



Poseidon remained as busy as ever in 2020 despite the Covid-19 pandemic, finding new ways to work remotely and completing many desk-based consultancy and research projects once travel restrictions were introduced. Reducing the carbon footprint of our work from reduced travel is welcomed, but we look forward to being able to engage face-to-face again soon with our clients, stakeholders and colleagues.

### Fisheries governance

During 2020 we developed, tested (in Namibia and Madagascar) and finalised a training programme for countries wishing to prepare and implement **National Plans of Action in support of the implementation of FAO's Small-Scale Fisheries Guidelines**. We also assisted FAO with communication messages and activity planning for the International Year of Artisanal Fisheries and Aquaculture in 2022. Also in Africa, we continued our 3-year project providing assistance in Liberia to **build the capacity of the National Fisheries and Aquaculture Authority** providing expertise and support in fisheries management, legislation, economics, fish hygiene, and fishing patrol vessel operations.

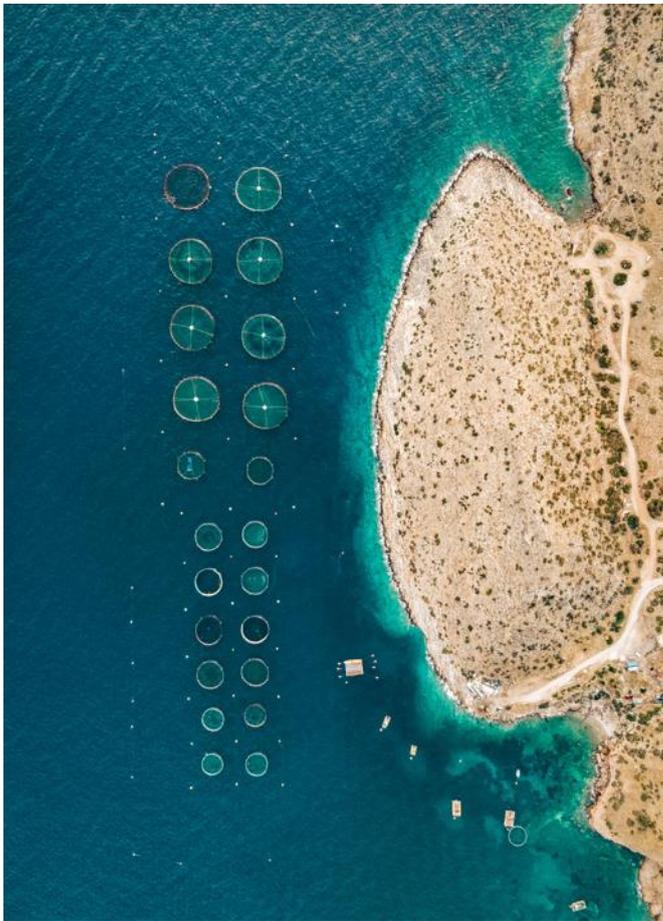
In the Asia/Pacific region we started work at the end of 2020 on developing a **fisheries sector master plan for Orissa in India**. And we completed a feasibility study for the Association of Southeast Asian Nations (ASEAN) of an **ASEAN General Fisheries Policy**. We also assessed progress by **Asia-Pacific Fisheries Commission (APFIC) countries in combatting IUU fishing** and evaluated their national plans of action to prevent, deter and eliminate IUU fishing (NPOA-IUU).

Continuing on the theme of combatting IUU fishing, we completed a study to evaluate **supply sectors of goods and services to distant water IUU fishing vessels**. And we were commissioned at the end of 2020 to **update our IUU Fishing Index**, and a new set of indicator scores will be provided by the middle of 2021.

Poseidon has worked on research and measures to reduce the impact on the marine environment from **fishing gear and plastic waste** for many years. Thankfully 2020 saw this issue gain even more global attention. Poseidon contributed by:

- completing a study to support the implementation of obligations set out in the EU Directive on the reduction of the impact of certain plastic products on the environment and in the revised Directive on port reception facilities.
- assisting the Marine Stewardship Council (MSC) to assess whether 'ghost gear', its impact and its management should be included within the MSC fisheries certification standard.
- working in Indonesia to assist with implementation of the government's 2017-2025 National Plan of Action on Marine Plastic Debris.
- providing an update of the Global Ghost Gear Initiative (GGGI) Best Practice Framework for Fishing Gear Management.

In Ireland we are working on a model for **ecological risk assessment** to assess habitat and species impacts and recoverability from fishing.



Aquaculture in Europe

## Aquaculture sector

Aquaculture is one of the world's fastest growing food-producing sectors, and accounts for nearly half of the world's fish production.

In 2020 Poseidon continued to provide global expertise to the aquaculture sector, some of our assignments included:

- preparation of a realistic, action-oriented and forward-thinking **English Aquaculture Strategy** for the next 20 years, with growth targets and a short, medium- and long-term delivery plan.
- development of a '**Best Practice Framework to Reduce Marine Debris from Aquaculture**', to reduce the accidental or deliberate loss of aquaculture-derived plastic to the marine environment.
- evaluation of a US\$ 6 million grant programme in Indonesia to **support sustainable aquaculture practices**.
- continued due diligence for **Project Sea Dragon** in Australia, one of the largest aquaculture development projects in the world.
- moderating an EU workshop on aquaculture producer organisations and cross-border cooperation.

## Environmental certification and Fisheries Improvement Plans (FIPs)

Poseidon completed many fishery assessments, re-assessments, and surveillance audits during the year, benchmarking and scoring fisheries against the **Marine Stewardship Council (MSC)** standard. Work in 2020 related to:

- Greenland lumpfish
- Shetland inshore mussels
- Dutch *ensis* (razor clam)
- Chinese crayfish
- Western Australia Exmouth Gulf prawn trawl
- West Greenland shrimp
- South Australia Spencer Gulf prawn trawl
- Dutch hand-raked cockles
- Greenland halibut
- Western Australia Shark Bay prawn trawl

Our recent and ongoing work on **Fisheries Improvement Plans (FIPs)**, often a pre-cursor to MSC-certification, includes:

- deepwater snapper and grouper in Indonesia
- handline caught tuna in Vietnam
- clam and crayfish fisheries in China
- Mediterranean Gulf of Lion wedge clam in France
- Channel scallops, monkfish, lemon sole, plaice, crab and lobster in the UK
- nephrops and scallops in the UK.



*Nephrops norvegicus*, also known as nephrops, Norway lobster, Dublin Bay prawn, scampi and langoustine

## Evaluation

Through our evaluation expertise we aid clients in decision-making about policy and public expenditure, and generate lessons to inform future interventions. In 2020 we completed a baseline and interim progress assessment of a project in the **Philippines to combat IUU fishing** using space-based intelligence. Under Poseidon's framework contract with DG MARE (in association with F&S and Megapesca) we completed an ex-ante evaluation of a potential **Sustainable Fisheries Partnership Agreement (SFPA)** between the EU and Guinea.



## Evaluation (continued)

Much of our evaluation work last year was in Europe, with projects for the European Commission and national governments including:

- an evaluation of how **marine spatial planning** benefits specific blue economy sectors.
- an impact assessment of the revision or removal of the **marketing standards** for fisheries and aquaculture products in Europe.
- an evaluation of **Ireland's European Maritime and Fisheries Fund (EMFF) programme** (2014-2020) to inform future programme development.
- an evaluation of the EU's '**Deep-Sea Access Regulation**' governing access to deep-sea fishing and setting conditions for protecting vulnerable marine ecosystems in international and EU waters.
- support to Member States on the Common Monitoring and Evaluation System of the **EMFF**.

## Renewable energy

We are involved with several large-scale offshore renewable energy projects, primarily to assess the **potential impacts of offshore wind farm development on the commercial fisheries sector**.

Work includes the preparation of Environmental Impact Assessment scoping studies as part of the ScotWind bidding process around Scottish waters, and further afield, including in the Philippines.

We are currently undertaking detailed commercial fisheries impact assessments for:

- Dublin Array offshore wind farm in the Irish Sea
- Rampion 2 in the English Channel
- Awel y Môr off the north Wales coast
- Hornsea Four in the North Sea, and
- Sheringham Shoal and Dudgeon Extension projects off the English Norfolk coast.

Additionally, we continue to provide post-consent support to offshore wind farms approaching construction, including Environmental Clerk of Works and commercial fisheries monitoring for the Neart na Gaoithe offshore wind farm off the east coast of Scotland.



Offshore wind farm

## Economic studies

Poseidon was involved in several economic studies during 2020 in fisheries, aquaculture, and the blue economy.

These included a global study on methodologies to assess the volumes and values of reported **tuna transshipments**, and a number of projects examining the **feasibility and justification for fisheries infrastructure developments**, including:

- an ongoing engagement to develop the Northern Ireland Fishing and Seafood Development Programme for marine infrastructure investment.
- developments to create a modern commercial fisheries complex in Sutton Harbour, in south-west England.
- a cost benefit analysis on Bina harbour investments and processing factory in the Solomon Islands.

Work in the Asia/Pacific region included long-term commitments to support PNA countries in **economic modelling of tuna fleets** to inform the setting of access fees, and an assessment of purse seine **vessel economics under Covid-19**, and a **cost recovery and cost benefit analysis** for electronic reporting for the PNA longline fleet.

We also supported detailed due diligence studies of a potential large-scale **shrimp sector investment** in the region.

In Malta we conducted a needs assessment for the government regarding the fisheries and seafood sector in advance of **European Maritime Fisheries and Aquaculture Fund (EMFAF) funding programme development** (for 2021-2027).