Abandoned, Lost and Otherwise Discarded Gear (Derelict Gear) in Eastern Caribbean Small Scale Fisheries: A Legal Gap Analysis

Los Aparejos de Pesca Abandonados, Perdidos o Descartados en las Pesquerías del Caribe Oriental: Un Análisis de Brechas en el Marco Legislativo

Engins de Pêche Abandonnés, Perdus ou Rejetés (ALDFG) dans les Pêcheries des Caraïbes Orientales: Une Analyse des Écarts du Cadre Législatif.

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EXTENDED ABSTRACT

INTRODUCTION

Abandoned, Lost and Otherwise Discarded Fishing Gear (ALDFG) also referred to as derelict gear is a global problem that is associated with large-scale industrial fishing and small-scale/artisanal fleets alike. It has been shown that derelict fishing gear may result in significant deleterious impacts to marine habitats and wildlife (including many threatened species), can create navigational hazards and may lead to socioeconomic impacts to fisheries stakeholders (McFayden et. al., 2009). Such socio-economic impacts may be more acutely felt within small-scale fisheries, already grappling with declining fish stocks in the face of a changing global climate. While some work has been undertaken to understand the causes and impacts of fishing gear loss, abandonment or discard both internationally and in the Wider Caribbean region (McFayden et. al., 2009; Laist, 1997; Matthews 2010), significant knowledge gaps exist, as highlighted in the 2021 report of Working Group 43 of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (i.e. GESAMP) on Sea Base Sources of Marine Litter (GESAMP, 2021) and a meta-analysis by Richardson et al. (2019).

Surveys conducted by the FAO ahead of a 2019 regional workshop on derelict gear in Latin America and the Caribbean revealed that more than half of the respondents considered the issue of derelict gear to be of high or major concern in the area (FAO, 2020). However, survey respondents also noted that lack of reporting mechanisms, absence of regulations, inability to retrieve gear, and lack of awareness among fishers were among the most significant challenges to effectively managing the threat of derelict gear in the region (FAO, 2020). The current gap analysis is focused on understanding the policy and legislative gaps relevant to the management of derelict fishing gear in the member states of the Organisation of Eastern Caribbean States (OECS) and Barbados. It identified gaps in the regulatory regime not only nationally for the countries under review but also in the regional policy landscape.

METHODOLOGY

To undertake the gap analysis a review of the existing regulatory regimes for the management of derelict fishing gear was undertaken, taking account of the multi-level nature of governance that currently exists for managing this threat. In this regard, relevant international and regional instruments, bodies and initiatives were reviewed and assessment of the participation by the relevant countries and territories in such instruments. An evaluation of regional policies developed by relevant instruments and fisheries bodies was also made. To assess legislative and policy gaps, a benchmark was established based on the best practice and policy guidance garnered from the literature (McFayden et al., 2009; Huntington, 2016; Gilman, 2015; FAO, 2019; ICCAT, 2019). National legislation dealing with fisheries management, marine pollution and/or environmental protection were then analysed for each of the target countries and territories and assessed against the benchmark to determine whether there were any legislative gaps. In analysing national legislation, it was determined whether they included proposed preventative, mitigative and curative provisions as described in McFayden et. al. (2009).

RESULTS

At the international level, several key instruments exist relevant to the management of derelict fishing gear. The UN Convention on the Law of the Sea (UNCLOS) as the primary instrument for ocean governance, in Article 194 urges states to take measures to "prevent, reduce and control pollution of the marine environment from any source including pollution from vessels (UNCLOS, 1982). While it does not prescribe technical provisions for doing so, Article 211 (2) of the convention text encourages that states adopt laws and regulations to prevent ship-based pollution which have the "same effect as "generally accepted international rules and standards established through the competent international organization" (UNCLOS, 1982). Such generally accepted rules have been developed by the International Maritime Organisation (IMO) and its international instruments related to marine pollution from ships (MARPOL Annex V) and dumping (London Convention and London Protocol). Regulations 3 and 5 of MARPOL Annex V prohibits discharge of garbage including synthetic ropes and fishing nets in marine waters found both outside and within areas of the sea that are designated as special areas (International Maritime Organisation, 1992). However, the regulations do not apply in the case of fishing nets

or synthetic materials used for net repair that have been accidentally lost "provided that all reasonable precautions have been taken to prevent such loss" (International Maritime Organisation, 1992).

Additionally, both regionally and nationally, there exists significant gaps in the legislative and policy regime for the management of derelict fishing gear in the small-scale fisheries of the OECS and Barbados. While there is a growing attention to the issue of marine debris regionally, many of the initiatives have primarily focused on land-based sources. Notwithstanding this, the Regional Action Plan on Marine Litter (RAPMaLi) developed by the Caribbean Environment Programme has outlined a number of actions relevant to the management of derelict fishing gear including the need to establish special litter warden programmes focused on fishers, the need for fisheries research focusing on the impact of marine litter on wildlife, the need to develop specialised education programmes including those focusing on fishers and the need for collaboration with regional fisheries bodies. Regional fisheries bodies have also set out management recommendations on abandoned lost and otherwise discarded gear (ICCAT, 2019) while urging member states to adopt FAO's voluntary guidelines on gear marking (WECAFC 2019, FAO, 2019). However, in the case of the ICCAT's recommendations on ALDFG many of the small-scale fishers of the Eastern Caribbean member countries may be exempt to these recommendations which only apply to vessels over 12 m and are not applicable to long-line gear.

At the national level, the regulatory regime for management of derelict gear in the sub-region was found to be fragmented and relatively weak with significant legislative gaps. Provisions were split between national fisheries laws (which generally set out regulatory provisions that could aid in mitigating the impacts of derelict gear) and marine pollution or waste management laws as well as environmental protection laws as in the case of Antigua and Barbuda. Table one summarises the regional outlook for management of derelict gear within the OECS and Barbados, including whether the state/territory has ratified key international or regional instruments or is a member of a regional fisheries body that has developed policy guidance or management recommendations on the same. Part 5 of the table looks at the alignment of national fisheries regulations with key benchmarks.

Figure two considers the measures enshrined in other laws relevant to marine pollution management with a focus on whether such laws prohibited the purposeful discard of fishing gear or aligned with proposed curative measures related to reporting and removal of derelict gear. With the exception of the UK's Merchant Shipping Regulation which govern the British Overseas Territories, none of the laws reviewed included a requirement to report derelict gear. Several countries, however prohibited the discard of plastic netting and fishing line.

CONCLUSIONS

The issue of derelict fishing gear has received relatively little attention in the small-scale fisheries of the OECS and Barbados. Unfortunately, outdated and missing fisheries laws, ineffective marine pollution instruments that include provisions focused on marine-sources of waste, and complexities related to the multi-gear nature of the fisheries have resulted in a policy and regulatory landscape that falls short of effectively addressing the threat of derelict gear at the national level. Further, the fragmented nature of the regulatory and policy regime for managing derelict fishing gear nationally, highlights the need for the establishment of effective mechanisms for cross-sectoral cooperation and collaboration which may not currently exist within these states and territories. Legislative review and reform is urgently needed to effectively manage the challenge of abandoned, lost and discarded fishing gear within the small-scale fisheries of the OECS and Barbados.

KEYWORDS: Derelict Fishing Gear, Small Scale Fisheries, Eastern Caribbean, Legal Review, Gap Assessment

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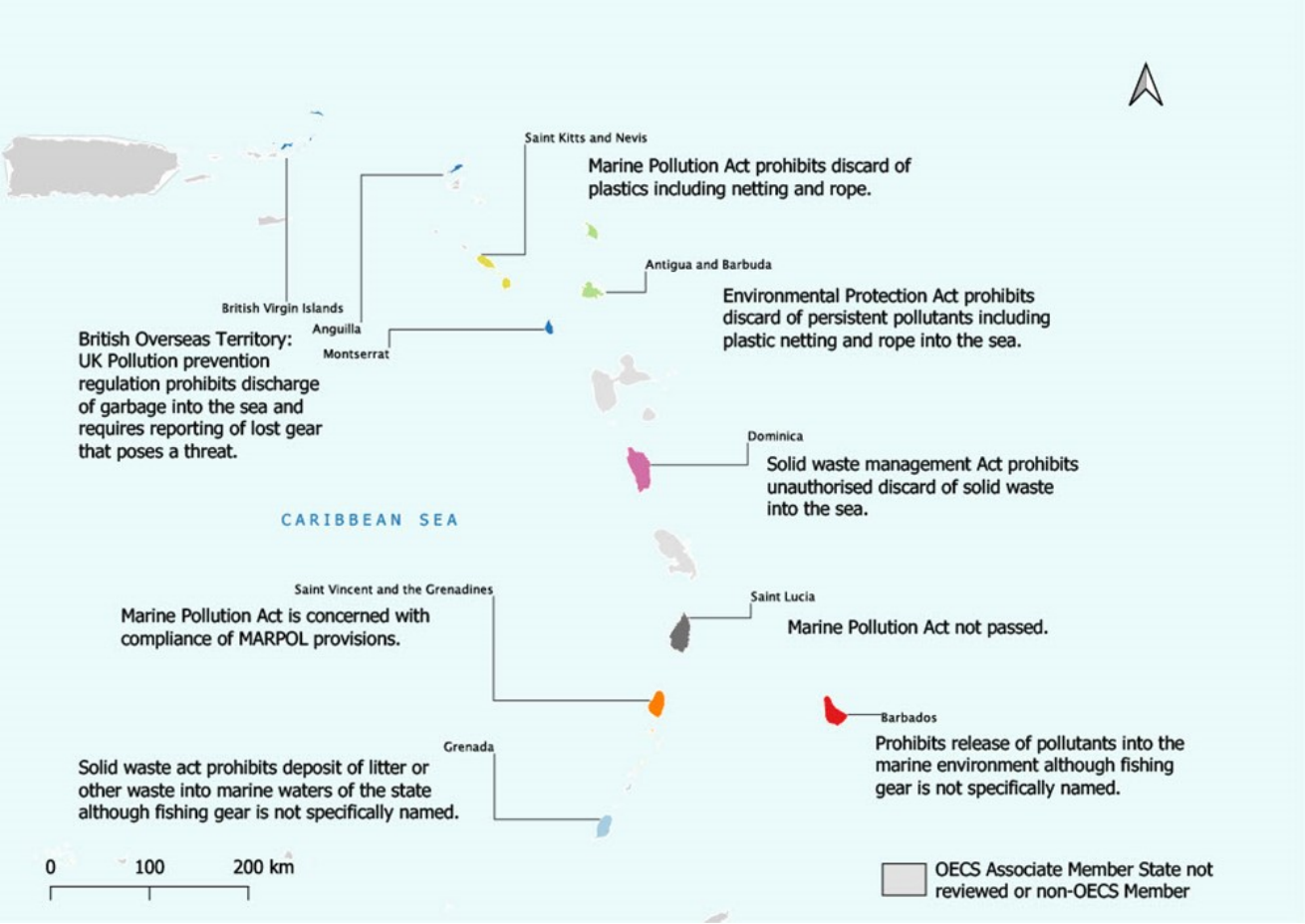

Figure 1. Provisions enshrined in Marine Pollution, Waste Management or Environmental Protection Laws Relevant to Management of Derelict Fishing Gear. (Produced by Sarah Mahadeo).

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Table 1. Summary of Member State ratification key regional and international instruments and fisheries management measures (● = all gear, ⭘= FADs only, ○= traps only; ¯= gillnets, ◆= Trawl nets, °= trammel or entangling nets).

REGIONAL OUTLOOK										
1.0 Policies and Programmes of Regional Bodies			UNEP-CAR/RCU	CAR-SPAW RAC	OECS	ICCAT	WECAFC	CFRM		
Has developed policy, plan or programme that includes provisions on marine litter			*	*	*					
Considers ALDFG in such policy, plan or programme			*	*						
Has developed management recommendation on ALDFG						*				
Has developed management recommendation on gear marking							*	*		
NATIONAL OUTLOOK										
2.0 Membership in International Environmental or Marine Debris Instruments	**ANG**	**AB**	**BAR**	**BVI**	**DOM**	**GRE**	**MON**	**SKN**	**SLU**	**SVG**
UNCLOS	*	*	*	*	*	*	*	*	*	*
MARPOL Annex V	*	*	*	*	*		*	*	*	*
London Convention	*	*	*	*			*		*	*
London Protocol	*	*	*	*			*	*		
3.0 Membership in Regional Environmental instruments	**ANG**	**AB**	**BAR**	**BVI**	**DOM**	**GRE**	**MON**	**SKN**	**SLU**	**SVG**
Cartagena Convention	*	*	*	*	*	*	*	*	*	*
SPAW Protocol			*			*			*	*
4.0 Membership in Regional Fisheries Bodies	**ANG**	**AB**	**BAR**	**BVI**	**DOM**	**GRE**	**MON**	**SKN**	**SLU**	**SVG**
ICCAT	*		*	*		*	*			*
WECAFC	*	*	*	*	*	*	*	*	*	*
CRFM	*	*	*		*	*	*	*	*	*
5.0 National Fisheries Management Measures	**ANG**	**AB**	**BAR**	**BVI**	**DOM**	**GRE**	**MON**	**SKN**	**SLU**	**SVG**
Preventative Measures										
Gear Marking	⭘○	●	○	○				⭘○	○	⭘
Traceability	*	*						*		*
Spatial Management										
Time Restriction for gear deployment – Gill nets.		*		*					*	
Gear Bans (on certain nets)	◇	◆	◈	◆◈					◈	◈

[1]In the case of Anguilla, the regulations allow for mesh size restrictions on nets but none have been stipulated

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Mitigation Measures										
Mesh size restrictions – Nets[1]	*	*	*	*				*	*	*
Mesh size restrictions – Traps	*	*	*	*				*	*	
Length Restriction – Gill nets/drift nets		*	*							
Biodegradable Panel - Traps		*		*						
Escape Hatch – Traps		*	*							
Ban use of corrosion resistant material on traps		*								

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