



Ocean Country Partnership Programme

Ghana

Achievement Report

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Programme:

The Ocean Country Partnership Programme (OCP) is a 5 year (2021-2026) technical assistance and capacity building programme that provides tailored support to countries to manage the marine environment more sustainably, including by strengthening marine science expertise, developing science-based policy, management tools and creating educational resources for coastal communities. The OCP delivers work under three thematic areas: biodiversity, marine pollution, and sustainable seafood. OCP was delivered by three British Government Arm's Length Bodies (ALBs): the Centre for the Environment, Fisheries and Aquaculture Science (Cefas), the Joint Nature Conservation Committee (JNCC), and the Marine Management Organisation (MMO). Other components of OCP were delivered by the Global Ocean Accounts Partnership (GOAP) and the Friends of Ocean Action (FOA) and those elements are not covered in this report. More information on OCP can be found at: [DevTracker Programme GB-GOV-7-BPFOCPP Documents](#)

Document Purpose:

This Achievement Report presents a summary of the activities undertaken and the achievements obtained as a result of cooperation between countries for this partnership. This document does not cover the multilateral components of the programme and this report only covers achievements by the end of the programme. A range of further achievements are expected as recommendations from the OCP are adopted by partner countries in the preceding period post-programme closure.

All OCP Achievement Reports have been authored by the ALBs and therefore key achievements and impacts of collaboration reflects individuals own perspectives. Independent evaluation by the OCP MEL provider verifies outputs and outcomes against the programme logframe, the findings of which can be viewed in the programme's annual reviews and closure report on Dev Tracker.

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Acronyms

ACU – Association of Commonwealth Universities
ACECoR – African Centre of Excellence in Coastal Resilience
AHP – Analytical Hierarchy Process
ALB / ALBs – Arm’s Length Body / Bodies
ALDFG – Abandoned, Lost or otherwise Discarded Fishing Gear
BHC – British High Commission
BPF – Blue Planet Fund
Cefas – Centre for Environment, Fisheries and Aquaculture Science
CSIR – Council for Scientific and Industrial Research
Defra – Department for Environment, Food and Rural Affairs
eDNA – Environmental DNA
EEZ – Exclusive Economic Zone
EPA – Environmental Protection Agency
FAO – Food and Agriculture Organization of the United Nations
FC – Fisheries Commission
GAEC – Ghana Atomic Energy Commission
GBV – Gender-Based Violence
GCRF – Global Challenges Research Fund
GEDSI / GESI – Gender Equality, Disability and Social Inclusion
GIS – Geographic Information System
GNADP – Ghana National Aquaculture Development Plan
HABs – Harmful Algal Blooms
IMO – International Maritime Organization
IUCN – International Union for Conservation of Nature
IUU – Illegal, Unreported and Unregulated (fishing)
JNCC – Joint Nature Conservation Committee
KII / KIIs – Key Informant Interview(s)
LaBEC – Landing Beach Enforcement Committees
MCSO – Monitoring, Control and Surveillance Division
MDGs – Millennium Development Goals
MEL – Monitoring, Evaluation and Learning
MMO – Marine Management Organisation
MoFAD – Ministry of Fisheries and Aquaculture Development
MPI – Multidimensional Poverty Index
MPA / MPAs – Marine Protected Area(s)
MSP – Marine Spatial Planning
MESTI – Ministry of Environment, Science, Technology and Innovation
NADMO – National Disaster Management Organisation
OCPP – Ocean Country Partnership Programme
OHA – One Health Aquaculture
OSRL – Oil Spill Response Limited
RMU – Regional Maritime University
SCAT – Shoreline Cleanup Assessment Technique
SDG / SDGs – Sustainable Development Goal(s)
SEAH – Sexual Exploitation, Abuse and Harassment

UCC – University of Cape Coast
UG – University of Ghana
UNDP – United Nations Development Programme
USAID – United States Agency for International Development
WHO – World Health Organization

Executive Summary

The Ocean Country Partnership Programme (OCP) in Ghana is a UK-funded technical assistance programme that has provided tailored support across three thematic pathways: marine biodiversity, marine pollution, and sustainable seafood, whilst, working in close partnership with Ghanaian communities and institutions from various sectors including academia, civil society and the private sector.

Since delivery began in 2023, OCP has strengthened Ghana's ability to respond to climate change, declining fish stocks, marine pollution and socio-economic vulnerability in coastal communities. The programme has focused on building national capacity, improving the use of scientific evidence in decision-making, and supporting inclusive governance approaches that recognise the central role of women, small-scale fishers and other vulnerable groups in the marine economy.

A landmark achievement has been OCP's contribution to advancing the designation of Ghana's first Marine Protected Area (MPA) in the Greater Cape Three Points region. Through sustained technical and coordination support, the programme has helped unlock a major national policy milestone and laid strong foundations for effective post-designation management through a national MPA Implementation Roadmap.

OCP has also delivered long-term benefits through investments in marine science and monitoring, including water quality, microplastics and contaminants analysis at national laboratories and universities. These capabilities now support regulatory action, national reporting and future investment. Complementary work on fisheries compliance, aquatic animal health, One Health aquaculture and marine pollution has strengthened skills, tools and cross-sector collaboration.

Education, behaviour-change initiatives and targeted GEDSI and safeguarding actions have further ensured that OCP's impacts are inclusive and sustainable. Overall, the programme has delivered tangible outcomes, strengthened national systems and created a strong legacy to support Ghana's blue economy, climate resilience and coastal livelihoods beyond 2026.



Context

Ghana's 550 km coastline hosts a rich mix of ecosystems—lagoons, estuaries, mangroves, sandy and rocky beaches. These ecosystems support important breeding grounds for fish, shellfish, turtles, and migratory birds, while also underpinning major national industries such as fisheries, tourism, and port operations. Long-standing human–environment interactions are complex due to dense coastal settlements, traditional canoe fisheries, informal trading hubs, and expanding infrastructure all influence habitat condition, resource use, and the flow of ecosystem services to local communities.

This combination of ecological richness, geomorphological variation, and socioeconomic dependence—paired with significant, human-driven environmental stress—makes Ghana's marine environment both uniquely valuable and uniquely vulnerable.

Coastal and Marine Pressures

Climate Change

Ghana's coastal and marine systems are highly vulnerable to climate change due to a long, densely populated coastline and heavy dependence on natural resources. Climate change acts as a risk multiplier, intensifying existing pressures such as overfishing, habitat degradation, marine pollution, and weak waste and wastewater management, which together reduce ecosystem resilience to sea-level rise, coastal erosion, flooding, ocean warming, and extreme weather events ([World Bank, 2023](#)). Degraded coastal habitats, including mangroves and wetlands, further weaken natural protection and adaptive capacity.

Food security and livelihoods are particularly climate-sensitive, as between 50–80% of the population relies on fish as a primary protein source and millions depend on fisheries-related livelihoods. Climate-driven changes in ocean temperature and productivity are already contributing to declining fish stocks, especially small pelagic species such as sardinella, exacerbating food insecurity and economic vulnerability in coastal communities ([Townhill et al., 2023](#)). Aquaculture is being promoted as an adaptation pathway, but inland systems remain exposed to climate risks including rising temperatures, water quality degradation, and disease outbreaks, underscoring the need for climate-resilient production and improved fish health management.

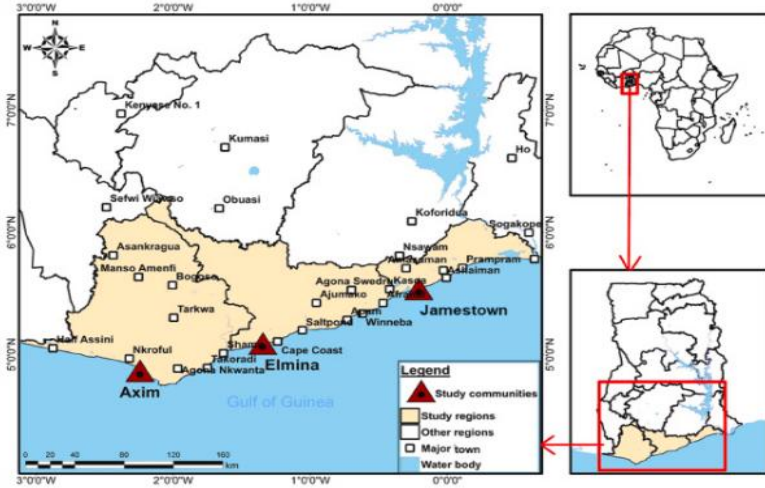
Ghana is pursuing ecosystem-based adaptation measures, including the expansion of Marine Protected Areas (MPAs), marine spatial planning, and sustainable fisheries and aquaculture development. MPAs are intended to enhance ecosystem resilience and support fish stock recovery under climate change, but current coverage remains below 1% of the Exclusive Economic Zone, limiting their effectiveness ([Ghana Sustainable Ocean Plan, 2025–2030](#)). Progress is constrained by limited funding, fragmented data systems, and weak science–policy integration, highlighting the importance of strengthened governance, coordinated research, and evidence-based decision-making to support long-term climate adaptation ([IUCN, 2024](#)).

Biodiversity Pressures

Ghana's marine biodiversity is shaped by the Gulf of Guinea and includes a range of productive ecosystems such as mangroves, coastal wetlands, estuaries, sandy beaches, and offshore waters that support diverse fish, invertebrate, and marine mammal species. These ecosystems provide critical habitats for spawning, nursery, and feeding grounds, underpinning fisheries and coastal livelihoods.

The fisheries and aquaculture sector provides direct and indirect employment for about 3 million people across the value chain, making it one of Ghana's largest livelihood sectors.

Ghana's coastal and marine biodiversity is under significant pressure from overexploitation, habitat degradation, and pollution (EPA Ghana, 2021; FAO, 2022). Critical coastal habitats are increasingly degraded by urbanisation, wastewater discharge, agricultural runoff, and industrial pollution, reducing ecosystem resilience and overall biodiversity productivity (Dika, Kusimi & Gyekye, 2018; EPA Ghana, 2021).



Marine Pollution

Marine pollution poses a serious threat to Ghana's coastal and marine ecosystems, particularly in urban and peri urban areas such as Accra, Tema, and stretches of the Central and Western Regions. Evidence from the Environmental Protection Agency indicates, that multiple pollution sources, plastic waste, untreated sewage, industrial effluent, agricultural runoff, and oil related- activities are degrading environmental quality along the coast (EPA Ghana, 2021). Ghanaian university studies corroborate pervasive plastic debris and marine litter on beaches, in lagoons, and nearshore waters, driven largely by inadequate waste management and weak enforcement (Dika, Kusimi & Gyekye, 2018; ChicoOrtiz- et al., 2020). These findings collectively point to accelerating pressures on habitats that underpin fisheries and aquaculture (EPA Ghana, 2021). [\[cbd.int\]](https://www.cbd.int/), [\[books.google.com\]](https://books.google.com/), [\[openknowle...ge.fao.org\]](https://openknowledge.ge.fao.org/)

Pollution directly undermines fisheries, livelihoods, and food security by contaminating habitats and reducing fish abundance. Studies along Ghana's coast show fishers increasingly land plastics mixed with fish, while nutrient rich runoff fuels harmful algal blooms and hypoxia that disrupt marine life (Gbogbo et al., 2023; University of Cape Coast/ACECoR, 2025). Offshore oil activities further elevate pollution risks, and response efforts are constrained by monitoring gaps, fragmented data, and limited investment, underscoring calls from national research institutions for stronger waste systems, coastal governance, and integration of scientific evidence into policy (EPA Ghana, 2021; University of Cape Coast/ACECoR, 2025).



Poverty and Development

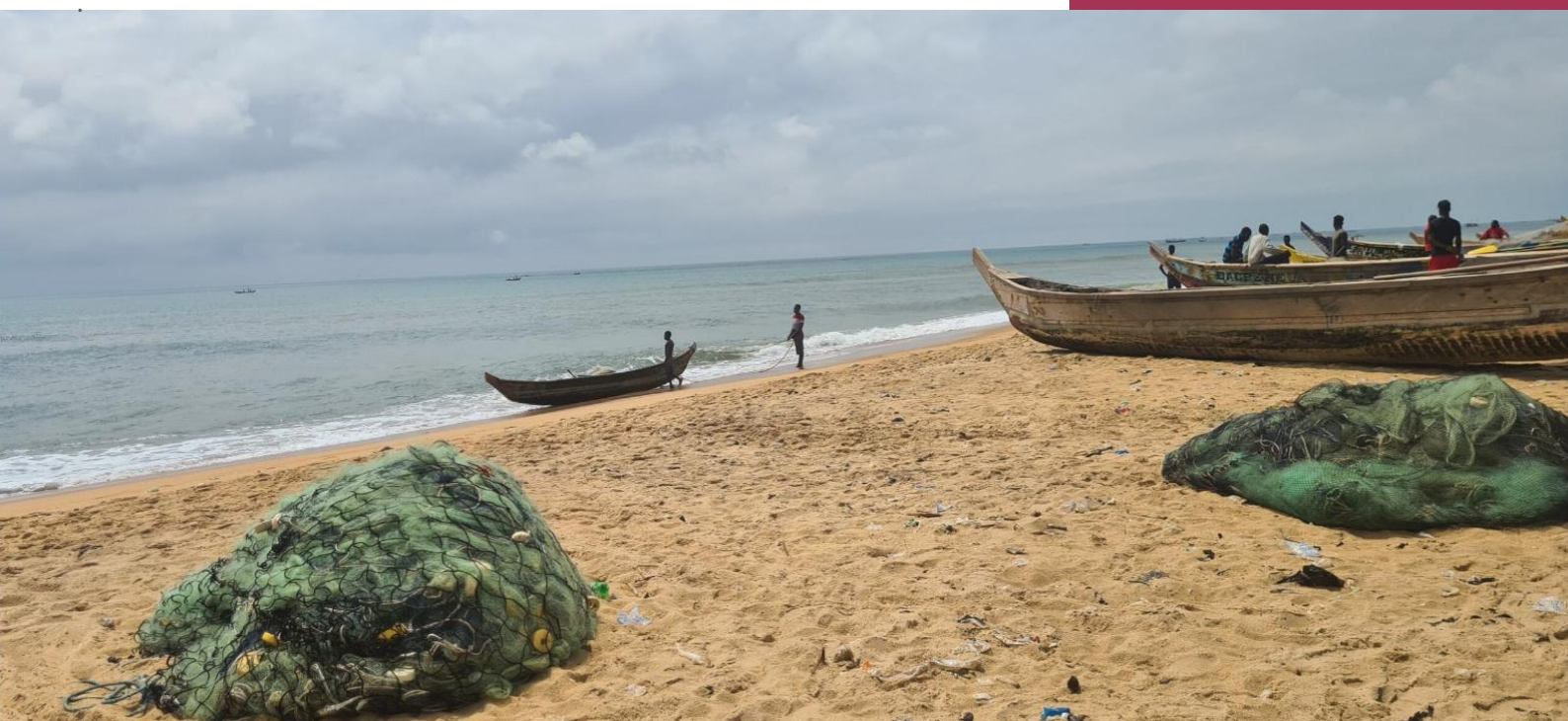
Ghana was reclassified as a lower middle-income country in Africa in 2011, a milestone primarily attributed to the discovery of oil ([ISS African Futures, 2024](#)). This advancement sparked optimism for rapid, inclusive economic growth as a means to address poverty and inequality. Nonetheless, considerable oil revenues have not been enough to realise these ambitions. Achieving macroeconomic stability and ongoing development required sound governance, with an emphasis on fiscal responsibility and transparent management of revenues ([World Bank, 2023](#)). When Ghana reached lower middle-income status, the nation had made notable strides towards fulfilling the Millennium Development Goals (MDGs), yet progress in poverty reduction remained uneven, especially between the northern and southern regions.

Ghana aims to tackle poverty beyond income metrics by using a national Multidimensional Poverty Index (MPI) to target overlapping deprivations in housing, sanitation, health, education, and employment. This approach is designed to ensure that policies address how people are poor, not only how many are poor.

Ghana's SDG commitments include reducing poverty rates, addressing regional inequalities, and ensuring that "no one is left behind" by 2030 through integrated social protection, rural development, and targeted support for women and youth ([UNDP](#)).

Poverty is particularly acute in coastal communities where alternative livelihood options are limited. Seasonal closures and falling catches disproportionately affect small-scale fishers who have few pathways to diversify, reinforcing local unemployment and underemployment; these risks are heightened in places where governance and enforcement capacity are weak ([Ghana Sustainable Ocean Plan, 2025–2030](#)).

Marginalisation in fishing communities in Ghana take various social and economic forms, affecting diverse groups rather than a single homogeneous population. This section highlights key factors of exclusion in coastal communities where data is available. Small-scale fishers and fish workers are a vulnerable and marginalised group (EJF, 2021).



Gender dynamics shape development outcomes along the value chain. Women are central to post harvest processing and trade, yet insecure tenure and informal working conditions mean shocks in the fisheries sector—whether from resource depletion or market disruption—disproportionately reduce women’s earnings and household resilience (Townhill et al., 2023)

Stakeholders

Ghana’s marine space is shaped by several key national institutions and partners who play critical roles in fisheries governance, maritime security, coastal conservation, and scientific capacity building. The **Ministry of Fisheries and Aquaculture Development (MoFAD)**, as the overarching policy authority, provides strategic leadership on marine resource governance while the **Fisheries Commission** acts as the primary regulatory body responsible for fisheries development, management, and compliance activities across the marine sector. Its remit covers fish health, post-harvest processes, and quality assurance, all under the policy direction of MoFAD.

Alongside government agencies, NGOs and civil society organisations (CSOs) play major, practical and policy level roles in managing Ghana’s marine and coastal environment. Examples of these agencies include **Hen Mpoano** and **GFRA**, who provide policy advocacy, technical support and multistakeholder engagement for sustainable coastal and fisheries governance, helping shape more inclusive marine management practices.

Universities in Ghana play a central role in generating scientific evidence, building national expertise, and supporting policy decisions that shape the country’s marine management. Institutions such as the **University of Cape Coast (UCC)**, **University of Ghana (UG)**, and **Regional Maritime University (RMU)** lead research on coastal ecosystems, fisheries, pollution, and climate impacts, providing datasets and technical analysis that government agencies rely on for informed decision-making. Their work spans ecological monitoring, stock assessments, water quality studies, and marine spatial planning, often filling critical knowledge gaps for ministries and regulators.

Bespoke organisations, such as **Chaint Afrique** supported the OCPP by leading educational outreach, community engagement and net waste recycling, including use of OCPP provided fishnet balers to reduce waste volumes. Community-based enforcement groups such as **LaBEC** benefitted from targeted capacity building to strengthen coastal resource protection and fisheries compliance efforts.

Private sector actors play a central role in Ghana’s marine space by driving key ocean- based industries such as fisheries, aquaculture, tourism, offshore oil and gas, and maritime transport, which are essential to national economic growth. Examples include the **Chamber of Aquaculture Ghana** who co-organised the One Health Aquaculture workshop, helping

to connect industry needs with environmental protection priorities. They also support the- delivery of Ghana’s Blue Economy Strategy through investment, innovation, and participation in marine governance processes, including marine spatial planning, where their input helps balance economic activity with environmental protection.

The **Council for Scientific and Industrial Research (CSIR)** plays a key national role in generating scientific evidence, supporting policy, and strengthening technical capacity for the management of Ghana’s marine and coastal environment. CSIR is also central to monitoring and laboratory analysis, providing accredited testing for parameters such as microbiology, nutrients, heavy metals, toxins, and sediment quality. These laboratories support national surveillance programmes, environmental assessments for coastal infrastructure, and research needed for international reporting obligations.

The OCPP has also been supported by the **British High Commission, Accra** across various elements of the programme to ensure smooth delivery, from logistics to representation at workshops.

A full list of stakeholders can be found in Annex 2.



“Throughout this partnership, what has stood out most has been the energy, collaboration and leadership demonstrated by Ghanaian institutions at every level.

The UK is honoured to have supported Ghana’s MPA journey, and we are delighted that this work is now culminating in Ghana’s first ever Marine Protected Area.

The gazettelement of Cape Three Points, and the momentum we celebrate today, are a testament tat lasting change is achievable through committed partnerships and when we work collectively toward a healthy, resilient ocean.”

Victoria Situ - Forests & Climate Advisor, British High Commission, Accra

OCPPs Approach to Intervention

OCPP scoping missions, identified priority challenges to address through intervention that aligned with both country demand and priorities and, OCPP thematic work areas.

The Government of Ghana asked OCPP to provide targeted support to strengthen its capacity to manage, monitor and regulate human activities in the marine environment. In response to growing pressure from artisanal and industrial fisheries, declining coastal fish stocks, and widespread IUU fishing practices, Ghana requested assistance to improve fisheries governance, compliance and enforcement, and evidence-based decision-making. OCPP was specifically asked to help address capacity gaps that limited the effective management of marine resources, while supporting Ghana's ambition to increase aquatic food production without further degrading ecosystems. This included support aligned with Ghana's Aquaculture Development Plan (2021–2027), particularly around developing domestic human and infrastructure capacity and strengthening aquatic animal health systems.

There was also a clear ask to collaborate to help improve coordination, investment effectiveness and inclusivity in marine management. Recognising that public and private investment in sustainable ocean management was insufficient and poorly coordinated, Ghana sought support to better align government initiatives, public-private partnerships and donor programmes, in line with the national "Ghana Beyond Aid" vision. OCPP was asked to help reduce duplication, support cross-sector collaboration, and strengthen platforms that bring together actors with shared interests, such as those addressing marine pollution. In parallel, Ghana requested support to improve understanding of the full economic, social and ecological value of marine ecosystems so that these benefits could be more effectively reflected in policy and planning decisions, including those related to marine protected areas. Finally, OCPP was asked to help strengthen inclusive participation in marine decision-making by integrating government-led action with community-based and private-sector initiatives, ensuring coastal communities are meaningfully involved in decisions that affect their livelihoods and derive tangible benefits from sustainable marine resource management.



Impact

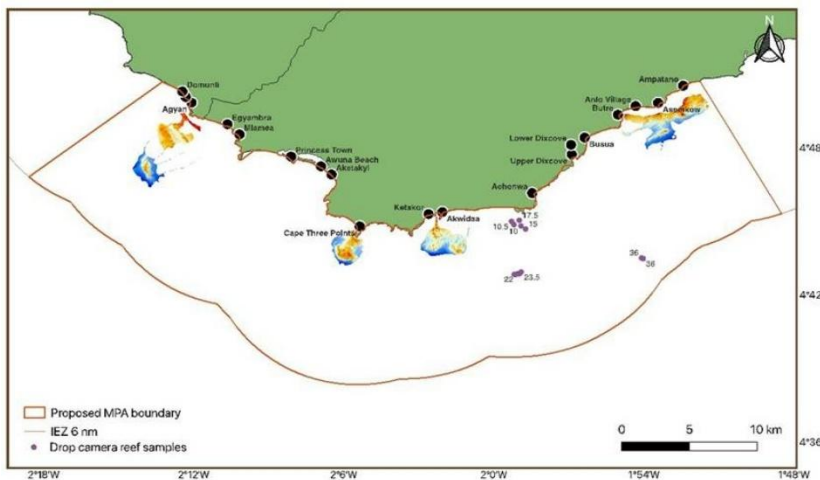
Since 2023, OCPP has supported Ghana to deliver several nationally significant outcomes across marine conservation, science capacity and sustainable resource management. OCPP has worked collaboratively with key Ghanaian stakeholders to strengthen marine governance, science capability, and evidence bases across pollution, biodiversity, aquaculture, emergency response, and food safety.

More than 200 government, academic, and civil society practitioners have received technical capacity by training specialist areas such as marine litter monitoring, microplastics analysis, aquaculture risk assessment, oiled wildlife response, and pathogen detection. These investments expanded the capabilities of institutions including the Fisheries Commission, EPA, GAEC, CSIR institutes, and universities, enabling them to generate higher quality marine data and apply international best practice within national processes.

The programme has delivered new decision support tools and evidence products—such as aquaculture site suitability assessments, microplastics baselines, ALDFG guidance, marine emergency response training packages, and improved seafood pathogen surveillance protocols—helping ministries to manage risks more effectively. It also strengthened cross agency coordination by bringing together government, academia, NGOs, and the private sector to codesign policies and drive more integrated coastal management. These contributions enhanced Ghana’s ability to respond to pollution events, regulate aquaculture sustainably, protect marine ecosystems, and integrate evidence into policy, ultimately improving long-term ocean health and supporting coastal livelihoods.

Designation of Ghana’s first Marine Protected Area (MPA)

OCPP has played a key role in advancing the designation of Ghana’s first Marine Protected Area (MPA) in the Greater Cape Three Points region. Targeted assistance, delivered by Hen Mpoano (a local NGO in Ghana) under OCPP oversight, has supported the remaining steps required for legal gazettelement. This includes inter ministerial coordination, parliamentary and Cabinet engagements, finalisation of management guidelines, and public facing communication to build national and community support. This will help unlock a major policy milestone for Ghana. The image below outlines the area of the proposed MPA.



Beyond MPA Designation

The programme also supported Ghana to take the next steps required for effective MPA implementation through the Beyond MPA Designation project, delivered by Hen Mpoano. This work responded to gaps identified around post designation management, monitoring, community engagement, and awareness raising. Five key analytical and planning products were developed, including legislative and policy reviews, a stakeholder and gender analysis, an assessment of current marine awareness initiatives, and recommendations for future education efforts. A high level MPA roadmap framework was also produced, outlining essential actions needed after designation to ensure that Ghana’s first MPA is effectively and sustainably managed.

Building on these outputs, the programme has further supported the development of the Strategic Roadmap (see case study) for the Implementation of Marine Protected Areas in Ghana, which provides a practical, adaptable guide to support transitioning from MPA establishment to effective, long-term implementation. Together, these activities provide a strong foundation for Ghana to translate its first MPA designation into meaningful and lasting conservation impact.

Strengthening Ghana's Marine Science Capacity and Skills

The OCPP has strengthened Ghana's marine science and technical capacity since 2023 by providing training and tools that improve monitoring, research quality and decision making. Through courses on marine litter and marine protected areas, socioeconomic research and ALDFG assessment, Ghanaian institutions such as GAEC, the Centre for Coastal Management (CCM) and the Fisheries Commission have increased their ability to generate and apply scientific evidence for coastal governance.

Under the water quality workstream, OCPP upgraded analytical capability at Ghana Atomic Energy Commission (GAEC) and the Centre for Coastal Management at the University of Cape Coast by introducing standardised sampling methods, providing equipment, and training staff. This created Ghana's first consistent microplastics and contaminants evidence pipeline, enabling regular monitoring that can feed into EPA, Fisheries Commission, and national reporting processes. Evidence generated supports decisions on pollution control and ecosystem health.

Fishing Waste Behaviour Change

The OCPP supported CHAiNT Afrique on a community level outreach, education and engagement on marine pollution, with a strong focus on abandoned, lost or otherwise discarded fishing gear (ALDFG).

CHAiNT Afrique codeveloped localised education materials, delivered face-to-face awareness campaigns with fisherfolk and coastal stakeholders, and facilitated dialogue on the environmental, navigational and livelihood impacts of ALDFG. This work complemented OCPP's science led approach by translating evidence into accessible messaging and supporting behaviour change within fishing communities, while providing structured reporting and engagement metrics to inform OCPP monitoring and learning processes.

In parallel, CHAiNT Afrique linked OCPP objectives to practical circular economy solutions through its NetCycle Africa initiative, demonstrating pathways from pollution awareness to sustained action. This included promoting the collection and recycling of end-of-life fishing nets, incentivising responsible disposal, and supporting alternative livelihoods by connecting communities to recycling markets. By showcasing NetCycle within OCPP-related events and partnerships, CHAiNT-Afrique strengthened local ownership, enhanced programme visibility, and illustrated how community centred circular economy models can reduce

The anticipated gazettelement of the **Greater Cape Three Points MPA** will mark the **country's first formally designated MPA** and demonstrates clear uptake of technical recommendations, contributing directly to stronger ocean governance under Ghana's Sustainable Ocean Plan

marine litter while supporting coastal livelihoods in Ghana, contributing to the longer-term- sustainability and legacy of OCPP outcomes.

Enhanced Evidence and Knowledge for Decision Making

OCPP's work since 2023 has supported the production of datasets, assessments, workshop outputs and policy evidence across marine pollution (e.g., ALDFG workshop outcomes and litter training programmes), fisheries sustainability, and biodiversity management.

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Other scientific outputs have provided government and community stakeholders with information needed to understand human pressures, climate-linked vulnerabilities and coastal dynamics, as reflected in outcomes from national scientific conferences and thematic research sessions.

Strengthening Safe and Sustainable Aquaculture Through One Health Approaches

Under OCPP's Sustainable Seafood theme, Ghana benefited from targeted capacity building and policy-relevant science to support the sustainable expansion of aquaculture. A flagship outcome was the One Health Aquaculture (OHA) workshop in Accra (February 2024), which brought together Ghanaian regulators, scientists and private-sector actors alongside regional and UK experts to apply One Health principles to aquatic food production. The workshop strengthened understanding of how environmental quality, animal health and human health interact across aquaculture value chains and explored practical tools—such as seafood risk profiling—to reduce disease, contamination and environmental risks while supporting national food security ambitions.

One Health Aquaculture Workshop Case Study

Scientists and policymakers from across Ghana, the UK, Senegal, Sierra Leone and Nigeria, came together at the workshop in Accra, to discuss how a One Health approach could be applied to developing safe and sustainable aquatic food. The workshop focused on how a Seafood Risk Tool could be applied to support aquatic food supply chains in Ghana. The event brought together stakeholders from authorities with responsibility for aquatic environmental protection and for aquatic food production and trade in Ghana to investigate linkages between national aquatic food production aspirations and the need for provision of healthy environmental conditions in which the sector can flourish.

The two-day workshop was followed by an additional one-day workshop that brought together stakeholders from across Ghana, Nigeria, Senegal and Sierra Leone to open dialogue on the harmonisation and coordination of Antimicrobial Resistance (AMR) surveillance in aquaculture across the region. This workshop was supported by the UK's Fleming Fund and was delivered by the UK's Food and Agriculture Organisation (FAO) of the United Nations reference centre for AMR, with APHA joining Cefas colleagues to deliver that event.





The Strategic Roadmap for the Implementation of MPAs in Ghana was shaped by technical evidence and the perspectives of coastal communities. Collaborating with GFRA LBG, the programme engaged widely across coastal districts, visiting communities and fish-landing sites to gather stakeholder views on marine protection. These dialogues included fishers, traditional leaders, women, youth, district assemblies and NGOs, fostering open discussion on MPA challenges and opportunities. Input from these sessions informed the roadmap's recommendations on governance, participation, livelihoods and transparent communication.

A national workshop involving government, academia, civil society and local representatives reviewed the near-final roadmap, helping to refine priorities and ensure policy alignment. This collaborative process strengthened national ownership and grounded the roadmap in local realities. The result is a practical, inclusive document supporting sustainable, community-centred MPA implementation in Ghana.

"I'm impressed about the extent of community engagement, with traditional and fishing community dwellers. What is also impressive is the fact that a lot of the activities have been synchronised with the operational department of the Fisheries Commission so we are working in Tandem"

Professor Nunoo, representative of the National Fisheries Association of Ghana / Chairman of the Fisheries Management Operational Committee

A national workshop involving government, academia, civil society and local representatives reviewed the near-final roadmap, helping to refine priorities and ensure policy alignment. This collaborative process strengthened national ownership and grounded the roadmap in local realities. The result is a practical, inclusive document supporting sustainable, community-centred MPA implementation in Ghana.

Workstreams

Since 2023, OCPP Ghana has delivered capacity building and evidence-generation across fisheries compliance, emergency response, marine protection and pollution. This included development of fisheries enforcement manuals, in-country and UK-based training for MCSD, Fisheries Commission and Marine Police officers, and provision of safety and communication equipment to Landing Beach Enforcement Committees to strengthen authority and community cooperation. Ghana's strong emergency response baseline was complemented through targeted oil spill preparedness training (IMO2/3 and SCAT), vessel traffic analysis support, and coordination with national agencies. Major progress was also made toward gazettelement of Ghana's first Marine Protected Area at Greater Cape Three Points, supported by extensive stakeholder engagement, parliamentary briefings, communications campaigns, and completion of legal steps, alongside development of a national MPA implementation roadmap and an MPA short course delivered with the University of Cape Coast.

OCPP also strengthened Ghana's foundations for sustainable marine management through work on aquatic animal health, aquaculture, pollution and marine litter.

OCPP Ghana Timeline

- 2023**
 - Launch of OCPP partnership via a delegation visit to Ghana
 - Initial technical trip to scope delivery across the three themes
 - LaBEC community-based fisheries management training and pollution scoping
 - Marine Spatial Planning capacity building workshops, framework, MPA continued scoping, Fisheries and Compliance
- 2024**
 - Bivalve mollusc growing area field assessments and training
 - Emergency Response visit
 - Emergency Response: GI WACAF conference attendance
 - Marine litter short course delivered
- 2025**
 - Beyond MPA designation and UCC short course
 - Microplastics lab installation, ALDFG training and workshop
 - C&E training
 - Fisheries inspectors training and vessel inspections
 - Biodiversity deployment and Cefas asset checks
 - Fisheries Commission visit to the UK
- 2026**
 - Final transition visit, including transition and lessons learnt workshop centred around MPAs

Fisheries Compliance and Enforcement

This workstream has focused on capacity building, through the development and delivery of training and guidance materials. A Programme Initiation Document (PID) was updated and shared with the Head of MCSD. Core training materials, including a fisheries enforcement manual, were developed and delivered in 2024, with additional training provided in March 2025 focusing on “train the trainer”, mentoring new staff and utilising the enforcement manual during inspections. Further investigations training was delivered in Ghana in August 2025 to 29 participants from MCSD, the Fisheries Commission Scientific Division and the Marine Police Unit. The -five-day course covered fish identification, gear, investigative and enforcement procedures, covert surveillance- and practical exercises, and was well received, with strong demand for further training and exchanges.

Capacity building was reinforced through a UK exchange visit in September 2025, where MCSD staff shadowed UK enforcement officers, observed best practice and received in person training. Key outcomes included improved understanding of collaborative and intelligence led enforcement, health and safety, training systems and gear selectivity, alongside identification of gaps to address in Ghana. Gender equality and social inclusion were actively considered throughout, with strong participation and leadership by female officers. Collectively, these activities aim to strengthen consistent, effective inspections of vessels, catch and gear, directly supporting implementation of Ghana’s recent net directive to reduce bycatch in industrial trawl fisheries, curb IUU fishing, protect small pelagic stocks and improve long-term food security for coastal communities.

Landing Beach Enforcement Committees (LaBEC)

Members of the Landing Beach Enforcement Committees (LaBEC) were supplied with safety and communication equipment provided by OCPP, which included





reflective vests, life jackets, and walkie-talkies. This equipment has been used across several landing beaches in Ghana’s Central Region to support enforcement duties. Reflective vests helped distinguish LaBEC members from fishers and improved their visibility, authority, and cooperation with communities, while life jackets ensured their safety during offshore monitoring and inspections, demonstrating responsible practice and setting a positive example. Walkie-talkies enhanced coordination, incident reporting, and response times during enforcement and crowd management activities.

Regions have significantly improved:

- Identification and authority of committee members
- Safety during offshore monitoring activities
- Communication and coordination during enforcement operations
- Confidence and cooperation among fisherfolk

Strengthened Preparedness to Respond to Emergencies

OCPD assessed each country preparedness to respond to emergencies at the start of programme intervention, taking into account its baseline in the categories of

- (1) Policy
- (2) Governance
- (3) Delivery
- (4) Trained Personnel and Equipment, tools, and laboratories.

As part of this baselining it was agreed that Ghana would be excluded from the target for this outcome indicator as Ghana’s baselines were high compared to the other countries, given the strong private and public sector investment in oil and gas in the country.

Country	Stage	Policy	Governance	Delivery	Training
Ghana	Baseline	Exemplary	Exemplary	Advanced	Foundation
	24-25	Exemplary	Exemplary	Advanced	Foundation

Note: Ghana has a well-developed oil and gas industry which means many ‘western’ companies such as Shell and BP are active in it – bringing experience on a global scale in MER.

Recent events emphasise the need for flood response and epidemic preparedness. There has been some movement on this by WHO following the 2023 Akosombo Dam floods, when WHO trained over 700 surveillance volunteers and supported 51 districts in developing contingency plans.

OCPD supported Ghana in Emergency Response including provision and interpretation of vessel traffic analysis outputs and delivery of training with key individuals, coordinated with agencies such as the Ghana Health Service, National Disaster Management Organisation (NADMO), Ghana National Fire Service, and others.

The OCPD funded a OSRL delivered IMO2, SCAT and IMO3 training in Ghana in March 2025. This training is essential for effective oil spill response and provides

important knowledge and skills for safe and efficient operations to protect the environment and public health. The training was attended by a range of appropriate personnel involved in the [Emergency Response](#) sector and included a practical equipment deployment exercise which was organised in collaboration with the Ghana Ports and Harbour Authority.

Marine Protected Areas

MPA Gazettement

Through close collaboration with Hen Mpoano, the programme delivered a comprehensive package of support to advance the gazettement of Ghana's first Marine Protected Area (MPA) in the Greater Cape Three Points region. Activities strengthened government commitment through targeted briefings with District Assemblies, Fisheries Commission leadership, the Western Regional Coordinating Council, fisher-folk representatives and, following Cabinet approval, the Technical Advisory Committee. Stakeholder support was broadened through high-level engagements with non-state agencies, media training for journalists, and a tailored communication campaign involving around 35 key actors, including opinion leaders and Fisheries Commission staff. Parliamentary engagement was facilitated through an inter-ministerial meeting to secure cross-government buy-in, followed by sustained follow-up with the Ministry of Food and Aquaculture officials, Select Committee members, and Chief Directors to maintain momentum.

Public-facing communications, such as radio and television outreach, were implemented to prepare communities for designation, while technical support ensured that all legal steps for gazette notification were completed, culminating in the 7th TAC meeting to discuss the management plan and public declaration. The formal request for gazette has now been submitted to the Attorney General's Office, and the Minister has confirmed that the official announcement is expected imminently.

MPA Implementation Roadmap

The programme, working closely with Ghanaian NGO GFRA LBG, has developed a Strategic Roadmap for the Implementation of Marine Protected Areas in Ghana, providing the country with a comprehensive framework to guide the transition from MPA designation to effective, long-term management. Building on earlier OCPP work delivered through the Beyond MPA Designation project, the roadmap sets out the essential post-designation actions required to establish robust management, monitoring and assessment systems, while addressing cross-cutting priorities such as stakeholder engagement, gender equality, disability and social inclusion, alternative livelihoods, and sustainable finance. The roadmap is supported by a detailed supplementary information document and a case study for the Greater Cape Three Points MPA, tracing the process from site identification to gazette and implementation. Extensive stakeholder engagements and validation workshops ensured the roadmap reflects local realities, strengthens national ownership, and provides a practical, adaptable tool to guide sustainable MPA implementation across Ghana.

Through collaboration with the University of Cape Coast, the programme developed an introductory online short course on Marine Protected Areas

(MPAs), combining expert-led lectures with self-directed learning materials. The eight-module course introduces the national and international need for marine conservation and covers core themes including foundational MPA concepts, global and regional policy drivers, designation and management processes, monitoring and evaluation, and the integration of MPAs within wider marine spatial planning. Case studies are used throughout to contextualise learning for Ghana and West Africa, and the course is designed for final-year undergraduate and postgraduate students, government staff, and NGO practitioners. The completed course was shared with UCC, who successfully delivered it for the first time at the end of February, receiving strong engagement and positive feedback from participants.

Aquatic Animal Health and Food Pathogens

Food pathogen and aquatic animal health efforts in Ghana have focused primarily on strengthening diagnostics, surveillance, and understanding of pathogen risks within aquaculture and shellfish harvesting systems.

Workstreams under OCPP included a **baseline assessment of parasites in mangrove oysters and Volta clams**, carried out with national partners such as the Fisheries Commission, CSIR, the University of Cape Coast, the University of Ghana and the Veterinary Services Directorate. Histology and molecular samples collected in August 2024 were sent to UK laboratories for analysis, alongside environmental samples for ecotoxicology, chemistry (including heavy metals), and eDNA testing. This formed the foundation for developing a future “toolbox” approach to assessing aquatic food pathogen- risks. Training was also delivered in **fish biopsy, disease investigation**, and **bacteriology diagnostics**, with further specialist bacteriology training planned at Cefas in early 2025.

Parallel work across the One Health and aquaculture space identified broader pathogen related concerns, including zoonotic bacterial pathogens (e.g., *Edwardsiella* spp.) and hazards from water systems, as discussed at the Ghana OHA Workshop. Questions raised at the workshop covered monitoring biosecurity on farms, susceptibility testing, and the interpretation of commonly isolated bacterial species. Additionally, national laboratory capacity was reviewed: the National Food Safety Lab—accredited to ISO 17025—received training in **Salmonella culture and serotyping**, though capability remained limited to group level typing. This work highlighted the need for enhanced pathogen specific surveillance to support both public and animal health.

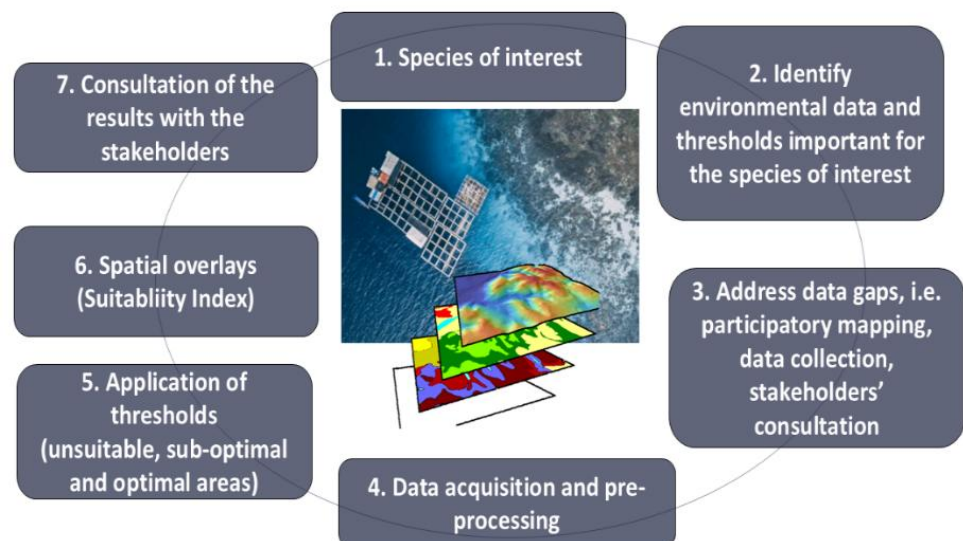
The *Manual for the Management of Aquatic Animal Health in Ghana* was developed as a policy and operational guidance tool for national competent authorities responsible for aquatic animal health. It provides structured procedures, standards, and best practice approaches to support Ghana’s regulators, inspectors and fisheries officers in preventing, detecting and managing aquatic animal diseases. The manual was finalised and printed in early 2026 and distributed to in country teams and fisheries officers, with a view to collecting feedback and potentially updating the document in the following financial year.



Aquaculture Site Suitability Assessment

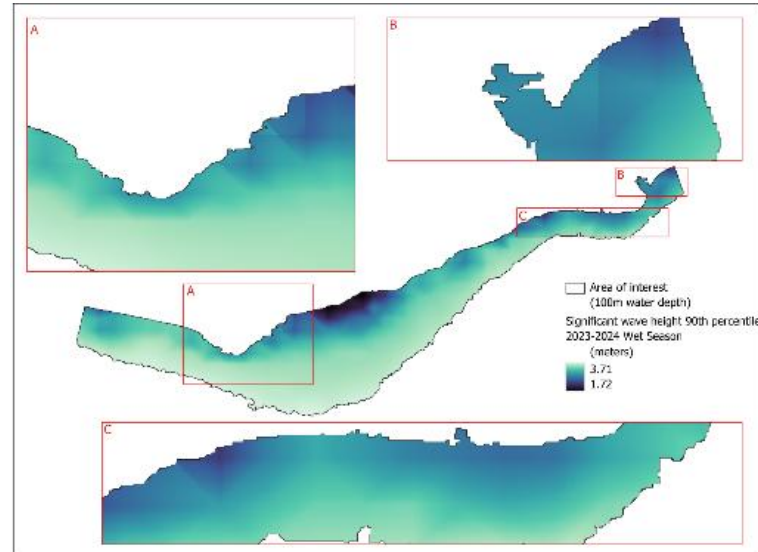
Global aquaculture production has risen steadily in the past two decades. In 2020, the industry produced 87.5 million tonnes of farmed fish. As of 2020, Africa contributed 2.57% to global production, up from 2.23% in 2010. Sub-Saharan Africa has been the fastest growing region within the continent and now accounts for 15.84% of animal production (FAO, 2022).

The Republic of Ghana through its National Aquaculture Development Plan (GNADP) 2024 – 2028 aspires to sustainably enhance both freshwater and marine aquaculture production to contribute towards national food security, employment, and revenues via export to international markets.



However, the results from the marine aquaculture suitability mapping were presented at a workshop on 21 November 2025 and all the GIS data and available Microsoft Community Training was provided to the stakeholders. A similar approach (number 1, 2 and 3) was applied in Senegal, presenting an opportunity to align training, share learning, and support cross country collaboration through a coordinated rollout of the tool.

Alongside the GIS suitability mapping, we investigated stakeholder perceptions of marine and coastal aquaculture development in Ghana.

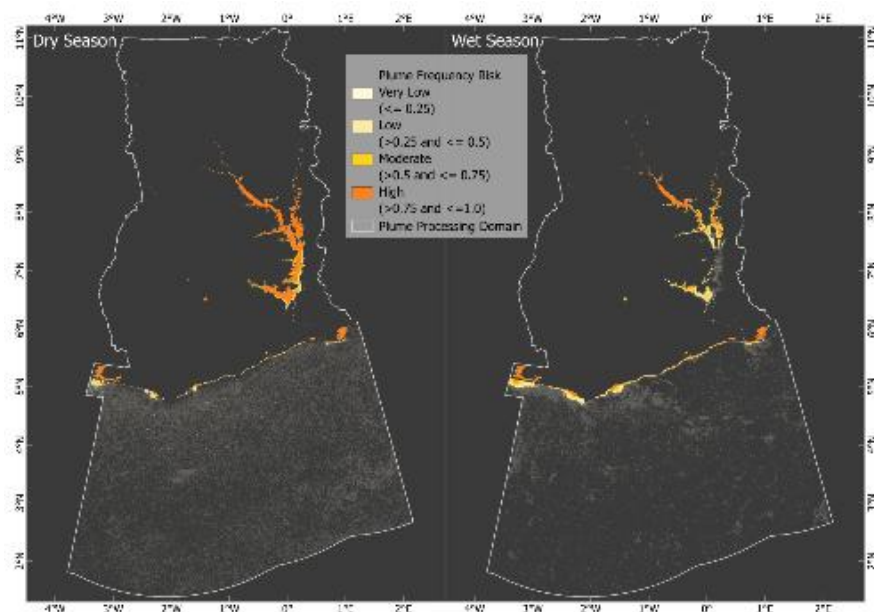


Aquaculture is widely recognised as essential for strengthening food security, supporting livelihoods, and contributing to biodiversity protection.

Using a mixed-methods approach, the study combined a literature review, semi-structured interviews, and an online survey. Stakeholder perceptions were assessed across four key dimensions—environmental, socioeconomic, governance, and technological, while the Analytical Hierarchy Process (AHP) was applied to determine which dimensions should be prioritised for sustainable aquaculture development.

Overall, the findings indicate that sustainable aquaculture development in Ghana will require:

- (1) Clear regulatory frameworks and inclusive governance;
- (2) Strengthened community engagement and capacity building;
- (3) Investment in infrastructure, research, and digital tools;
- (4) Balanced environmental management and robust food-safety assurance.



Pollution

Water Quality

OCP's water quality work in Ghana centred on generating baseline evidence on ecological and aquatic health conditions across key coastal and estuarine shellfish-growing areas. A major activity involved a coordinated field sampling campaign across eight water bodies—including the Amanzule, Whin and Amissano estuaries, Narkwa Lagoon, the Densu Delta, Volta Estuary (Big Ada and Tunu), Keta Lagoon, and Lake Volta. This work formed part of an integrated programme titled *Rapid Assessment of Water and Sediment to Support Safe Aquaculture in Ghana*, jointly designed to align with the OCP, GCRF and Fleming Fund investments. The sampling programme collected water and sediment data to assess ecological health, potential contamination risks, and overall suitability for safe and sustainable shellfish production.

The water quality work also linked to the broader *Water Quality and Aquatic Health Assessment Project*, which involved collaboration with ACU postgraduate students and Ghanaian institutions to build long term in-country capability. Students were supported to align their research projects with OCP objectives, participate in field visits for practical training, and contribute to baseline monitoring discussions such as a potential annual or biannual coastal survey programme. This created a pathway for sustained monitoring and skills development across Ghanaian universities and agencies.

A key workstream involved harmful algal bloom (HABs) monitoring, where GAEC submitted a proposal to expand national HABs surveillance with technical support from Cefas. This proposal outlined plans to increase sampling coverage along the coast, train Ghanaian scientists, and generate datasets on phytoplankton dynamics and biotoxins—aimed at informing policy on water quality and public health.

Microplastics Laboratories

OCP funded two microplastic laboratories which have been installed at the University of Cape Coast and CSIR. The labs are already being used for capacity building, with ACU students involved in analysis. Progress has also been made in identifying national suppliers capable of replacing and troubleshooting key laboratory equipment. Longer-term ambitions include supporting the generation of an initial national microplastics dataset, developing an ongoing monitoring plan, and leveraging this evidence base to apply for future funding and produce associated reports, potentially supported through online workshops and a clear delivery timeline.

“We have been with OCP at the latter stages and we are looking forward to a long-term and sustainable partnership, where we will be able to develop microplastics research in Ghana.... We are therefore hoping to improve the research, expand the data and the scope of the data and be able to reach policy makers, particularly the Ministry of Environment, Science and Technology, which can help spearhead a paradigm shift in the country regarding behaviours around plastics and microplastics. This will support efforts to safeguard the country’s water bodies and other consumables from the effects of microplastics.

In the long term, we are seeking an opportunity to make a strong case to policy makers and influence decisions on how plastics are discarded and managed in the country”

Dr. Boniface Yeboah Antwi, Polymer Scientists, Senior Research Scientist, Materials and Manufacturing Division, CSIR-Institute of Industrial Research



Abandoned, Lost or Otherwise Discarded Fishing Gear (ALDFG)

Activities in Ghana have focused on establishing a baseline evidence base and identifying practical, community led solutions. Through a subcontract with CCM (2023/24–2025/26), baseline data were collected using monthly manual surveys over six months at eight coastal sites, alongside engagement with local fisherfolk to understand ALDFG sources and potential measures to address the ALDFG issue. Complementary work with Chaint Afrique (2023/24–2024/25) also engaged fishing communities to identify ALDFG pathways, develop outreach and advocacy materials on ALDFG impacts, and evaluate how learning from activities has been applied. This work was supported by national workshops, including an OCPP workshop in late 2024 on circularity in the fishing net sector in West Africa and a two day workshop in March 2025 on ALDFG and other fishing related litter. The ALDFG workshop addressed the nature, drivers, and impacts of ALDFG, and explored potential solutions and stakeholder roles, considering differential impacts across groups within Ghana. This multi-stakeholder workshop with representation from other West African countries, facilitated cross regional learning and identification of best practices with the ultimate aim to agree next steps and inform coordination efforts towards achieving programme outcomes.

ALDFG disproportionately affects vulnerable coastal groups, including women fish processors, small-scale fishers, and community members with limited economic resilience. The ALDFG workshop’s fieldwork and community based data collection approach created opportunities to strengthen participation of women fish processors and other often excluded groups in discussions about marine litter, gear management and mitigation measures. Since ALDFG directly affects coastal livelihoods and safety, the workshop’s emphasis on understanding fishing practices, gear use and beach litter dynamics provided an entry point to incorporate gendered and social inclusion considerations, ensuring that interventions address the needs of those most at risk.

Marine Litter Short course

The marine litter short course was developed and rolled out in phases, with the initial manual codesigned with African researchers in FY23/24 and further refined in FY24/25 alongside recorded lectures hosted on an online platform. The training programme was launched in October/November 2024, combining a one- month online course with two weeks of in--person training. Gender equality and social inclusion considerations are being reviewed to understand who is and is not accessing the course, with future plans to broaden participation beyond initially targeted ministries to include wider stakeholders such as waste pickers. From the outset, expectations were managed that any follow- -on training would require independent funding beyond OCPP, with CCM expected to take the course forward long term and explore adaptation for a broader audience in collaboration with the education department or minister.



Education

13 OCPP Master of Science scholarships were awarded in Ghana, managed by the Association of Commonwealth Universities (ACU), hosted at the University of Cape Coast, Department of Environmental Science. Eleven scholars successfully submitted their research projects by December 2025, with the remaining two finishing March 2026.

Scholars studied for MPhils under the following, with their research title aligning with OCPP priority themes:

- (1) Integrated Coastal Zone Management
- (2) Blue Economy, Governance and Social Resilience; or
- (3) Environmental Science

Topics selected by the student for their research areas included:

- Coastal Livelihoods, Socio-economics & Value Chains
- Coastal Ecosystems, Habitats & Nature-Based Solutions
- Pollution, Contaminants & Environmental Quality
- Water Resources, Hydro-geochemistry & Salinity
- Environmental Monitoring, Methods & Applied Technologies
- Waste Management & Circular Economy in Coastal Communities



“Integrated coastal management was one of the modules I really fell in love with, especially the topic in marine ecology, because it exposed me to some of the key issues in the marine space....

...Since I am very concerned about coastal issues, especially how coastal communities are able to access portable drinking water for their daily activities, I plan that after completing my studies I will volunteer or intern with organisations such as the Community Water and Sanitation Agency and WaterAid. This will help me gain more knowledge and insight into the issues affecting coastal communities”

Edna Makubedu, OCPP scholar studying Integrated Coastal Zone Management at the University of Cape Coast

GEDSI

Social Development Direct were contracted by Cefas to conduct a national level Gender Equality, Disability and Social Inclusion (GEDSI) analysis for Senegal. A GEDSI analysis helps to understand how power relations, social norms, attitudes, and beliefs shape and impact the opportunities, rights, services, and resources available to different social groups, as well as their experiences of discrimination and poverty (SDDirect, 2023). This is critical in being able to assess inequalities and social exclusion, tackle rather than perpetuate inequalities, remove barriers and leave no-one behind (FCDO, DESNZ, DEFRA, 2025).

The report identifies who the most marginalised and vulnerable groups living in coastal communities in Senegal area and the challenges that women and girls, persons with disabilities, the LGBTQI+ community,

people living with HIV, children and young people and migrants face. The analysis also explores how these groups are at risk from future environmental degradation. The analysis provided a series of recommendations for OCPP to take forward and consider through programme delivery to ensure a robust GEDSI approach.

To support consistent implementation across the partnership, OCPP has developed a comprehensive GEDSI Toolkit for the blue economy that will provide practical guidance, templates and monitoring tools. The toolkit has been translated into several languages. It will help country teams and partners identify and address GEDSI risks, strengthen safeguarding protocols, and integrate inclusive design principles into future programming and transition planning.

OCPP repository link to OCPP GEDSI Analysis in Ghana conducted by SD-Direct: [OCPP GEDSI Analysis: Ghana](#)

Safeguarding

The report highlights that Ghana's coastal regions, despite their economic reliance on fisheries, suffer from entrenched poverty, environmental degradation, and systemic exclusion. Vulnerable groups include small-scale fishers, women, children, persons with disabilities, migrant fishers, and LGBTQI+ individuals. Women play vital roles in the fisheries value chain but face significant barriers to participation and leadership due to socio-cultural norms and limited access to education. Environmental threats such as marine pollution, climate change, and overfishing exacerbate these vulnerabilities, often leading to gender-based violence (GBV), child labour, and exploitation.

Safeguarding concerns, particularly around sexual exploitation, abuse, and harassment (SEAH), are underreported but prevalent. Practices like "sex-for-fish" and the impacts of the fisheries "closed season" further expose women and children to harm. The report calls for stronger safeguarding frameworks across OCPP partners, inclusive programming from the outset, and targeted research to address data gaps—especially around disability inclusion.

Recommendations include promoting inclusive dialogue, ensuring women's representation in decision-making, building GEDSI into programme design, and endorsing the CAPSEAH commitment to tackle SEAH. The report underscores the need for multi-stakeholder collaboration and sustained efforts to transform harmful norms and promote equitable marine management.

Key findings from Ghana deployment:

- Ghana's coastal communities are under significant pressure due to rapid population growth, urbanisation, and heavy reliance on fisheries for food security and livelihoods. Overexploitation, illegal fishing, and lack of alternative income sources have left many vulnerable, with women playing a key role in shell fisheries such as clam and oyster harvesting.
- Commercial aquaculture is emerging but faces challenges from water quality issues, disease, and limited infrastructure. The government aims to expand aquaculture production significantly by 2027.

Annex 1 – full stakeholder list

Relevant government departments responsible for fisheries, marine environment, science and education, community development, and planning and budgeting

- Ministry of Fisheries and aquaculture development
- Fisheries Commission
- Ministry of Sanitation and Water Resources
- Land Use and Spatial planning Authority
- Ghana Statistical Service
- Water Research Institute (Council for Scientific Research)

Science and higher education organisations working on fragile marine ecosystems (incl. environmental, social / human sciences, and political economy sciences)

- Department of Marine and Fisheries Science (University of Ghana, Legon)
- Water Research Institute (Council for Scientific Research)
- University of Cape Coast

Civil society organisations working on policy advocacy related to marine environment, fisheries, DRR and community development in coastal or marine-related areas

- Plastic Punch
- Ghana National Plastic Action Partnership
- Chaint Afrique
- Smart Nature Freak youth Volunteers Foundation (SNFVF)

Stakeholder Category	Key Actors	Roles & Responsibilities
Government Agencies	MoFA, Fisheries Commission, MEST, EPA, WD, GMA, Navy, GPS Marine Unit, MoJAGD, MMDAs, LUPSA	Policy, regulation, enforcement, ecological assessments
Local Communities	Fishers, women processors, estuarine & coastal groups	Provide local ecological knowledge (LEK), cultural stewardship, voluntary compliance
Traditional Authorities	Chiefs, chief fishermen, queen mothers, customary councils	Enforce customary rules, mediate conflicts, uphold cultural practices
International Organisations	JNCC, IUCN, WB, USAID, GEF, FCWC, UN agencies	Funding, technical assistance, global policy alignment
Cooperatives, Committees & Associations	NAFPTA, CEWEFIA, GNCFC, LaBEC, MPA-TAC, Fisheries Mgmt Committees	Represent fishers & women traders, co-management, local mobilization
NGOs	FoN, Hen Mpoano, EJF, GWS, NCRC, WiLDAF	Advocacy, awareness, monitoring, technical expertise
Universities & Research Institutions	UCC, STC, COMADRIP project	Research, capacity building, participatory monitoring
Private Sector	Fisheries companies, oil & gas (Tullow, ENI), Pioneer Food Cannery, tourism operators	Investment, employment, infrastructure, R&D funding
Media	Print, electronic, community radios	Awareness raising, shaping public opinion, accountability
General Public / Non-Coastal Groups	Broader Ghanaian society	Indirect beneficiaries of marine conservation

Annex 2 – full list of OCPP scholar research titles

1. Examining the Socio-economic impact and vulnerabilities of shellfish harvesting in Ghana: A Pathway to Sustainable Development and Resilient coastal communities in Ghana.
2. Synthesis of Iron-Alumina Activated Carbon Composite via the Sol-Gel Method for the Removal of Mercury from Pra Estuary
3. Assessment of Microplastic Pollution in the Muni-Pomadze and Fosu Lagoons
4. Assessment of groundwater salinity in the Cape Coast Metropolis using hydrogeochemistry and stable isotopes markers
5. Effects of Tourists' Perception of Marine Litter and Willingness to Pay for Cleaner Beaches in Ghana
6. Baseline Sanitary Survey of Community Managed Oyster Growing Areas in Ghana to Assess Food Safety and Support Livelihoods - A Case Study of Narkwa in the Central Region
7. Value chain analysis of dried fish in Ghana: enhancing sustainability and market efficiency
8. Suitability of Microtox Assay as a Screening Tool for the Assessment of Environmental Pollutants in Ghana
9. Valorization of organic waste to compost in selected coastal communities in Komenda- Edina - Eguafo – Abirem Municipality of Central Region, Ghana .
10. Cost- Benefit Analysis of A Mangrove Restoration Project at the Densu Delta Ramsar Site
11. Assessing the vulnerability of mangrove forests in the Amanzule wetlands in Ghana
12. Species sensitivity of organisms to turbidity of the Pra Estuary