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Interim Report on the International Standard

Statistical Classification of Fishing Gear

(being also FAO Fisheries Circular, No.280)

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INTERIM REPORT ON THE INTERNATIONAL STANDARD STATISTICAL CLASSIFICATION OF FISHING GEAR

Compiled by

The Secretary Coordinating Working Party on Atlantic Fishery Statistics FAO Department of Fisheries



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS Rome, August 1971

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FAO Fisheries Circular (FAO Fish.Circ.)

A vehicle for the distribution of short or ephemeral notes, lists, statistical tabulations, etc., including provisional versions of documents to be issued later in other series.

CLASSIFICATION OF FISHING GEAR FOR STATISTICAL PURPOSES

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An <u>ad hoc</u> Working Group on the International Standard Statistical Classification of Fishing Gear (ISSCFG) met at FAO Headquarters in Rome from 21 through 23 April 1971. The List of Participants is given in Appendix 1.

This Working Group developed from an invitation extended by the Secretary of the CWP to Dr. A.I. Trescev (VNIRO, Moscow) and to Professor Dr. A. von Brandt (Bundesforschungsanstalt für Fischerei, Hamburg), to come to Rome to discuss the establishment of an International Standard Statistical Classification of Fishing Gear. This invitation was made during the course of the ICES Special Meeting on the Measure of Fishing Effort, September 1970, Copenhagen.

The Working Group decided in view of the urgency of the matter to issue a Preliminary Report. A final report which would include detailed appendixes, as well as illustrations of the different types of gear, and which would take possibly a year to prepare, should be issued during the course of 1972. The Group recommended that this final report should be completed by means of correspondence. It also expressed the hope that it would be possible for Professor von Brandt and Dr. Treschev to arrange for the illustrations to be included in the final version.

The divisions and groups of the ISSCFG as proposed by the <u>ad hoc</u> Working Party are presented in Appendixes 2 and 3.

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Appendix 1

LIST OF PARTICIPANTS

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Appendix 2

- 5 -

INTERNATIONAL STANDARD STATISTICAL CLASSIFICATION

OF FISHING GEAR (ISSCFG)

- A. SURROUNDING NETS
- B. <u>SEINE NETS</u>
- C. TRAWLS
- D. DREDGES
- E. <u>LIFT NETS</u>
- F. FALLING GEAR
- G. GILL-NETS AND ENTANGLING NETS
- H. TRAPS
- I. HOOKS-AND-LINES
- J. GRAPPLING AND WOUNDING GEAR
- K. HARVESTING MACHINES
- L. OTHER

Appendix 3

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DESCRIPTION OF ISSCFG CATEGORIES

A. SURROUNDING NETS

The manner of capture is to surround the fish not only from the side but also from underneath allowing fish to be caught over very deep waters by preventing them from escaping by diving downwards.

(1) Surrounding nets with purse-lines

Purse-seines, ring-nets, etc., operated from:

- (a) one boat (with or without auxiliary skiffs)
- (b) two boats (with or without auxiliary skiffs)

(2) <u>Surrounding nets without purse-lines</u>

Lampara-type nets, alamans, etc.

B. SEINE NETS

The manner of capture is to surround an area of water with a net set from beaches and shore installations or from craft including rafts and platforms. These nets may be equi-winged or not and with or without one or more bags. Such gears are usually operated in coastal and shallow waters where the bottom and surface act as natural barriers preventing fish from swimming out of the enclosed space.

(1) Beach-seines

Operated from the shore (usually a beach) or set platforms; includes virtually all the freshwater seines and seines operated under the ice.

(2) Boat-seines

Operated from boats; includes Danish seines.

C. TRAWLS

Is operated by the dragging or towing of the gear by fishing craft. The otter trawls, included here, can be operated from either the side or the stern of the fishing craft.

(1) <u>Bottom trawls</u>

Near bottom trawls are included

- (a) Beam trawls
- (b) Otter trawls one boat
- (c) Pair trawls two boats
- (2) Midwater Trawls

Surface trawls are included

- (a) Otter trawls one boat
- (b) Pair trawls two boats

D. DREDGES

The gear is dragged to separate the molluscs, crustaceans, fish, etc., from the water, mud, sand, etc.

(1) Boat dredges

Heavier dredges dragged by moving fishing craft.

(2) <u>Hand dredges</u>

Lighter dredges hand-operated in shallow waters, afoot, from boats or other vehicles.

E. LIFT-NETS

The manner of operation is to raise or haul the submerged netting upward out of the water to catch the fish lying above them and are operated by isolating them when the water is strained away. This includes small hand-operated lift nets, hoop nets, blanket nets and large mechanically and pneumatically operated lift-nets, some of which use levers, gallows, etc.

- (1) Portable lift-nets
- (2) Boat-installed lift-nets

Includes gear such as stick-held dip-nets.

(3) Shore-operated stationery lift-nets

F. FALLING GEAR

The fish is caught by covering them with the gear and then gathering them when the net is lifted and the water strained. The use of this gear is usually restricted to shallow waters.

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This division includes hand cast-nets, mechanized cast-nets, short castnets, cast-nets with gallows, drive cast-nets, cover pots and lanternnets, etc.

G. GILL-NETS AND ENTANGLING NETS

The fish is gilled, entangled or enmeshed in the netting which might be either single (gill-nets) double or triple (trammel-nets). Some of types of nets might be combined in one gear. These nets might be used either singly or in large numbers ("fleets" of nets).

(1) <u>Set-nets</u>

Anchored or fixed by stakes, directly to the bottom or higher in the water, to catch fish trying to swim through.

The term "set-nets" is used at present in the Far East when referring to "pound-nets", see H(1).

(2) Drift-nets

Drift separately or with the fishing craft, to catch fish trying to swim through.

(3) Encircling drive-in nets

This gear is used to capture the fish, usually in shallow waters, by driving them into the netting by noise and other means.

H. TRAPS

The fish is confined in collecting units from which escape is prevented by labyrinths and retarding devices such as gorges, funnels, etc.

(1) Stationary uncovered pound-nets

Are large gear units anchored or fixed on stakes, either set or slightly swaying, with various types of retarding devices. Are mostly divided into chambers with netting on the bottom. (In Japan this group is usually called "set-nets" - which term is used in a different sense in this classification, see G(1).)

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(2) Covered pots and fyke nets

Are either set or drifting. Can be used as single units or arranged in systems with wings and leaders. Are basket-like or cage-like implements made of wood, netting, wire, plastic, etc.

(3) Stow-nets

Can be used only in rivers and strong sea-currents. Are fixed on stakes or anchored (with or without boats) with the mouths usually held open mostly by frames.

(4) Barriers, fences, weirs, corrals, etc.

Are made of various materials - stones, earthwalls, stakes, brushes, netting, etc., and are usually constructed in tidal-waters.

(5) Aerial traps

Jumping and gliding fish (so called "flying" species) are trapped in boxes, rafts, boats, etc., and in veranda nets. The fish may be frightened into jumping out of the water.

I. HOOKS-AND-LINES

The fish is enticed by the use of edible or artificial baits or lures to be caught by a hook or by a gorge, and retained by lines.

Hooks also allow the capture of fish by ripping when the fish comes into their range. Hook-and-line units can be used singly or in large numbers.

Recreational angling (sportfishing) is covered in particular by Nos. (1) and (4) below.

(1) Hand-lines and pole-lines

Includes all types of jig-lines.

(2) <u>Set-lines</u>

Includes baited and unbaited bottom or near-bottom long-lines.

(3) Drift-lines

Includes drifting long-lines.

(4) <u>Troll-lines</u>

J. GRAPPLING AND WOUNDING GEAR

The principle is based on killing, wounding and grappling. These gears include not only harpoons, spears, clamps, tongs, and rakes but also bows-and-arrows, and other killing and wounding implements.

K. HARVESTING MACHINES

Comparatively new types of gear based on the separating of fish from the water by means of "fish-transfer".

(1) Pumps

- Refers to fish-capturing by pumps (not to be confused with the use of pumps to transfer fish already caught).

(2) Mechanized dredges

Involves the digging out of molluscs by means of underwater jets; so sometimes combined with convoyer-belt type appliances.

- (3) Other appliances
- L. OTHER

This heading covers a great variety of miscellaneous fishing gear and methods n.e.s. or based on mixed principles. The following are examples: (1) Hand and landing nets

- These could have fixed or variable mouths operated in various ways in shallow waters or from boats.
- (2) Drive-in-nets, n.e.s.
- (3) Gathering by hand or with simple hand implements with or without diving equipment
- (4) Stupefying materials (solid, liquid, gas) and explosives
- (5) Trained animals
- (6) <u>Electrophysically induced narcosis</u>