

Consultations on the Conservation and Management Strategy for Sharks and Rays in the Gulf of Guinea Region

Saly, Senegal, 5 September 2023

CMS/Shark-Ray-Strategy/Draft Strategy

DEVELOPMENT OF A CONSERVATION STRATEGY FOR SHARKS AND RAYS IN THE GULF OF GUINEA REGION

Background

1. Within the Gulf of Guinea region, there are a number of CMS Appendix I listed species with high conservation significance which include the Whale Shark (*Rhincodon typus*), Great White Shark (*Carcharodon carcharias*), Basking Shark (*Cetorhinus maximus*), Oceanic Whitetip Shark (*Carcharhinus longimanus*), Smalltooth Sawfish (*Pristis pectinata*), Largetooth Sawfish (*Pristis pristis*), Reef Manta Ray (*Mobula alfredi*¹), Giant Manta Ray (*Mobula birostris*), Bentfin Devil Ray (*Mobula thurstoni*), Box Ray (*Mobula tarapacana*), and the Lesser or Atlantic Devil Ray (*Mobula hypostoma*).
2. Shark and ray research and conservation efforts are of crucial importance given their imminent risk of extinction, as highlighted by concerning declining population trends linked with overfishing (Pacoureaux et al., 2021, Sherman et al., 2023). In particular, monitoring species-specific landing trends in fisheries, assessing trade in elasmobranch products, and gathering information on their socio-economic context are crucial to identifying effective strategies to improve the management of sharks and rays.
3. While progress has been made to gather such information in many shark and ray species fishery hotspots worldwide, there is comparatively little data available from the Gulf of Guinea region. Possible causes of this are the relatively low capacity to conduct fishery and ecological research (e.g., few institutes with programs focused on shark research to train researchers) and the lack of funding to conduct research studies focused on sharks.
4. Yet, while the elasmobranch research community is relatively small in the Gulf of Guinea, important milestones have been reached by multiple institutions in the region (& the greater West Africa), and highly relevant research has been conducted, especially in recent years (e.g., see Midinoudéwa et al., 2020; Maia et al., 2018; Seidu et al., 2022a; Seidu et al., 2022b; Leurs et al., 2021; Metcalfe et al., 2022; Diop, 2016; Laurentino, 2020; Leeney & Quayson, 2022; Moore et al., 2019; N'Gouan et al., 2021).
5. Many of the most active researchers working in the field with sharks and rays in the Gulf of Guinea area are early career scientists, but all researchers including in governmental or academic institutions, often indicate feeling isolated and find it difficult to broaden their network with peers from the region, share lessons learned, or develop collaborative research and conservation projects at a regional scale.

¹ Taxonomy and nomenclature align with the recent version of Fricke, R., Eschmeyer, W. N. & R. van der Laan (eds) 2023. ESCHMEYER'S CATALOG OF FISHES: GENERA, SPECIES, REFERENCES as the standard reference for fish.

Development of the Gulf of Guinea Sharks and Rays Strategy

6. To improve conservation of sharks and rays in the region and to support the development of a regional Conservation Strategy and Action Plan, a Gulf of Guinea Elasmobranch Network has been established in 2023. A group of experts was gathered in Kribi, Cameroon from June 5th to 10th, 2023, co-hosted by The Manta Trust and African Marine Mammal Conservation Organisation (AMMCO).
7. Key representatives from coastal fishing nations in the region working towards shark and ray conservation were invited to attend the GoG Elasmobranch Network meeting. It consisted of an informative conference and workshop that was held as part of the 3rd edition of the Street Whale event. Representatives working in Cameroon, Nigeria, Cote d'Ivoire, Benin, Ghana, Angola, São Tomé and Príncipe, Gabon, Democratic Republic of the Congo, Mauritania, Guinea-Bissau attended the workshop.
8. During this first Gulf of Guinea Elasmobranch Network meeting, a regional conservation strategy was drafted, which is provide in the Annex to this document.
9. Range States to this strategy are Angola, Benin, Cameroon, Cote d'Ivoire, the Democratic Republic of Congo, Equatorial Guinea, Gabon, Ghana, Guinea, Liberia, Nigeria; Mauritania, Republic of Congo, São Tomé and Príncipe, Senegal, and Togo. All Range States are Parties to CMS and with the exception of Angola, Cameroon, Equatorial Guinea, Gabon, Republic of Congo, and Sao Tome and Príncipe, who are also Signatories to the Sharks MOU.
10. The overall vision of this strategy is for thriving shark and ray populations in the Gulf of Guinea achieved through improved governance, enhanced knowledge, and sustainable solutions for communities. The strategy will serve to implement five goals of the Gulf of Guinea Elasmobranch Conservation Strategy through 1) effective and adaptive management of shark and ray fisheries, 2) habitat management, 3) research, 4) sustainable livelihoods and 5) awareness of sharks and rays within the Gulf of Guinea Region. The activities to support these goals are detailed further within the strategy.

Consultation Process

11. The 'Draft Conservation Strategy for Sharks and Rays of the Gulf of Guinea region' is provided in the Annex to this document. Range State representatives and experts are invited to discuss the draft strategy at this meeting and to contribute towards its finalization by providing comments in writing to the Secretariat (cms.secretariat@cms.int; cc: andrea.pauly@un.org) by **31 October 2023**.
12. A final draft Strategy will thereafter be circulated amongst Range States and will inform the development of a **regional Action Plan** that will contain concrete actions, timelines, measurable outputs and that will mention all different actors involved with the implementation of activities.
13. Range States are encouraged to take an active role in the development of this Action Plan to ensure that national priorities and goals are being reflected appropriately. These consultations will be undertaken in writing in 2024 and will be facilitated by the Secretariat.
14. The final draft Conservation Strategy and Action Plan for Sharks and Rays in the Gulf of Guinea region is planned to be proposed for adoption at the 5th Meeting of the Signatories to the Memorandum of Understanding on the Conservation of Migratory

Sharks, scheduled for 2025, and at the 15th Meeting of the Conference of the Parties to CMS, scheduled for 2026.

Action Requested

15. Range States and experts are requested to:
 - a) Review the “Draft Conservation Strategy for Sharks and Rays in the Gulf of Guinea region” included in the Annex to this document and provide comments in writing by 31st October 2023; and comments will be considered to finalize the strategy’; and
 - b) Contribute to the development of a regional Action Plan for Sharks and Rays in the Gulf of Guinea region.

DRAFT CONSERVATION STRATEGY FOR SHARKS AND RAYS IN THE GULF OF GUINEA REGION

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Vision: Thriving shark and ray populations in the Gulf of Guinea achieved through improved governance, enhanced knowledge, and sustainable solutions for communities.

Goal A. Fisheries. Effective and adaptive management of shark and ray fisheries (target and bycatch).

A1. Small-scale fisheries

1. Introduce fishing bans for targeted shark fisheries.
2. Introduce fishing gear restrictions (i.e., gear swaps, specify filament type, minimum and maximum mesh size).
3. Develop a list of protected elasmobranch species (most threatened species).
4. Introduce bycatch reduction measures (i.e., Bycatch Reduction Devices to avoid bycatch, live release measures to reduce mortality).
5. Limit fishing effort by ensuring fisheries access is limited and access restricted (e.g., no additional licenses for fisheries of concern, introduce a registration/license system for shark and ray fisheries).
6. Protect Human Rights for fishers (ensure equality among fishery actors).
7. Make cross-border fishing agreements (e.g., regulate the number of fishing vessels operating abroad).
8. Improve efficiency of trade (ie. post-harvest processing, and traceability).

A2. Industrial fisheries

1. Ensure existing legislation is enforced (i.e., use of VMS information for Marine Protected Areas (MPAs) small-scale fishing zones, prevent IUU Illegal, Unreported and Unregulated (IUU) fishing).
2. Ban shark finning (provision of ICCAT- needs to be translated into National policy).
3. Develop national level legislation relating to elasmobranch product exportation to enter compliance with Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
4. Reduce fishing effort (i.e., reduce fleet sizes, define maximum length of fishing trip).
5. Ban fishing gear targeting elasmobranchs (e.g., specific gear, hook, leader, bait types).
6. Monitor industrial catches (make onboard observers or camera systems mandatory, monitor transshipment, and landings- based on fishing agreement type).
7. Develop species-specific Total Allowable Catch (TAC) quotas.
8. Limit bottom trawling.
9. Enforce seasonal bans on industrial fisheries.
10. Include shark and ray provisions in fisheries agreements, and funding accountability (bilateral agreements should mirror existing European Union regulations).

11. Limit number of Fish Aggregation Devices (FADs) and material (to reduce elasmobranch bycatch).

Goal B. Area-based management. Effective and adaptive management of areas important for sharks and rays.

1. Reinforce and standardize monitoring and evaluation of Marine Protected Areas (MPAs) (i.e., maximize spatial coverage, training, use of relevant tools- METT).
2. Identify priority habitats for sharks and rays.
3. Review legislation for MPAs and use adaptive management (makes sure MPA management is not obsolete).
4. Define a legislative framework for elasmobranchs within existing, and new MPAs.
5. Include local communities in area-based management.
6. Ban industrial fishing in MPAs and define limits for fishing between small-scale and industrial fisheries to avoid conflict.
7. Promote participatory research approaches (strengthen the relationship with local community and promote involvement in monitoring and other research).
8. Introduce and enforce seasonal closures (ie. during reproductive periods).
9. Involve local leaders and head of fishing cooperatives in enforcement of area-based regulations.
10. Improve livelihoods in MPAs (eg. Support initiatives for MPA ecotourism).

Goal C. Research. Research priorities needed to support sharks and ray conservation in the Gulf of Guinea.

1. Obtain Local Ecological Knowledge.
2. Taxonomy of sharks and rays in the region (ie. collect voucher specimens, and sample databases, establish a list of species for the Gulf of Guinea).
3. Characterize fishery practices, catch and landing composition (species-specific landings, threat level, determine catch per unit effort, map fishing effort, develop stock assessments).
4. Identify important areas and migratory corridors for sharks and rays (breeding areas, feeding areas, resting areas- see ISRAs (IMPORTANT SHARK AND RAY AREAS)).
5. Study the interactions between fishers and elasmobranchs (ie. socio-economy, destruction of fishing gear, cultural impact of elasmobranchs on coastal populations, toxicology of elasmobranch meat and effects on consumers, etc.).
6. Support and involve local NGOs/Academic institutions in research (ie. through funding, scholarships, equipment, supervision/ training- data collection, survey design, statistics).
7. Characterise the population structure for elasmobranchs in the Gulf of Guinea (including population genetics, demography).
8. Characterise drivers, utilisation and trade of sharks and rays (ie. value chain, trading routes).
9. Identify fishing practices for bycatch reduction.
10. Assess life-history characteristics where missing.
11. Assess impact of conservation measures on community.

Goal D. Sustainable livelihoods. Priority actions needed to support the development of sustainable livelihoods in communities fishing sharks and rays.

1. Understand socio-economic profiles of stakeholders involved in elasmobranch fisheries.
2. Support communities in diversifying their income through artisanal production (ie. honey production, snail farming, salt production, etc.).
3. Promote a participatory approach to conservation activities and involve fishers in research through paid positions, either over short or longer-term contracts.
4. Add value to fishery-derived products (ie. post-harvest processing).
5. Diversify the ecotourism offer and ensure income generated reaches fishing communities.
6. Ensure ecotourism infrastructure is co-developed with communities.
7. Promote a circular economy, with opportunities for micro-credit to incentivize income diversification.

Goal E. Awareness. Priority actions to raise awareness of shark and ray conservation needs in the Gulf of Guinea.

1. Engage with the public about the importance of sharks and rays and why they should be conserved (incl. environmental education, which incorporates local ecological knowledge, and create a repository of relevant materials).
2. Identify all key actors involved in elasmobranch fisheries.
3. Promote sustainable livelihood programs with communities involved with fishing elasmobranchs.
4. Provide training for fishers (i.e. species identification, legal gear types and characteristics, legal fishing grounds, use of GPS (Global Positioning System), etc.).
5. Engage relevant stakeholders to ensure existing policies are enforced.
6. Engage relevant stakeholders to develop policies that support GoG Elasmobranch Conservation Strategy.
7. Develop elasmobranch species identification materials.
8. Organize regular events supporting the strategy across the region.
9. Promote knowledge transfer between the GoG Elasmobranch Network and the institutions in charge of fisheries.
10. Develop tools that summarize rights and duties of fishers, to support compliance.

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