah) terlibat dalam aktiviti berkaitan dengan sains samudera. Perkataan 'Professional' pula digunakan untuk memasukkan profesional untuk merangkumi pakar bidang masing-masing dari semua lapisan masyarakat. *

- Ya
- Tidak
- Mungkin

13. Pernahkan anda dengar tentang Program ECOP? *

- Ya
- Tidak
- Mungkin

14. Pernahkan anda dengar tentang UN Decade of Ocean Science for Sustainable Development (2021-2030)? (atau secara ringkas 'Ocean Decade') *

- Saya sangat memahami dan pernah melibatkan diri
- Saya pernah membaca tetapi tidak pernah melibatkan diri
- Saya pernah membaca tetapi tidak pernah cuba untuk lebih memahami
- Saya tidak pernah membaca ataupun mendengar

15. Sila kongsi pengalaman anda jika pernah melibatkan diri dalam aktiviti/program Ocean Decade [Soalan tidak wajib]

-Short answer-

16. Adakah anda berminat untuk menyertai dalam sebarang program/aktiviti yang berkaitan dengan Ocean Decade pada masa depan? *

- Ya
- Tidak
- Mungkin

17. Sila pilih hasil-hasil UN Ocean Decade yang anda pernah/hendak terlibat? [Sila pilih mana-mana yang berkaitan] *

- #1: Laut yang bersih di mana sumber pencemaran dikenal pasti dan dikurangkan atau dibuang.
- #2: Laut yang sihat dan berdaya tahan di mana ekosistem marin difahami, dilindungi, dipulihkan dan diurus.
- #3: Laut produktif yang menyokong sumber makanan dan ekonomi marin yang mampan.
- #4: Laut yang boleh diramalkan, di mana masyarakat boleh memahami dan bertindak balas terhadap perubahan keadaan laut.
- #5: Laut yang selamat di mana kehidupan dan mata pencarian serta dilindungi daripada bahaya.
- #6: Laut yang mudah diakses dengan terbuka dan saksama dalam data, maklumat dan teknologi serta inovasi.
- #7: Laut yang boleh memberi inspirasi dan menarik minat masyarakat untuk memahami dan menghargai nilainya yang berkaitan dengan kesejahteraan manusia dan kelestarian.
- Saya tidak pasti.

18. Antara 10 cabaran ([UN Ocean Decade Challenges](#)) yang tersenarai di bawah, yang manakah fokus anda dan berasa penting dalam pendapat anda? [Sila pilih mana-mana yang berkaitan] *

- Cabaran 1: Memahami dan mengatasi pencemaran laut
- Cabaran 2: Melindungi dan memulihkan ekosistem dan biodiversiti
- Cabaran 3: Kemampanan sumber makan untuk seluruh populasi dunia
- Cabaran 4: Membangunkan kemampanan dan kesaksamaan ekonomi lautan
- Cabaran 5: Mencari cara penyelesaian berasaskan laut untuk perubahan iklim
- Cabaran 6: Meningkatkan daya ketahanan masyarakat terhadap bahaya laut
- Cabaran 7: Memperkembangkan 'Global Ocean Observing System'
- Cabaran 8: Mewujudkan wakil digital tentang kelautan
- Cabaran 9: Kemahiran, pengetahuan dan teknologi untuk semua
- Cabaran 10: Mengubahkan hubungan manusia dengan laut
- Saya tidak tahu.

Bahagian III. Keperluan, cabaran dan peluang ECOP di Malaysia

19. Adakah anda ingin terus bekerja dalam bidang sains samudera pascamasa hadapan? (termasuk juga pelajar tamat pengajian) *

- Ya
- Tidak
- Mungkin

20. Sila tandakan halangan ketara yang dihadapi oleh ECOP di dalam Malaysia untuk meneruskan kerjaya mereka dalam bidang maritim? (sama ada sains samudera, dasar, industri, dll.) [pilihan boleh lebih daripada satu] *

- Kekurangan sokongan keluarga
- Kekurangan peluang pekerjaan
- Kekurangan hubungan profesional/sosial
- Prospek gaji rendah
- Ketidaksamaan jantina
- Saya tidak berminat dalam bidang sains samudera
- Saya tidak pasti
- Lain-lain:

21. Sila tandakan aspek penambahbaikan yang anda ingin dalam bidang sains samudera di Malaysia? [pilihan boleh lebih daripada satu] *

- Pembiayaan
- Peluang Bimbingan
- Infrastruktur makmal di institusi pembelajaran
- Peluang kerjasama penyelidikan: termasuk program pertukaran & latihan industri
- Peningkatan pendedahan kepada amalan penyelidikan antara-/trans-disiplin
- Peningkatan ganjaran/gaji

- Merapatkan hubungan dengan pihak penguatkuasaan undang-undang dan sektor swasta
- Latihan kemahiran insaniah: termasuk komunikasi sains, kepimpinan, pidato dsb.
- Lain-lain:

22. Sila tandakan pendapat anda sejauh manakah pentingnya pembiayaan terhadap aspek-aspek berikut untuk ECOP di Malaysia? *

Note: The six-point Likert scale was translated accordingly into the national language: ‘*Tidak penting, Neutral, Agak penting, Penting, Sangat penting, Saya tidak tahu*’.

- Basiswa, Dermasiswa, Geran Penyelidikan
- Latihan industri dibayar
- Perbelanjaan perjalanan dan yuran pendaftaran untuk persidangan, latihan dan bengkel
- Geran/basiswa sukarelawan antarabangsa
- Dana untuk aktiviti/program baru sains samudera

23. Sila nyatakan aspek-aspek lain yang memerlukan pembiayaan selain daripada senarai di atas [Soalan tidak wajib]

-Short answer-

24. Apa penambahbaikan yang perlu dilakukan untuk meningkatkan keyakinan dan sumbangan anda terhadap bidang sains samudera? [Soalan tidak wajib]

-Short answer-

Bahagian IV. ECOP Malaysia: Cara-cara penglibatan untuk aktiviti masa depan

25. Adakah anda berminat untuk menyertai dan melibatkan diri dalam pembangunan nod ECOP Malaysia pada masa akan datang? *

- Ya
- Tidak
- Mungkin, saya memerlukan maklumat lanjut

26. Sila tandakan pilihan anda untuk berhubungan dengan ahli ECOP Malaysia yang lain dan/atau menerima maklumat terkini daripada Program ECOP. [pilihan boleh daripada satu] *

- Facebook (Groups/Pages)
- WhatsApp
- Instagram
- X (sebelumnya Twitter)
- Emel
- LinkedIn
- Newsletter
- Saya tidak berminat
- Lain-lain:

27. Sila tandakan jenis aktiviti atau projek yang memerlukan penekanan ECOP Malaysia dalam masa depan dan menggalakkan penglibatan anda? [pilih mana-mana yang berkaitan] *

- Peluang kerjasama dengan institusi penyelidikan dalam dan luar negara
- Program mentor-mentee
- Webinar series
- ECOP/Dekad Lautan acara sampingan, sesi atau bengkel semasa persidangan saintifik
- Penglibatan komuniti/perkhidmatan/sukarelawan
- Mesyuarat dalam talian dan rangkaian dengan kumpulan ECOP kebangsaan & antarabangsa
- Program pertukaran dan latihan industri
- Peluang untuk melanjutkan pelajaran atau membangunkan kerjaya
- Peluang kerja lapangan (termasuk perbelanjaan perjalanan)
- Lain-lain:

28. Sila berikan pendapat/komen atau soalan anda kepada kami [Soalan tidak wajib]

Sila berikan maklumat hubungan (nama dan emel) anda jika ingin menyertai kami dalam membangunkan ECOP nod Malaysia 🙏

-Short answer-

[ENDING PAGE]

If you would like to remain in touch and help contribute to the development of ECOP Malaysia, please leave your contact details (name and email) below 🙏

Thank you so much for participating in this survey, your voice is invaluable to us! Terima kasih atas kesudian anda untuk menjawab tinjauan ini! 😊

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