aquacross

37

Business Brief: AQUACROSS Recommendations for fisheries in relation to aquatic ecosystem management

WHY IS MARINE BIODIVERSITY IMPORTANT FOR FISHERIES?

Marine biodiversity is the range of fish, other wildlife, plants and other living organisms in seas and coastal areas. Healthy and functioning marine ecosystems that support diverse species and resilient fish populations are critical for the long-term sustainability of the fishing industry. For example, area-based closures of fisheries help increase the size of fish populations and individuals, both of which benefit fisheries in neighbouring areas.

However, fisheries activities put a range of pressures on marine biodiversity that can also threaten the long-term sustainability of fish stocks. The AQUACROSS case studies illustrate several ways in which fisheries affect marine ecosystems. For example, the AQUACROSS case study in the North Sea (see Case Study: North Sea) identified sea bed damage from fishing as a risk to the marine ecosystem. Other pressures include extraction of species (including unintentional bycatch), marine litter (including fishing nets and gear), boat traffic and underwater noise. The pressures that arise from poorly managed fisheries increase risks to their long-term sustainability.

The fishing sector benefits from efforts to protect and restore aquatic ecosystems. Such efforts help to reduce risks to operations from insufficient fish stocks and ensure compliance with legislation such as the Common Fisheries Policy, Marine Strategy Framework Directive, and the Maritime Spatial Planning Directive, for example. Engaging in marine ecosystem protection also offers corporate social responsibility benefits and competitive advantages in 'green' markets. For example, it can assist with meeting the standards of certification schemes such as the Marine Stewardship Council's Fisheries Standard.

AQUACROSS identified ecosystem-based management as a cost-effective way of protecting aquatic biodiversity while maintaining sustainable economic activity. Ecosystem-based management (see Introducing Ecosystem-based Management (EBM)) involves any management or policy options intended to restore, enhance and/or protect the resilience of the ecosystem.

AQUACROSS RECOMMENDATIONS FOR FISHERIES

- **Fisheries businesses should identify both how their business depends on functioning marine ecosystems and how their operations impact such ecosystems.**
  Fisheries should seek to understand the link between fisheries, the pressures it causes to the aquatic environment (e.g. sea bed disruption, marine litter), the impacts on aquatic biodiversity, and how those impacts affect fish stocks. In this way, businesses can identify effective measures that reduce the most important impacts and manage risks to fisheries. For example, the AQUACROSS case study in the North Sea (see Case Study: North Sea) considered extensions of existing fisheries management measures and some novel management approaches, such as habitat credits. The North Sea case study concluded that some measures are 'win-wins' - they minimise the impacts of fisheries and sustain landings and revenue. For example, habitat credits were identified as an opportunity to reduce impacts of bottom trawl fisheries in this case study by incentivising fishing of less sensitive habitats or using a fishing gear that causes less seabed disturbance.

- **Fisheries should collaborate with other companies and sectors in their area.**
  Engaging with other companies and sectors operating in marine environments, particularly those introducing risks for fisheries, such as renewable energy and tourism, can help ensure that policy decisions are multi-beneficial, including for fisheries. This collaborative approach can help to coordinate the institutions and regulations that govern the environment, fisheries and other relevant sectors such as tourism, thus increasing their effectiveness. For example, in the AQUACROSS Azores case study (see Case Study: Azores) fisheries activities are affected by decisions to manage tourism impacts on marine biodiversity and vice versa. Coordination between the two sectors helps to identify management measures that protect the long-term interests of both, such as increased monitoring and enforcement of regulations to protect the fish stocks and other biodiversity on which they both rely, benefitting businesses that invest in compliance.

- **It is in fisheries' interests to ensure effective biodiversity protection.**
  While environmental protection can sometimes have short-term costs for fishers, in the medium and long term, fisheries rely on the long-run health of marine ecosystems. Accordingly, while fisheries are right to be mindful of the short-term costs of protecting the environment, they should always remain attentive to the potential benefits, and should demand effective protection. In the AQUACROSS Azores case study (see Case Study: Azores), local commercial and recreational fishers supported monitoring and evaluation, to ensure that the Marine Protected Area was effectively protecting biodiversity and increasing fish stocks.

- **Fishers can provide knowledge to support protection of aquatic biodiversity.**
  Some relationships between human activities, aquatic ecosystems, and the benefits they provide to human society can only be understood with fisheries knowledge from the private sector. Providing this knowledge supports the identification of effective ecosystem management measures.

Further information

This is one of 38 short briefs summarising the key results of the AQUACROSS Project. For more detailed information on the topics covered in this brief, see the following:

- AQUACROSS Business Brief: The business benefits of engaging with the Sustainable Development Goals.