

Untangled: Regional workshop on ghost gear in the East Asian Seas

1-3 March 2023, United Nations Conference Centre, Bangkok, Thailand and online

SUMMARY REPORT



Executive summary:

The Untangled: Regional Ghost Gear Workshop took place in Bangkok, Thailand on 1-2 March 2023. The workshop was co-organized by COBSEA and the Environmental Justice Foundation (EJF) with support from the Government of Canada through the Ghost Gear Fund. The workshop brought together experts from governments, civil society organizations, development partners, and businesses to discuss challenges and opportunities to manage abandoned, lost, and discarded fishing gear (ALDFG) in the East Asian Seas region.

The Regional Ghost Gear Workshop was attended by over 100 participants from eight countries in the East Asian Seas, both virtually and in person at the United Nations Conference Center in Bangkok, Thailand. Over 20 guest speakers covered a range of issues from ALDFG retrieval, identification and tracking, monitoring of fishing activities and gear loss, to waste management innovation and gear marking. Participants engaged with experts and government officials on addressing challenges and gaps in ALDFG, identifying opportunities, and reviewing the use of regional tools such as the East Asian Seas Regional Node of the Global Partnership on Plastic Pollution and Marine Litter (GPML).

The workshop concluded with a field trip on 3 March to showcase successful fishing gear waste management in the Klong Kor Tor coastal community (one of EJF's [Net Free Seas](#) participating communities), to understand community waste management challenges in the Si Long coastal community, and to visit the Teampas Chemical Co. Ltd recycling company that manages ghost gear waste.

Workshop recommendations for ALDFG management in the East Asian Seas:

Prevention (Reporting and monitoring system of ALDFG):

- Governments to make ALDFG management as high priority and develop a framework of best practices.
- Governments to prioritize and promote fair and sustainable fisheries management.
- There is not one designated agency responsible for ALDFG management, it is recommended this is established to ensure greater coordination and effectiveness.

Awareness raising and retrieval operations:

- Explore alternative approaches to effectively communicate the ALDFG topic, including shorts on social media platforms.
- Establishing standardized retrieval protocols that are safe for both divers and the marine ecosystems.

ALDFG disposal facilities, logistical and cleaning complications:

- Integrated policies are needed related to ocean governance, land-based waste management, and sea-based waste management. Including Establishment of national committees to address ALDFG.

Country engagement:

- Effective community engagement, particularly with fishing communities, including fair incentives
- Localized and effective best practices will need to be developed by relevant authorities to suit local needs.

Data collection and knowledge management:

- Accurate and robust data is critical to develop suitable policies, regulations, and solutions, and for engaging stakeholders.
- Effective knowledge management and networking mechanisms are needed to enhance information sharing and understanding of ALDFG management issues.
- Existing platforms such as the East Asian Seas Regional Node and COBSEA's Toolbox can be leveraged to address this gap.

Technical support and funding:

- Resources are needed to scope and develop technologies and designs to mitigate the negative impacts associated with ALDFG.
- ALDFG is transboundary in nature, so it is important to promote international cooperation.
- Relevant regional bodies, such as COBSEA, should explore opportunities to support countries in addressing this challenge.

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- Inclusion of fishing net manufacturers in discussions related to ALDFG.

Highlighted opportunities and next steps for ALDFG best practices in the East Asian Seas:

- COBSEA and EJF, commit to developing a comprehensive toolkit on ghost gear that will consolidate existing knowledge and tools and generate new knowledge, where needed.
- A mailing list and contact list of workshop participants will be created to support networking beyond the workshop.
- The workshop has served as a valuable platform and partnerships established will continue to grow and thrive in the future.
- COBSEA and EJF will scope follow-up funding opportunities.



Group photo of workshop participants

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Overview of the workshop:

The workshop was co-organized by the Coordinating Body on the Seas of East Asia (COBSEA) and the Environmental Justice Foundation (EJF) as a hybrid meeting in Bangkok, Thailand, with support from the Government of Canada.

This workshop aimed to share challenges and showcase existing measures for addressing marine litter from ALDFG or 'ghost gear' in the East Asian Seas region. Participants shared best practice measures for prevention, recovery, and management of ghost gear for replication, discussed relevant national and international efforts and frameworks including on gear marking, and identified national and region-specific challenges, opportunities, and priority needs.

The workshop increased understanding and awareness of ALDFG issues and created a multi-stakeholder network to exchange ideas, inspire change and inform the development of effective national plans and interventions. The workshop identified priority actions for investment and capacity building and recommendations for the use of regional mechanisms for harmonization and coordination. The two-day workshop was followed by a field trip to visit artisanal fishing communities and a recycling business managing ghost gear. In preparation for the workshop, a survey was conducted among participants to identify key challenges, needs, good practices and issues to inform discussions. Results of the survey were presented and addressed during the workshop.

In total there were 74 on-site participants from eight East Asian Seas countries who represented international organizations, the civil society, fisheries and environmental government agencies, the private sector and volunteers providing logistical support during the event. An additional 34 participants joined online. The list of participants and facilitators is included in Appendix A.

Workshop objectives:

1. To understand challenges, barriers, and gaps on prevention, recovery, and management of ghost gear in the East Asian Seas region.
2. To exchange good practices, recommendations, and practical solutions to foster impactful action at national level, including input to a toolbox on ghost gear.
3. To identify needs and opportunities to effectively address and monitor ghost gear at regional level, including through harmonized gear marking.
4. To strengthen regional collaboration and networking of partners and stakeholder

Pre-workshop survey analysis:

The aim of the pre-workshop questionnaire was to assist understanding of the current practices, procedures, policies, and frameworks in East Asian Seas countries to prevent, recover and manage ALDFG. The combined responses were analysed and discussed at the first day of the workshop to inform discussions and recommendations on the way forward at national, regional, and international levels. A copy of the questionnaire is included in Appendix B.

34 participants took part in the survey, responding to 12 questions on ALDFG challenges, priority areas, implementation, and recycling.

Top priority areas in communities and countries of participants were raising awareness on ALDFG, building capacity for retrieval/collection/management, recycling/upcycling ALDFG, and designing/enforcing ALDFG related regulations/policies. The main challenges faced in participants' communities and countries were a lack of awareness/interest, lack of funding, no tracking system/gear marking, no incentives to collect/repair/recycle, and no infrastructure to collect/recycle.

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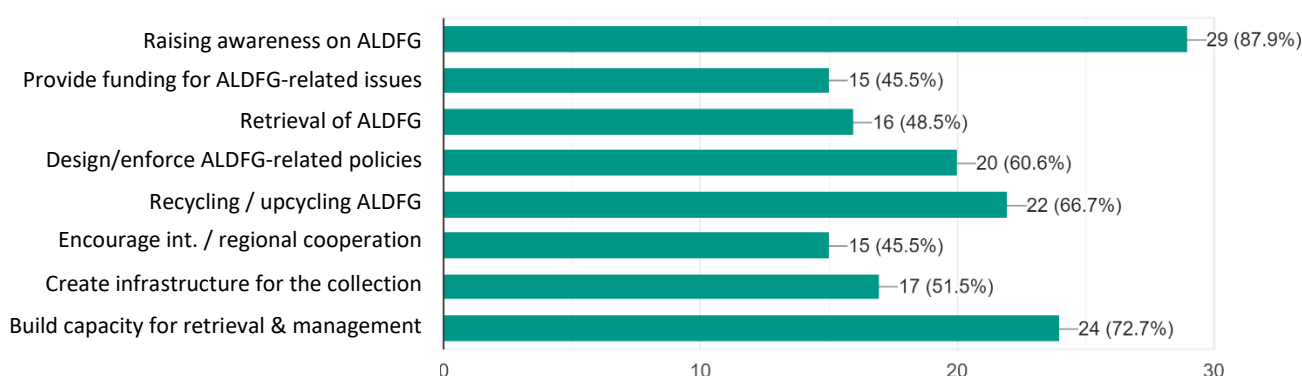


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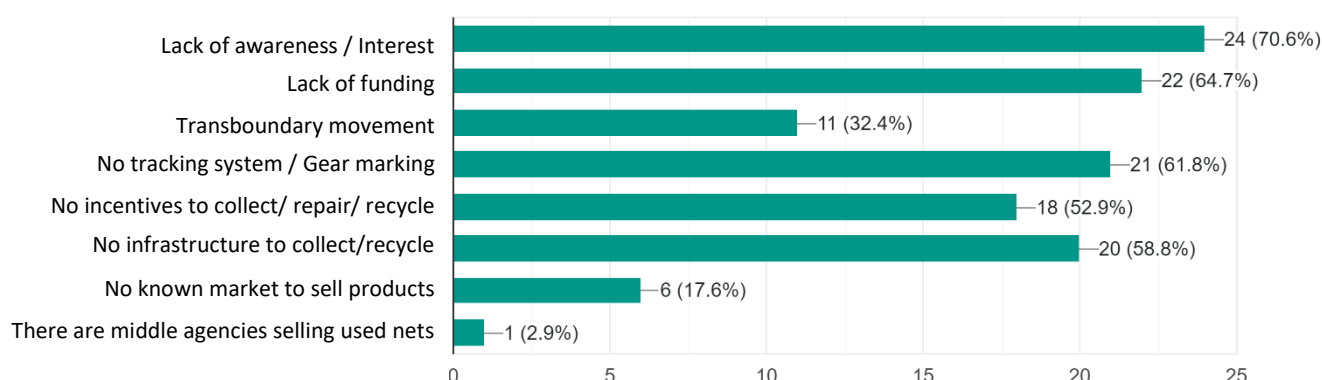
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PRIORITY AREAS FOR ACTION REGARDING ALDFG

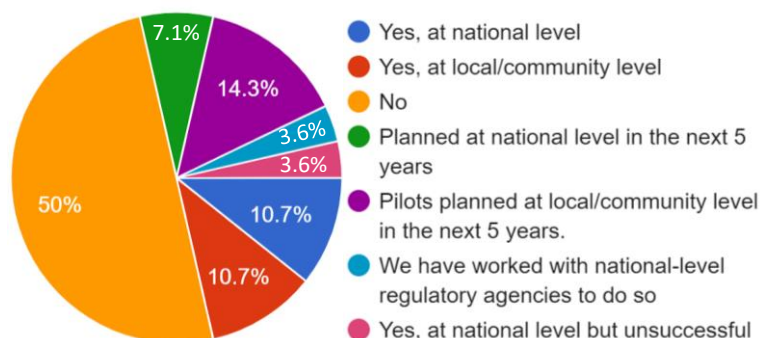


MAIN CHALLENGES IN RELATION TO ALDFG

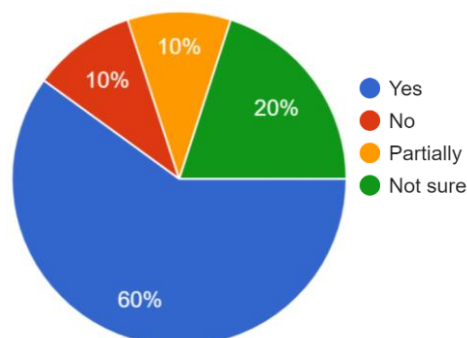


Top topics for discussion during the workshop were policy tools and mechanisms, recycling systems, knowledge sharing, and addressing the problems and solutions of ALDFG. Half the participants' organizations did not attend the FAO Regional Workshop on Best Practices to Prevent and Reduce ALDFG in 2019. 50% have not implemented gear marking systems, 14.3% have planned local/community level, 10.7% have implemented at a national level and 10.7% have implemented at a local/community level. Of those who implemented gear marking systems, 60% responded it was successful.

IMPLEMENTATION OF GEAR MARKING SYSTEMS



WAS IT SUCCESSFUL?



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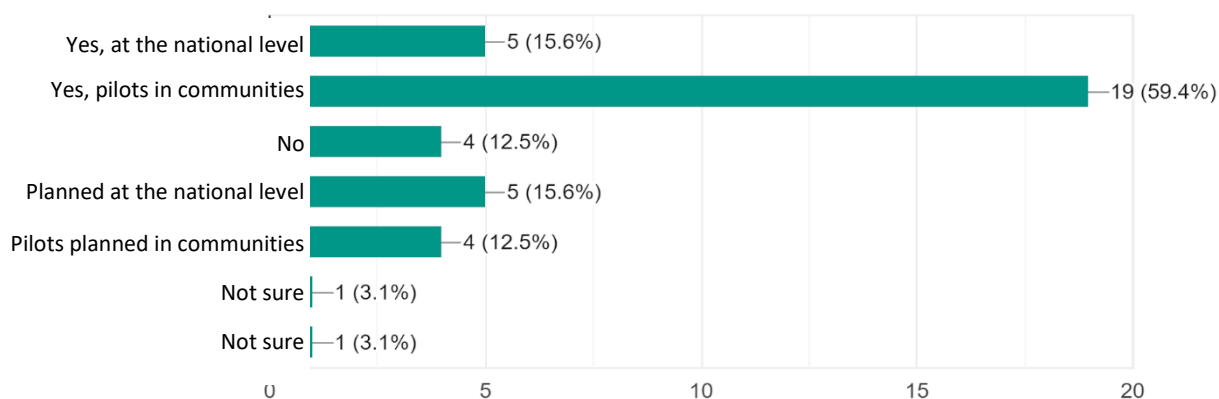
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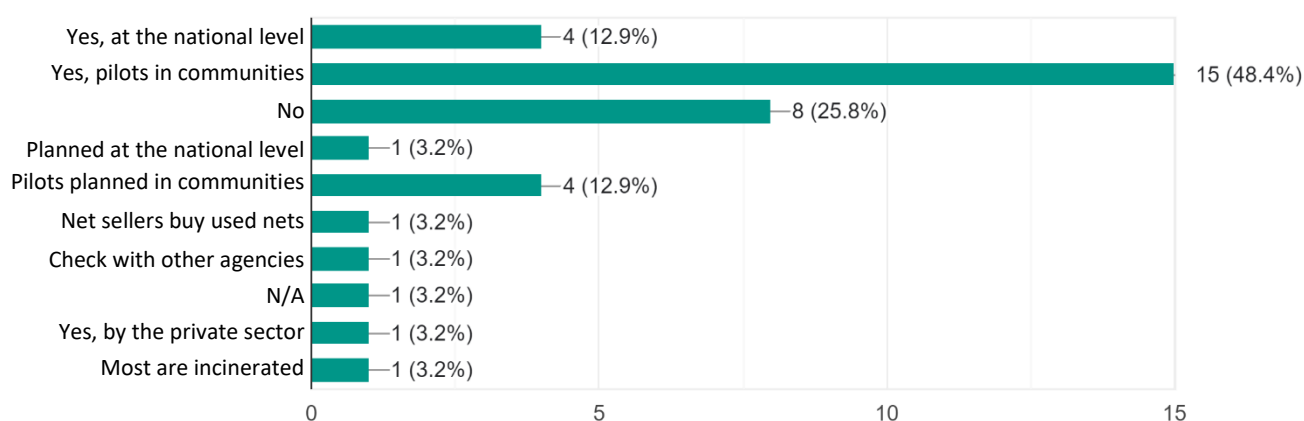
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In terms of implementing ALDFG collection, 59.4% have pilots at local/community level, 15.6% at the national level, and 15.6% planned at national level. 50% of participants have not implemented national incentive mechanisms to manage the retrieval, reuse, and recycling of ALDFG, 31.3% have implemented a pilot at a local/community level, and 9.4% have pilots planned for local/community level. Retrieved/collected fishing gear recycled; 48.4% said yes at the local/community level, 12.9% said at the national level, and 12.9% said pilots are planned for the local community level.

HAVE YOU IMPLEMENTED ALDFG COLLECTION?



ARE RETRIEVED FISHING NETS BEING RECYCLED?



Top priorities for follow-up actions were **retrieval and disposal**, **ALDFG management**, **awareness raising**, and **collaboration with the public and private stakeholders**. The last survey question was on future events and resources related to ghost gear, participants listed; resource sharing, ALDFG removal, capacity building, mitigation and recycling. The survey results are listed in Appendix C.

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Summary of workshop sessions:

Session 1: Setting the Scene – Ghost Gear in the East Asian Seas

Speakers: Mr. Tran Van Hung (Viet Nam Ministry on Natural Resources and Environment (MONRE)), Mr. Watcharapong Chumchuen, Ph.D. (Department of Fisheries, Thailand), Ms. Lin Tingting (Singapore Food Agency), Ms. Nor Effahazira binti Mohamad Khairudin (Ministry of Natural Resources, Environment and Climate Change (NRECC), Malaysia), Ms. Yukyung Jang (Ministry of Oceans and Fisheries of the Republic of Korea), Eko Prasetyo Budi (Coordinating Ministry for Maritime and Investment Affairs, Indonesia), Ms. Shuaichen Jin, (National Marine Environmental Monitoring Center, China), Mr. Leng Syvann (Department of Fisheries, Cambodia), Amparo Perez Roda (FAO), and Ms. Martina de Marcos (COBSEA Secretariat, UNEP).



From left to right: Representatives from Thailand, Malaysia, Republic of Korea, Indonesia, Cambodia, and Viet Nam

Summary and discussion highlights:

- **VASI, Viet Nam** gave background on Vietnam's fishing industry, economic value, National Action Plan on Marine Plastic Litter Management, and projects and models with WWF Vietnam, IDH, and IUCN
- **DoF, Thailand** discussed fishing industry, marine litter retrieval initiatives with public and private sector, and recommendations to raise awareness, develop a fishing gear management system, improve technology, and international cooperation
- **Singapore Food Agency** presented background on Singapore fishing industry, established and new policies and initiatives to manage ALDFG, and recommendations on tackling marine litter while working with grassroot initiatives
- **NRECC, Malaysia** summarized ALDFG situation in Malaysia and successful pilots and projects such as the National Marine Litter Policy and Action Plan, mandatory fishing gear marking, educational programs for fishermen, clean-up campaigns, ghost net report hotline, and retrieval technology
- **MoF, Republic of Korea** shared an overview of country's fishing industry, initiatives to establish marine debris management and revise policies on fishing to include ALDFG, and recovery and recycling recommendations
- **CMMI, Indonesia** representative provided an overview on transboundary marine debris issue, policy revisions to manage, prevent, recover, and recycle fishing gear, establishment of the Management of Marine Debris and Contaminated Sediment Act, sustainable ocean economy implementation, GloLitter Partnership Project on marine plastic waste, FAO MMAF gear marking pilot study, and the MMAF, GGGI, and Ocean Conservancy project on reduce, retrieve, reuse and recycle ALDFG
- **NMEMC, PRC** presented the Plastic Pollution Control Action Plan (2021-2025) for reducing and managing marine litter and initiatives to address ALDFG, including "Maritime Sanitation" and "Blue Cycle" Mode
- **DoF, Cambodia** representative shared an overview of fishing industry in Cambodia, relevant policies including the National Fisheries Action Plan and Marine Litter Framework, identified ALDFG sources, causes, and impacts, and initiatives to clean up ALDFG including dive groups
- **FAO** shared recommendations from a 2019 workshop on ALDFG and previous FAO and GGGI workshops on best practices to prevent and reduce ALDFG in a recorded presentation
- **COBSEA Secretariat** shared results of a pre-workshop survey, showing that pilot initiatives currently outweighed national campaigns, experience of participants was mixed, and key areas of concern were lack of funding and awareness, and the need for recycling of ALDFG.

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Session 2: Retrieval and Collection of Ghost Gear

Speakers: Ms. Siriporn Sriram (ATMEC), Ms. Annissa Lawrence (TierraMar), Mr. Nazirul Amin Azmi (Reef Check Malaysia), Ms. Lena Bumiller-Klathale and Mr. Nirattisai Ponputi (Moken Guardians of the Sea by Ranong Recycle Social Enterprise for the Environment), Mr. Amado Blanco (Coast 4C), Ms. Andrea Warren (PADI AWARE)

Summary and discussion highlights:

- **ATMEC** presented on the Marine Science Citizen Initiative (MARsCI) protocol and citizen science engagement through scuba diving and social media.
- **TierraMar** presented on net recycling projects in Indonesian communities, training local snorkeling guides, developing regional strategies on sustainable fisheries, and engaging with private business stakeholders on recycling projects.
- **Reef Check Malaysia** presented the SeaNet programme, which involves local islanders collecting, cleaning, and recycling ghost gear and receiving compensation. He also shared a resource to identify types of ghost gear and the country of origin using an identification guide website.
- **Moken Guardians of the Sea** initiative provided background on the plastic problem faced by the Moken community in Thailand, introduced their plastic collection initiative, and shared information on funding from second life organisations.
- **Coast 4C** shared the organization's vision and efforts on ghost gear retrieval since 2012, including innovative and alternative ideas for ghost gear repurposing, and challenges faced during the pandemic.
- **PADI AWARE** presented the scuba diving company's work on ghost gear, including training and education materials to support dive operators, providing resources, and funding to local communities, and working with governments on ghost gear policies.



From left to right: Reef Check Malaysia, Tierra Mar, Moken Guardians of the Sea

Session 3: Challenges and Gaps in ALDFG Management in the East Asian Seas (Breakout Session)

Summary and discussion highlights: Participants were divided into six groups to discuss challenges and gaps in ALDFG management in six areas:

- 1) Reporting and monitoring system of ALDFG
- 2) Awareness raising and retrieval operations
- 3) Community engagement
- 4) ALDFG disposal facilities, logistical and cleaning complications
- 5) Data collection
- 6) Technical support and funding

The discussions during the workshop underscored the importance of prioritizing ALDFG management as a critical component of marine litter action plans. To effectively address this issue, it was essential for governments and funding agencies to play a leading role in providing the necessary resources, policy mechanisms, and institutional support. Without such initiatives, efforts to combat ALDFG may be voluntary and unsustainable, making it challenging to achieve the desired impact and outcomes. Therefore, it is imperative for all stakeholders to work together to ensure that ALDFG management is given the attention and support it deserves.

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Breakout session

Session 4: Recycling and Repurposing of Fishing Gear

Speakers: Mr. Raymond D. Rusli (PT Wijaya Mandiri Tintex), Mr. Thosaphol Suppametheekulwat (QUALY/Cirplas), Ecoalf, Mr. Paritosh Deshpande (Norwegian University of Science and Technology), Mr. Ben R. Kneppers (BUREO), Mr. Dominic Thomson (Environmental Justice Foundation)

Summary and discussion highlights:

- **PT Wijaya Mandiri Tintex** discussed challenges in recycling education, collection organization, and the economic value of recycling, as well as issues of government involvement, funding, and incentives.
- **QUALY/Cirplas** shared their objective to create products from recovered fishing nets and single-use plastic, and their use of blockchain technology to track plastic pollution hotspots.
- **ECOALF** presented their mission to provide products made from recycled materials and their efforts to upcycle waste collected from the ocean.
- **The Norwegian University of Science and Technology** highlighted that 90% of the fishing gear collected on beaches is made up of plastic and presented the Norwegian fishing gear collection and recycling scheme.
- **BUREO** shared their aim to upcycle plastic into high-end materials and products, train and employ local workers, reinvest in the community, and work with international companies Netplus and Patagonia.
- **EJF** presented the Net Free Seas project and emphasized the role of local communities in promoting a circular economy approach in ALDFG management, and the importance of government support and community involvement.



From left to right: Qualy/Cirplas, EJF and PT Wijaya Mandiri Tintex

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Session 5: Thinking Outside the Box (Breakout Session)



Breakout session

Summary and discussion highlights: Participants were divided into six groups to identify opportunities and ways forward to combat ALDFG in the East Asia Seas.

Working with a ghost gear scenario, participants discussed the appropriate order of measures and steps to be taken by fisherfolk, local authorities, and community members to address ALDFG. Participants identified and added management options, opportunities, and recommendations to the scenario to inform good practices.

Session 6: Harmonizing Gear Marking, Technology, and Data

Speakers: Ms. Sunny Sunwook Hong (OSEAN), Ms. Kortney Opshaug (Blue Ocean Gear), Mr. Bruce Rose (Ghost Nets Taskforce, Parks Australia)

Summary and discussion highlights:

- **OSEAN** presented solutions developed in the Republic of Korea including source identification, pollution evaluation, and working with local fisherfolk.
- **Blue Ocean Gear** presented the Smart Buoy technology used to find lost gear as a preventative measure and identify pollution hotspots to inform fisherfolk, community members, and policymakers.
- **Ghost Nets Taskforce** shared the Northern Australia ALDFG initiative to identify the location of ghost gear, and efforts of gear identification and tracking.



Left to right: Blue Ocean Gear, OSEAN

Session 7: Regional Tools

Speakers: Ms. Martina de Marcos (COBSEA Secretariat, UNEP)

Summary and discussion highlights:

COBSEA Secretariat introduced the regional knowledge sharing and networking platform of the East Asian Seas Regional Node of the GPML that could be used to share good practices, data, and resources. She presented the ghost gear toolkit being developed by COBSEA in partnership with Reef Check Malaysia, the Reef-World Foundation, EJF and others, which would include case studies and guidance for ghost gear recovery and management. Participants worked in six groups to discuss available resources, knowledge gaps, and needs to inform development of the toolbox, case studies and guidelines.



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In a final discussion, participants shared their needs to effectively address ghost gear, highlighted opportunities for combatting ALDFG in the region, and used the remaining time to foster partnerships, network with other participants to learn from each other's experience.



Breakout session



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Summary of workshop recommendations for ALDFG management in the East Asian Seas:

Prevention (Reporting and monitoring system of ALDFG):

- It is recommended that **every government** places a **high priority on the management of ALDFG** as an integral part of their marine litter action plans. Countries are encouraged to **develop** a sustainable and inclusive localized **framework for best practices**. It is worth noting that government support, including mobilization of funding, knowledge, and technology, is essential to ensure the effectiveness and sustainability of these efforts.
- There is a consensus that fisheries management plays a significant role in the management of ALDFG, and therefore, it is recommended that **every government and relevant stakeholders prioritize the promotion of fair and sustainable fisheries management**, with a specific focus on ALDFG management.
- While there are several agencies involved in ocean governance in each country in the region, there appears to be a **gap in terms of a designated agency responsible for ALDFG management**. This gap can potentially result in a lack of integration in fisheries and waste management policies and regulations, leading to conflicts during implementation. As such, it is recommended that efforts be made to **identify and establish a country's responsible host agency for ALDFG management**, to ensure greater coordination and effectiveness in the overall approach to managing this issue.

Awareness raising and retrieval operations:

- Recognizing the gaps in the availability of comprehensive and accurate data on ALDFG, stakeholders will need to **explore alternative approaches to effectively communicate the urgency of this issue**. One potential solution is the use of innovative and accessible communication tools such as **shorts on social media such as Instagram and Tiktok**, which can help raise awareness and generate interest among a wider audience. By leveraging these tools and encouraging public engagement, we can build momentum and mobilize support for more robust data collection and management efforts, which are essential for effective ALDFG management.
- Recognizing the **importance of safe and sustainable ALDFG retrieval operations for both divers and the marine ecosystems**, it is recommended to establish standardized retrieval protocols that can be easily referenced and utilized by dive groups. Such protocols can help ensure that retrieval operations are conducted in a safe and responsible manner, with due consideration given to the unique characteristics of each location and the potential impact on local ecosystems. By establishing a common framework for retrieval operations, we can promote greater collaboration and knowledge-sharing among stakeholders, while also helping to safeguard the health and well-being of all involved.

ALDFG disposal facilities, logistical and cleaning complications:

- To address the issue of ALDFG comprehensively, **integrated policies are needed related to ocean governance, land-based waste management, and sea-based waste management**. Such policies would enable a more holistic approach to tackling the issue along the lifecycle, from source to sea. Establishment of **national committees to address ALDFG issues** and coordinate efforts across government bodies is highly recommended. This would facilitate a more effective and collaborative approach towards achieving the desired outcomes.

Community engagement:

- **Effective community engagement, particularly with fishing communities**, is essential for achieving sustainable development goals related to ALDFG. **Fair incentives are a key** driver to encourage and accelerate community engagement efforts.
- Participants noted that fishing practices vary across the region and within countries. While a universal ALDFG best practice scheme could serve as a useful baseline document, it is important to recognize that **localized and effective best practices will need to be developed by relevant authorities to suit local needs**. Localized best practices for ALDFG management should take into consideration the unique characteristics and context of each location.

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Data collection and knowledge management:

- The evidence and data on the volume and impact of ALDFG in the region are currently limited and fragmented. The lack of comprehensive documentation on this issue could impede advocacy and awareness-raising efforts. **Accurate and robust data is critical to develop suitable policies, regulations, and solutions, and for engaging stakeholders** such as fishing communities for a participatory management approach. Intensified efforts are needed to improve the collection, integration, and dissemination of data and evidence related to ALDFG in the region.
- A gap remains in knowledge management and networking related to ALDFG management, hindering replication of good practices and awareness raising across stakeholders and decision makers in the region. **Effective knowledge management and networking mechanisms are needed to enhance information sharing and understanding of ALDFG management issues.** Existing platforms such as the East Asian Seas Regional Node and COBSEA's Toolbox can be leveraged to address this gap.

Technical support and funding:

- Available research and support for technologies and innovative fishing gear design remains limited in the region, particularly related to preventing ghost gear. Increased attention and **resources are needed** to scope and **develop technologies** and designs to mitigate the negative impacts associated with ALDFG.
- Given that the issue of **ALDFG is transboundary in nature, it is important to promote international cooperation** as a means to exchange knowledge, mobilize funds and access to technologies, and to foster collaboration among relevant stakeholders to effectively address the issue. Regional cooperation on ALDFG management should be strengthened to promote coordinated and effective approaches.
- Regional organizations and bodies, such as COBSEA and APEC, have the potential to play a significant role in promoting collaboration and cooperation among member States, particularly in the areas of setting common goals and mobilizing resources. Given the transboundary nature of the issue of ALDFG, **relevant bodies should explore opportunities to support countries in addressing this challenge**, to facilitate knowledge sharing, mobilize resources, and promote the development of coordinated strategies and policies.
- Participants highly recommended the **inclusion of fishing net manufacturers in discussions related to ALDFG**, as they can play a pivotal role in mobilizing funding and technologies to enhance fishing gear design and disposal facilities. As key stakeholders in the production of fishing gear, their leadership in this area could contribute significantly to the development of more sustainable and effective approaches to managing ALDFG.

Highlighted opportunities and next steps for ALDFG best practices in the East Asian Seas:

- **COBSEA and EJF**, in collaboration with other partners, commit **to developing a comprehensive toolkit on ghost gear that will consolidate existing knowledge and tools and generate new knowledge, where needed.** This toolkit is intended to serve as a valuable resource for stakeholders across the region, enabling them to effectively address the issue of ALDFG through proven best practices, use of innovative technologies, and effective management strategies.
- To address transboundary issues of ghost gear, strengthen knowledge sharing and networking, replicate good practices, mobilize resources, and harmonize efforts, stakeholders in the region are encouraged to leverage existing regional mechanisms and bodies such as COBSEA and the East Asian Seas Regional Node of the GPML.
- As suggested, **a mailing list and contact list of workshop participants will be created to support networking beyond the workshop.** This will enable stakeholders, such as governments, civil society organizations, recycling companies and fishing net manufacturers, to continue to exchange information and collaborate on initiatives aimed at promoting a sustainable management for ALDFG in the region. **The workshop has served as a valuable platform** for initiating and advancing such collaborations, and it is hoped that the connections **and partnerships established will continue to grow and thrive in the future.**
- **COBSEA and EJF will scope follow-up funding opportunities** to continue activities on ghost gear and address needs identified during the workshop.

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Post workshop survey:

How has the workshop helped you improve ghost gear prevention, retrieval or recycling knowledge?

- I feel inspired to do more/keep on working so that we can achieve our goals to care for our oceans. (75%)
- I made new connections that will help my country or community in the future (65%)
- I found out about initiatives I didn't know about and my country or community can implement (50%)
- Through the interactive activities I realized things I hadn't realized before. (50%)
- I gained technical knowledge from other participants and I will apply it at work. (40%)

Strategies participants were unaware of and can now implement in their countries

- Education training including courses related to ALDFG for the fisherman before getting their fishing licence and in fishing communities.
- Integrating management of ghost gear in the country's fisheries management framework
- Retrieval protocol.
- Cooperation between all sectors is important.
- Divers collecting ghost gear.
- Establishing a buy-back scheme (deposit return schemes) between the government and NGOs.
- Retrieval in small communities, such as diver communities. I always thought that retrieval was expensive, but now I see it can start with a small community.
- Using more advanced technology for gear marking.

Breakout sessions takeaways

- Awareness and education are paramount
- The importance of brainstorming and sharing information
- Need for effective local policy
- The need of collaboration between different stakeholders from all levels in ALDFG and continuous support in terms of capacity building and finances. We need to work together.
- Upcycling opportunities and environment quality improvement
- By share experiences related to ALDFG we can get new ideas on how to handle it.

Photos from the field trip:



Visit to the Klong Kor Tor coastal community

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Visit to the Klong Kor Tor coastal community



Visit to the Teamplas Chemical Co. Ltd recycling plant

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Workshop organizers:

The **Environmental Justice Foundation (EJF)** exists to protect the natural world and defend our basic human right to a secure environment. EJF works internationally to inform policy and drive systemic, durable reforms to protect our environment and defend human rights. We investigate and expose abuses and support environmental defenders, Indigenous peoples, communities and independent journalists on the frontlines of environmental injustice. Our campaigns aim to secure peaceful, equitable and sustainable futures.

The **Coordinating Body on the Seas of East Asia (COBSEA)** is a regional intergovernmental mechanism and one of 18 Regional Seas programmes. It is the decision-making body for the East Asian Seas Action Plan, bringing together nine countries – Cambodia, China, Indonesia, Republic of Korea, Malaysia, the Philippines, Thailand, Singapore, and Viet Nam – in protection and sustainable development of the marine and coastal environment. COBSEA focuses on marine pollution, ecosystem-based marine and coastal planning and management, and ocean governance. The COBSEA Secretariat is hosted by Thailand in Bangkok and administered by UNEP.



EJF and COBSEA Secretariat team

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Appendices:

Appendix A – On-site participants

‘Untangled: Regional workshop on ghost gear in the East Asian Seas’					
1-2 March 2023 at UNCC, Bangkok					
No.	First Name	Last Name	Position	Organization	Country
1	Than	Monomoyith	Vice Chief of an office	Department of Marine and Coastal Zone Conservation of General	Cambodia
2	Leng	Syvann	Deputy Director	Department of Fisheries	Cambodia
3	Aditya	Yuniarti	Environmental Impact Control Officer	MoEF	Indonesia
4	Aditya Krisna	Laharjana	Analyst	Regional Capacity Center for Clean Seas/MoEF	Indonesia
5	Eko Prasetyo	Budi	Head of Design and Standardization of Fishing Gears Sub Working Group	Directorate of Fishing Vessel and Fishing Gears/ MMAF	Indonesia
6	Yukyung	Jang	Deputy Director	Marine Conservation Division/ Ministry of Oceans and Fisheries	Korea
7	Sunwook	Hong	Director	Our Sea of East Asia Network (OSEAN)	Korea
8	Do Hyung	Kim	Assistant Manager	Korea Marine Environment Management Corporation (KOEM)	Korea
9	Kyung Mi	Kim	Manager	Korea Fisheries Infrastructure Public Agency/ Fishing Ground and Aquaculture Department	Korea
10	Nor Effahazira Binti Mohamad	Khairudin	Assistant Secretary, Environmental	Management Division, Ministry of Natural Resources, Environment and Climate Change/ Ministry of Environment and Water (KASA)	Malaysia
11	Anuar Salam bin	Sulaiman	Head of Licensing Section	Fisheries Resource Management Division/ Department of Fisheries Malaysia, Putrajaya	Malaysia
12	Rachawadee	Chantra	Veterinarian, Practitioner Level	Department of Marine and Coastal Resources/ Ministry of Natural Resources and Environment	Thailand
13	Jenwit	Thammavichan	Fishery Biologist, Practitioner Level	Department of Marine and Coastal Resources/ Ministry of Natural Resources and Environment	Thailand
14	Tran Van	Hung	liaison officer	Department of Science, Technology and International Cooperation, VASI Ministry of Natural Resources and Environment (MONRE)	Viet Nam
15	Nopporn	Manajit		SEAFDEC/Training Department	SEAFDEC

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16	Santiphong	Putsa		SEAFDEC/Training Department	SEAFDEC
17	Isara	Chanrachakij		SEAFDEC/Training Department	SEAFDEC
18	Dang Kien	Nguyen		Capture Fisheries Department D-Fish	Viet Nam
19	Quang Tu	Trinh	Department Head	Department of Fisheries Economics & Policy Vietnam Institute of Fisheries Economics and Planning (VIFEP)	Viet Nam
20	Brittany	Chang		Marine Research Foundation	Malaysia
21	Watcharapong	Chumchuen	Fishery Biologist, Professional Level	Marine Fisheries Research and Development Division, Department of Fisheries	Thailand
22	Soontharee	Pirom	Chief of Environment Division	Marine Safety and Environment Bureau/ Marine Department	Thailand
23	Nazirul Amin	Azmi	Programme Manager	Reef Check Malaysia	Malaysia
24	Wachirah	Jaingam		Department of Marine Science Faculty of Fisheries, Kasetsart University	Thailand
25	Moh Yi / Teresa	Reen		Reef World Foundation	The Philippines
26	Chanrith	NGIN	Senior Research Fellow and Director	Center for Natural Resources and Environment (CNRE)	Cambodia
27	Matteo	Bonetto	Country Director and Project Manager	Isituto Oikos	Thailand
28	Atrasina	Adlina	Researcher	Destructive Fishing Watch	Indonesia
29	Benchawan	Pengnoo	Field coordinator	Thai Sea Watch	Thailand
30	Chatjaporn	Loyplew	Data Officer	Thai Sea Watch	Thailand
31	Suppamas	Sawatyanon	Assistant Manager	Siam Brothers Corp., Ltd.	Thailand
32	Thosaphol	Suppametheekulwat	CEO	CirPlas Tech Co.,Ltd	Thailand
33	Chudamas	Charoenporn	Project Coordinator	CirPlas Tech Co.,Ltd	Thailand
34	Kundan	Laserhi	Export Sale Manager	Teamplas Chemicals Co.,Ltd	Thailand
35	Siriporn	Sriaram	President of Love Wildlife Foundation	ATMEC	Thailand
36	Maneevan	Sanlee	Director and Secretary	Save Andaman Network	Thailand
37	Nirattisai	Ponputi	Operation Manager	Ranong Recycle	Thailand
38	Kitiphan	Saengkaew		Ranong Recycle	Thailand
39	Ponwarin	Kanantai	Technical lead on circularity project	NatureMind-ED	Thailand
40	Raymond	D.Rusli	Director	PT Wijaya Mandiri Tintex	Indonesia
41	Amanda	Rusli	Director	WIJAYA SUKSES ABADI	Indonesia
42	Donnapat	Tamornsuwan	Senior Field Officer	Raks Thai Foundation	Thailand

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43	Seksan	Chanthavorn	Field Coordinator	Raks Thai Foundation	Thailand
44	Napak	Angkawatatanat	Program Lead, Plastics	WWF Thailand	Thailand
45	Lena	Bumiller-Klathale	Project Manager	Moken Ocean Guardians	Thailand
46	Kortney	Opshaug	CEO	Blue Ocean Gear Inc	USA
47	Kamolsak	Lertpaiboon	Board of Directors	National Fisheries Association of Thailand (NFAT)	Thailand
48	Makna	Fathana Sabila	Policy Analyst	Coordinating Ministry for Maritime Affairs and Investments (CMMAI)	Indonesia
49	Anissa	Lawrence	Managing Director	TierraMar	Australia

51	Sitta	Marattanachai	Moderator	Hackathon Thailand	Thailand
52	Martina	De Marcos	Facilitator	COBSEA, UNEP	Australia
53	Margarita	Caballa	Facilitator	COBSEA, UNEP	Kenya
54	Pran	Chavalittumrong	Facilitator	EJF	Thailand
55	Aiden	Keely Mc Kean	COBSEA Intern	COBSEA, UNEP	Kenya
56	Hyunjeong	Jin	COBSEA Intern	COBSEA, UNEP	ROK
57	Dominic	Chakrabongse	Facilitator	EJF	Thailand
58	Salisa	Traipipitsirawat	Facilitator	EJF	Thailand
59	Kansiree	Kanjanatane	Facilitator	EJF	Thailand
60	Chonlada	Janpum	Facilitator	EJF	Thailand
61	Amika	Jamjansri	Facilitator	EJF	Thailand
62	Auswin	Natrayon	Facilitator	EJF	Thailand
63	Yonatan	Novario Ady	Facilitator	EJF	Indonesia
64	M Hanif	Arzaq	Facilitator	EJF	Indonesia
65	Panupong	Sriudom	Translator	AIT	Thailand
66	Tahia	Emdad	Volunteer	MUIC	Thailand
67	Sung-Chun	Huang	Volunteer	MUIC	Thailand
68	Pinyarphat	Chirakunrunskiatti	Volunteer	MUIC	Thailand
69	Pornpichar	Lomngam	Volunteer	MUIC	Thailand
70	Anchaleekorn	Wiriyamankij	Volunteer	MUIC	Thailand
71	Supapol	Jirawatmetee	Volunteer	MUIC	Thailand
72	Panupong	Khuansatavorrani	Volunteer	MUIC	Thailand

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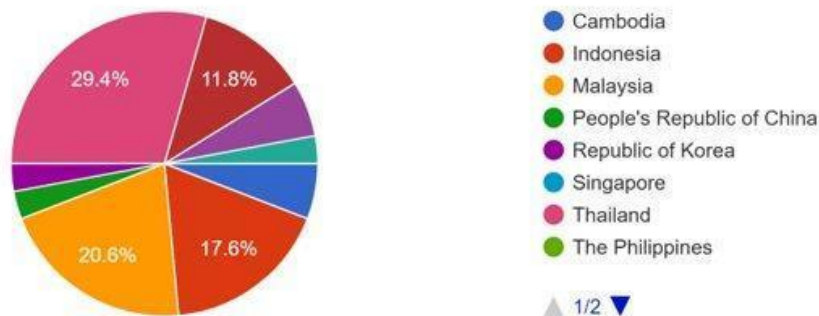
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Appendix B – Pre-workshop survey results

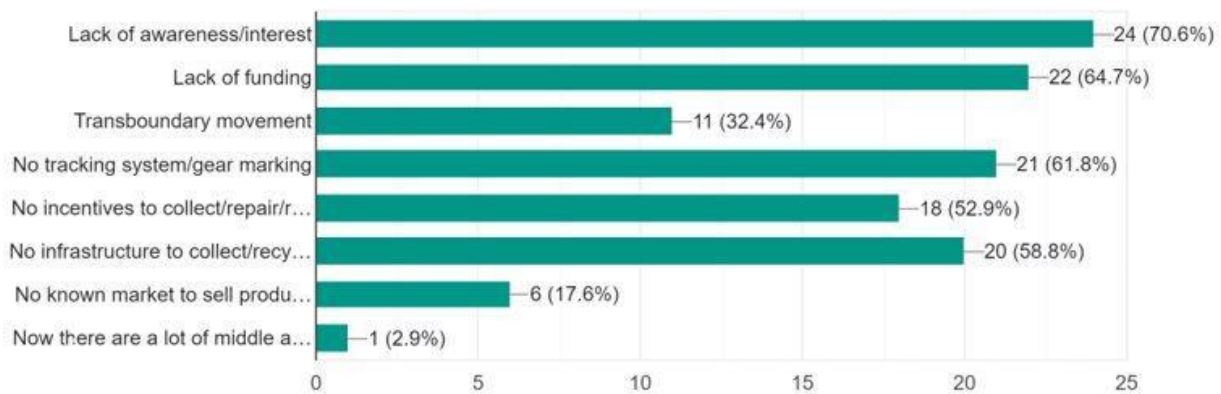
Which country do you represent / work in?

34 responses



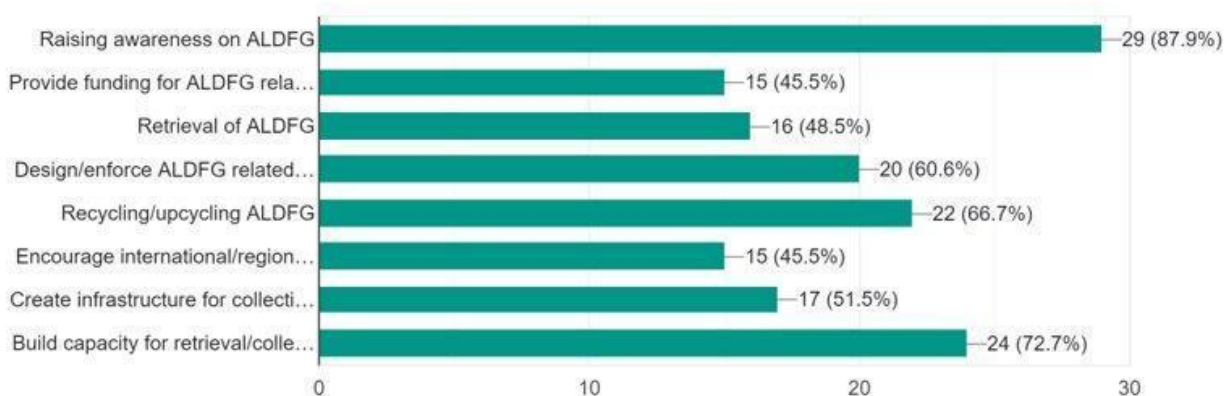
What are the main challenges in your community/country in relation to abandoned, lost or discarded fishing gear (ALDFG)? (choose as many as apply)

34 responses



What are the priority areas for action in your community/country regarding ALDFG?

33 responses



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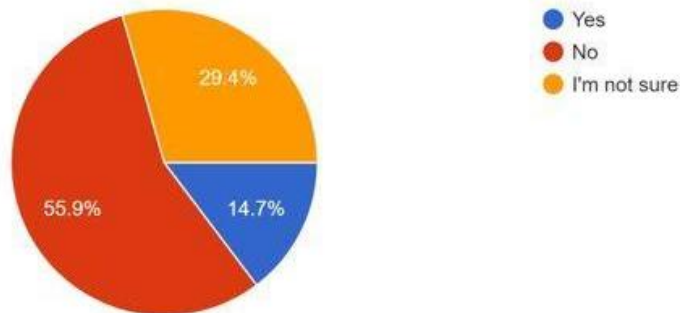
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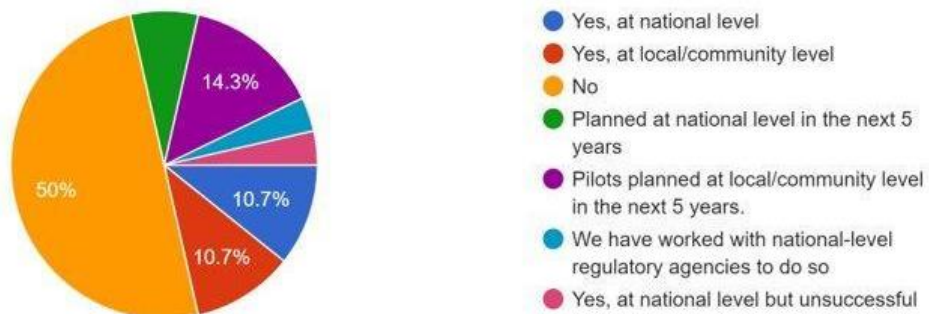
Did you or your organization attend the FAO Regional Workshop on Best Practices to Prevent and Reduce Abandoned, Lost or Discarded Fishing Gear in...al Ghost Gear Initiative, hosted in Bali in 2019?

34 responses



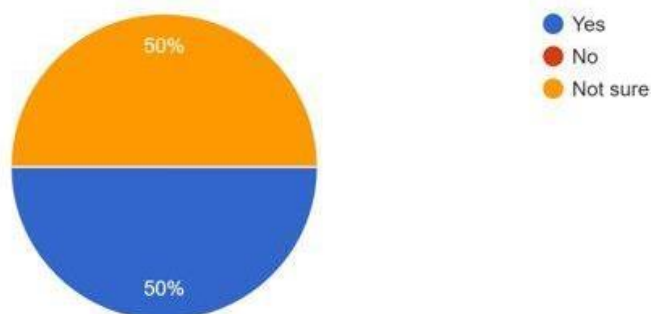
Have you implemented gear marking systems?

28 responses



Were outreach materials including train-the-trainer materials to raise awareness amongst fishing stakeholders and use them in solution projects developed and used?

10 responses



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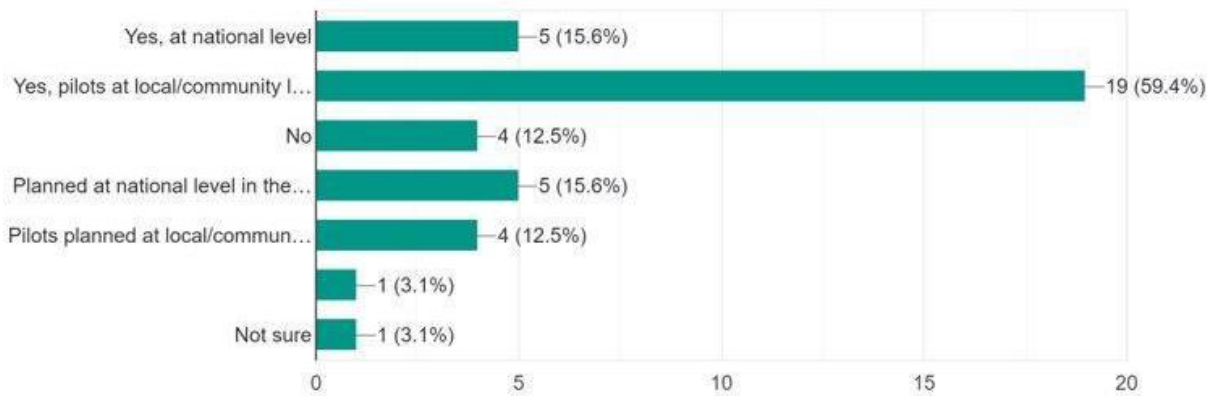
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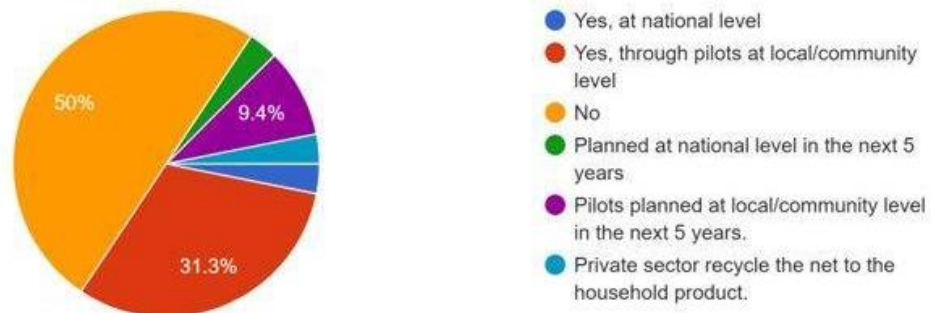
Have you implemented ALDFG collection? (choose as many as apply)

32 responses



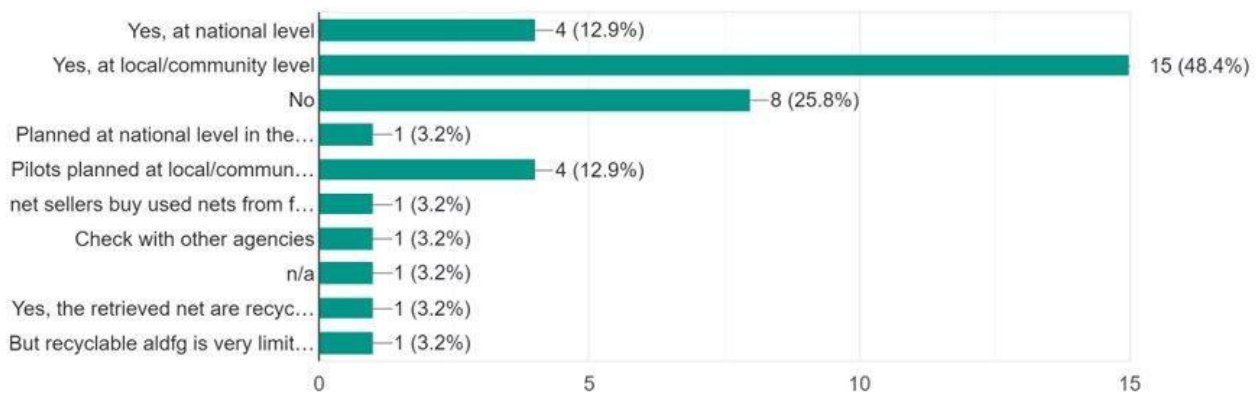
Have you implemented national incentive mechanisms to appropriately manage gear throughout its lifecycle including retrieval, reuse and recycling of ALDFG?

32 responses



Are retrieved/collected fishing gear being recycled? (choose as many as apply)

31 responses



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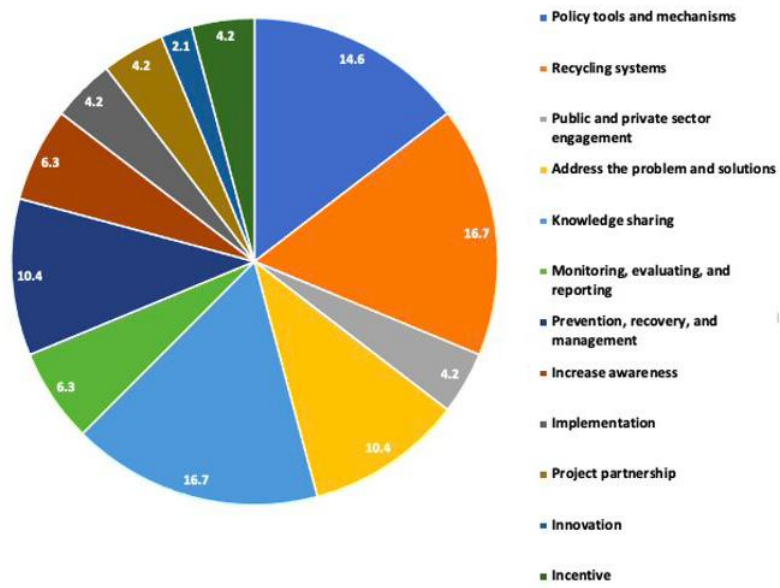


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What would you like to discuss/learn at the workshop? What are your main expectations?
Please mention at least two topics/issues



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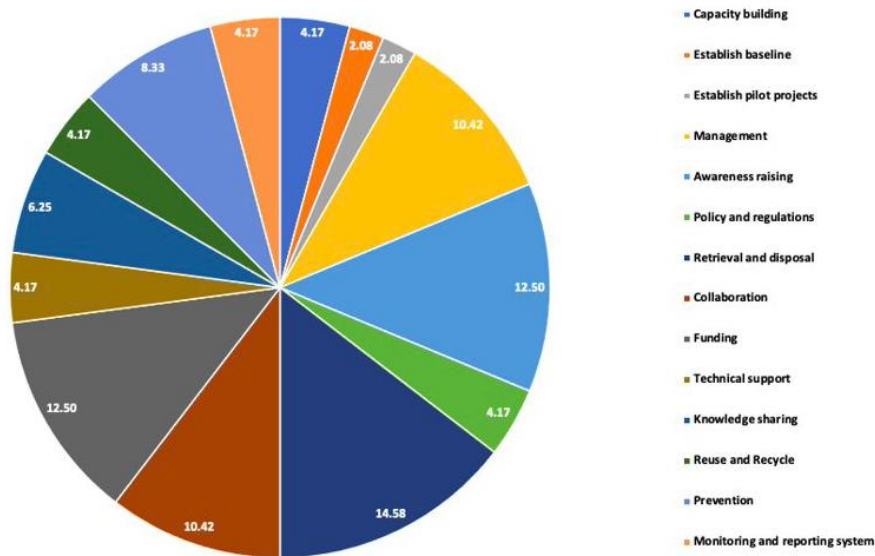


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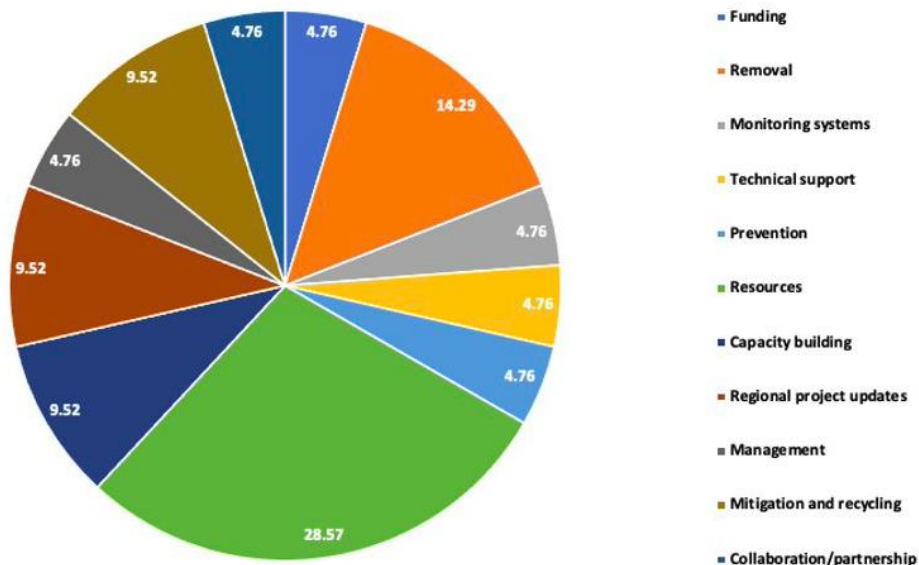
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What are priority actions/issues that need to be addressed? What kind of support is needed?
Please share your recommendations for follow-up actions from the workshop



Please let us know if you are interested in joining future events related to ghost gear and what resources you would like to receive



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For more information, please contact:

Secretariat of the Coordinating Body on the Seas of East Asia (COBSEA)
United Nations Environment Programme (UNEP)
unep-cobsea@un.org | www.cobsea.org

Environmental Justice Foundation
nfs@ejfoundation.org | <https://ejfoundation.org>

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