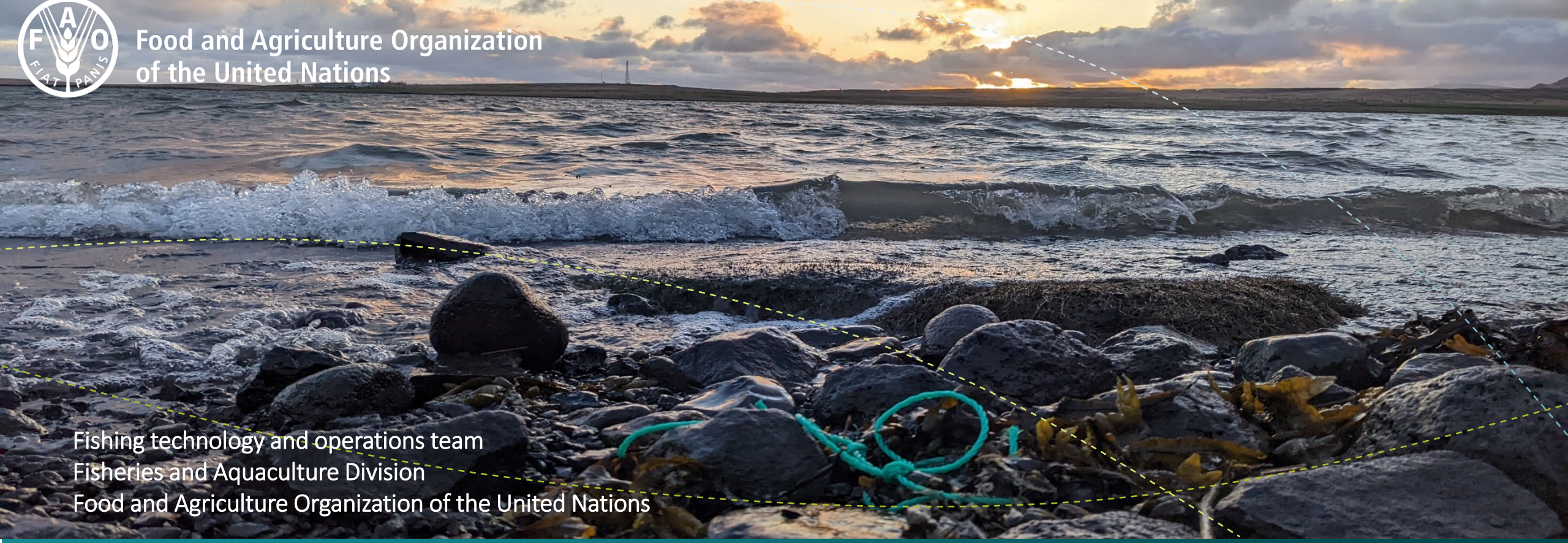
Food and Agriculture Organization
of the United Nations



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FAO Global Efforts to Prevent and Reduce ALDFG

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#ArcticPlastics2023

Outline

1. The Main FAO global efforts to mitigate ALDFG
2. The importance of marking the fishing gear
3. The FAO Global ALDFG Survey
4. The Arctic in this context

The Main FAO global efforts to mitigate ALDFG

Responsible Fishing Practices for Sustainable Fisheries

- **Voluntary Guidelines on the Marking of Fishing Gear (VGMFG) and supplementary materials:**
  - ***A Framework for conducting a risk assessment for a system on the marking of fishing gear***
  - ***Manual for marking fishing gear***
  - ***Operationalization of FAO Voluntary Guidelines for the Marking of Fishing Gear in the IOTC Area of Competence***

  https://www.fao.org/responsible-fishing/resources/en/

- **Projects and initiatives**

  FAO Global ALDFG Surveys

  IMO – FAO GloLitter Partnerships

  https://www.imo.org/en/OurWork/PartnershipsProjects/Pages/GloLitter-Partnerships-Project-.aspx

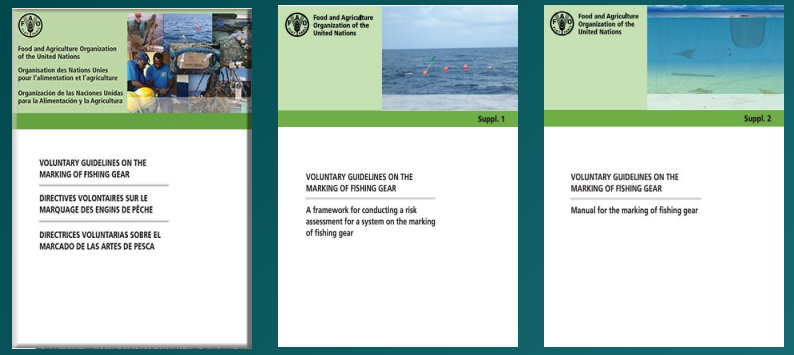
  GESAMP WG 43 – Sea-based sources of marine litter

  http://www.gesamp.org/site/assets/files/2213/rs108e.pdf

  ICES-FAO WGFTFB – Topic Group on ALDFG

- **Intergovernmental Negotiating Committee (INC) to develop global legally binding agreement on plastic pollution and IMO Marine Environment Protection Committee (MEPC)**

The Importance of Marking Fishing Gear



https://www.fao.org/3/ca3546t/ca3546t.pdf

https://doi.org/10.4060/cc4084en

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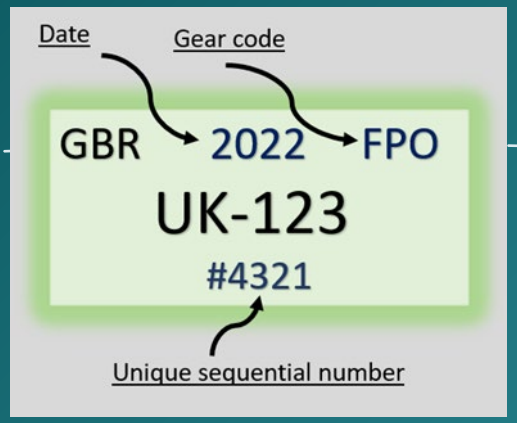


1. **Gear Marking for Ownership Identification:**
   - Implementing distinct markings on fishing gear is a systematic method for identifying ownership and origin.
2. **Longstanding Recognition as a Fisheries Management Tool:**
   - Acknowledged since the 1990s, gear marking has been established as a strategic tool for enhancing the comprehensive management of fisheries.
3. **Addressing ALDFG and Mitigating 'Ghost Fishing':**
   - The primary objective of gear marking is to counteract the issue of ALDFG and mitigate the occurrence of 'ghost fishing.'
4. **FAO Response to Global Marine Litter Concerns:**
   - Heightened global awareness and concern regarding marine litter prompted FAO members to revisit the significance of gear marking at COFI31 (2014), leading to renewed calls for FAO to undertake further initiatives in this domain.
5. **Integral Role in Combating IUU Fishing:**
   - In fisheries management, gear marking has gained recent recognition as a pivotal tool for detecting and addressing Illegal, Unreported, and Unregulated (IUU) fishing activities.

The Importance of Marking Fishing Gear

Critical provisions of marking the fishing gear

Global Scope: Applies to all fishing gear types worldwide

Ownership Identification: Gear marking system ensures **ownership identification for tracking**, reporting, recovery, and disposal, even if found far from the origin

Integration with Fisheries Management: Gear marking is considered within broader fisheries management measures, addressing ALDFG and IUU fishing

License Condition: Gear marking should be a condition of fishing authorisation or license

Accessibility: Gear marks should be accessible to inspectors and anyone handling the gear throughout its lifetime

Longevity: Gear marks should endure **the entire lifespan of the fishing gear**, from manufacture to disposal or recycling

The FAO Global ALDFG Survey

Background for establishing the survey

Estimate from 1975 based on person days and number of vessels

Commercial Fishing

According to the Food and Agriculture Organization of the United Nations, hereinafter referred to as FAO (1971), approximately 1.2 x 10^5 registered vessels, over 5 gross tons, are engaged in fishing for various countries (Table 8-7). We assumed an average crew complement of 20 per vessel (U.S. Department of Commerce 1972a, Ristori 1973), and the length of the fishing season to be two-thirds of the year (240 days). Using 5.8 x 10^8 person-days/year ([1.2 x 10^5 vessels][20 persons/vessel][240 days]) and a shipboard generation rate of 0.8 kg/person-day (Table 8-2), yields a total of 4.6 x 10^5 tons/year of litter.

We also estimated fishing activity by taking the regional estimates of the world fishery catch (Herring and Clarke 1971) and dividing this by the catch tonnage per crew-day from U.S. data (0.19 tons fish caught/crew-day) (Table 8-8) and using the shipboard generation rate of 0.8 kg/person-day. This yielded 2.8 x 10^8 person-days/year or 2.2 x 10^5 tons of litter/year (Table 8-9). We used the average (3.4 x 10^5 tons/year) of these two figures for our estimate.

Another source of debris from commercial fishing is the loss of fishing equipment such as polypropylene and nylon long lines, gill nets, and floats (Andersen 1973). If 1.07 x 10^3 ships in the Alaskan Gulf in 1972 lose 1.2 x 10^4 kg/year (U.S. Department of Commerce 1972a and 1973b), then 1.2 x 10^5 ships (Table 8-7) in the world fleet could lose 1.35 x 10^3 tons/year.

The global survey's development and planning follow recommendations from GESAMP WG43 on Sea-Based Sources of Marine Litter (refer to COFI/2020/SBD.8). FAO and IMO jointly lead this effort, with co-sponsorship from UNEP

http://www.gesamp.org/work/groups/wg-43-on-sea-based-sources-of-marine-litter

http://www.fao.org/about/meetings/cofi/documents-cofi34/en/

GESAMP WG 43 report disputes the ~~640,000 ton/year~~ estimates, which is an updated estimate from a 48-year-old publication

Conducting a global survey that involves fishers in estimation will support and complement other publications on ALDFG estimates, which may have used different methods or focused on specific regions

The FAO Global ALDFG Survey

Contact

Request for participation in the FAO Global ALDFG Survey
responsible-fishing@fao.org

Preparation

- LoA if needed
- Pre-survey-questionnaire for fishery profile
- Inform local authorities about the survey and request their fleet profile to complete the pre-survey questionnaire
- Sample size determined for each F.G.type
- Training for the interviewer and data entry
- Questionnaires translation into a local language
- Data portal registration

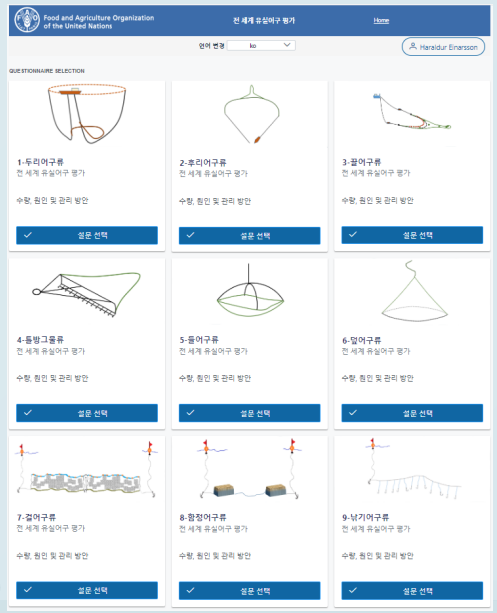
Survey

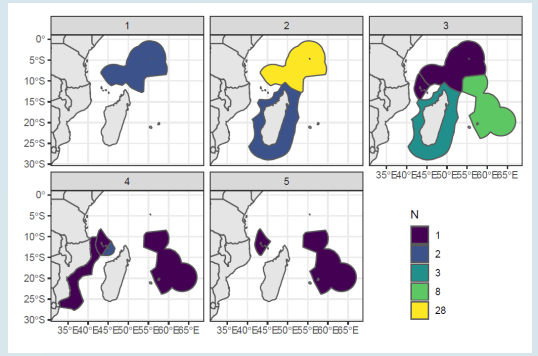
Survey conducted and data entered to the data portal

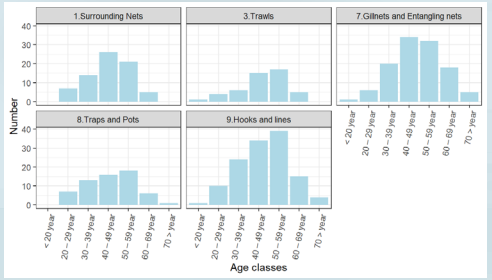
Verification and reports

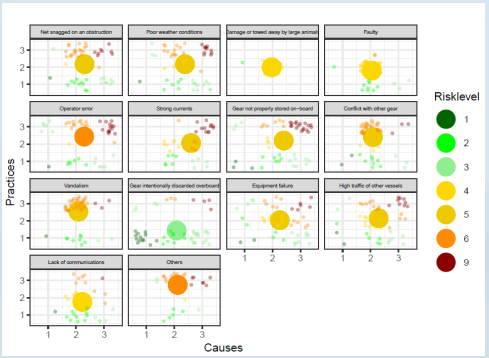
- Verification reports generated for each F.G.type surveyed
- Correction process of potential errors
- Data verification provided
- Secondary verification reports generated for each F.G.type surveyed

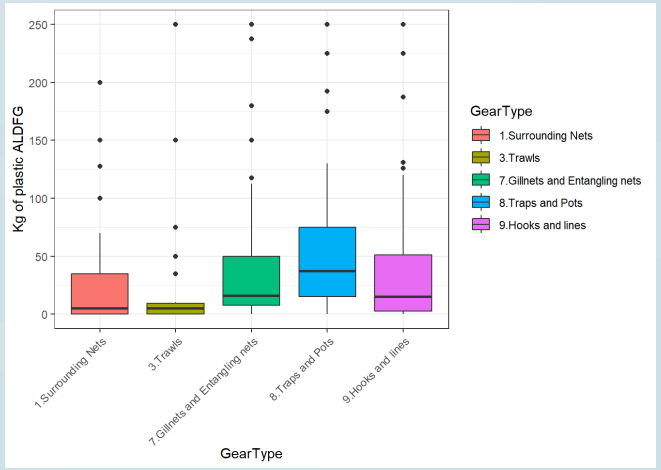
Provide a preliminary country report for all surveyed F.G. types to the survey user and relevant authorities

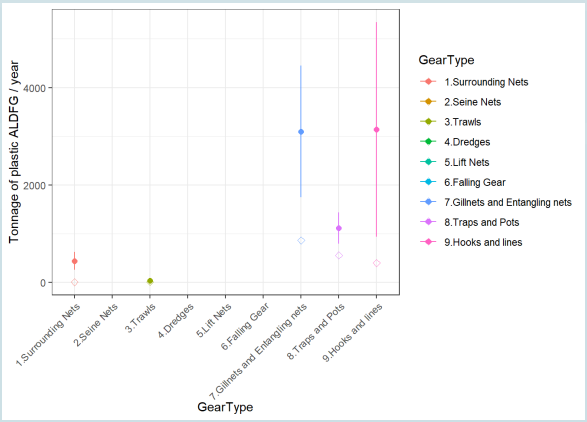












The Arctic in this context

The production of ALDFG

- What is the extent of ALDFG output from Arctic countries?
- How much ALDFG is drifting in and out of the Arctic region?

Implementing a robust management system for marking fishing gear could be a significant indicator of the scale and impact, with the potential for effective mitigation.

country	Surrounding Nets	Seine Nets	Trawls	Dredges	Gillnets	Traps	Hooks and lines
Indonesia	0	0	0	0	379	205	197
Kenya	11	44	0	0	82	51	57
Mexico	73	0	120	0	117	92	130
Montserrat	0	5	0	0	5	17	18
Myanmar	0	0	0	0	122	0	0
Pakistan	0	0	0	0	366	0	0
Republic of Korea	0	0	0	0	128	0	0
Seychelles	38	0	0	0	0	0	117
Thailand	0	0	0	0	112	55	0
Trinidad and Tobago	0	0	0	0	124	96	135
USA	0	0	0	6	18	21	0

Implementing the FAO Global ALDFG Survey in Arctic fisheries will establish a baseline for informed estimates, considering factors like effort and catch.

Conducting the FAO Global ALDFG Survey in Arctic fisheries will enable meaningful comparisons with other regions worldwide.

Marking fishing gear is cheap and easy method to fight against ALDFG

Thank You

any questions?