



FIRMS

FISHERIES AND RESOURCES
MONITORING SYSTEM

Review of RECOFI list of shared stocks - validation versus lists of national stocks

Agenda item 7

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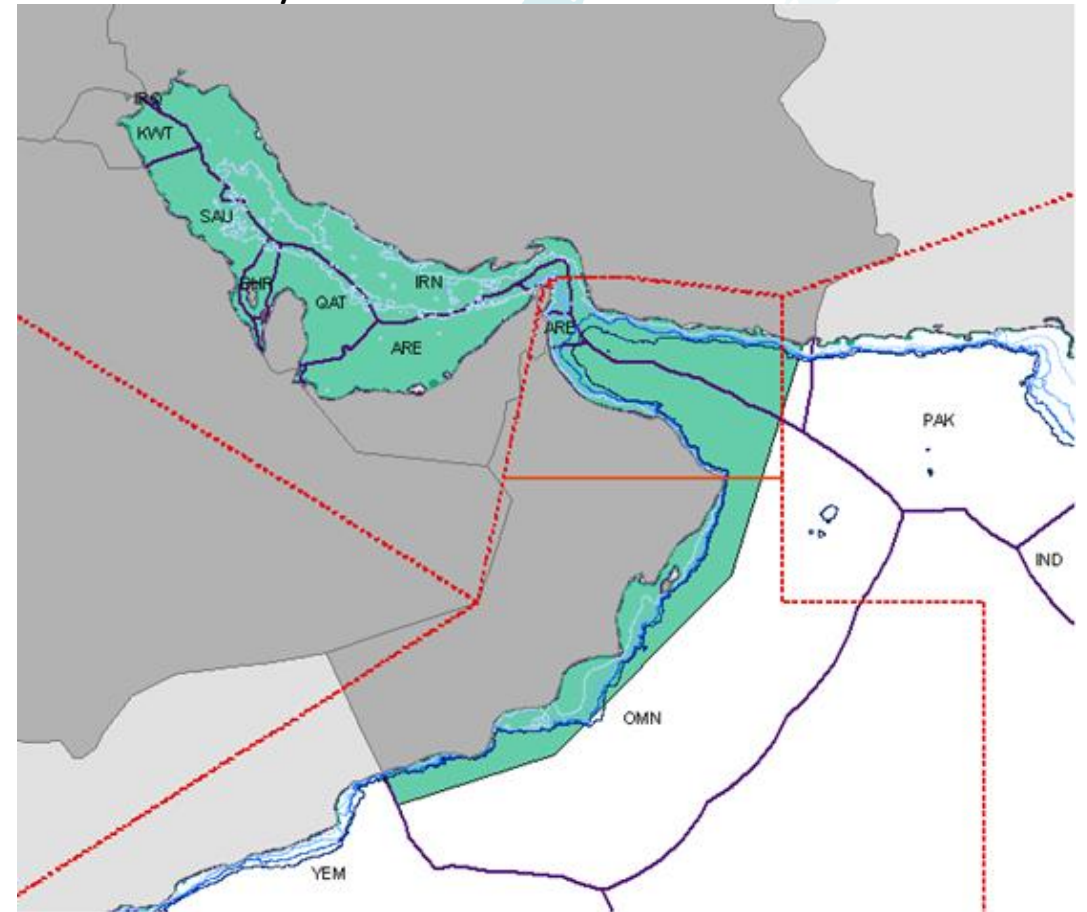
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Outline

- Recalling recommendations from the MDR meeting (13-15 July 2021)
- Recalling FIRMS definitions for shared stocks
- Review of Species reported in the SDG 14.4.1 vs. FIRMS stocks inventory

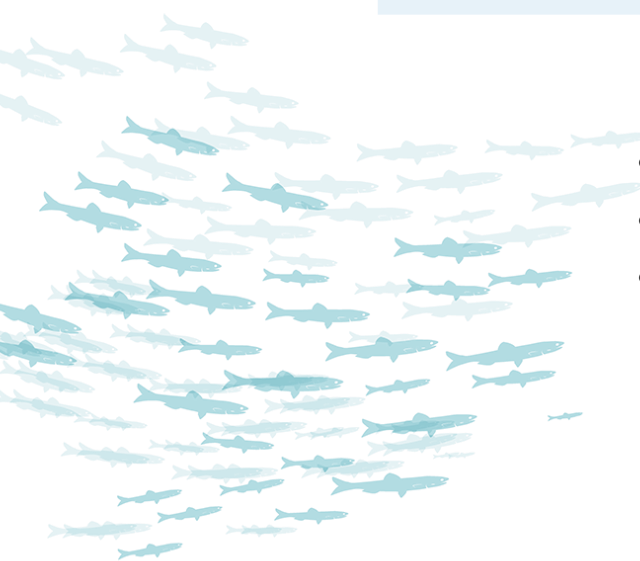


Review of RECOFI list of shared stocks – RECOFI Area

RECOFI Stock Name	Shared Resources	National Assessment Unit
Narrow-barred Spanish mackerel - RECOFI Area	YES	Oman, Qatar

Relevant recommendations from the MDR meeting (13-15 July 2021) to RECOFI-FIRMS:

- Re-assess the current **Priority Species** list
- Consider any further **species breakdown** for reporting
- Develop a pilot of the **Regional Database (RDB)** (including the RECOFI inventory of stocks and fisheries)

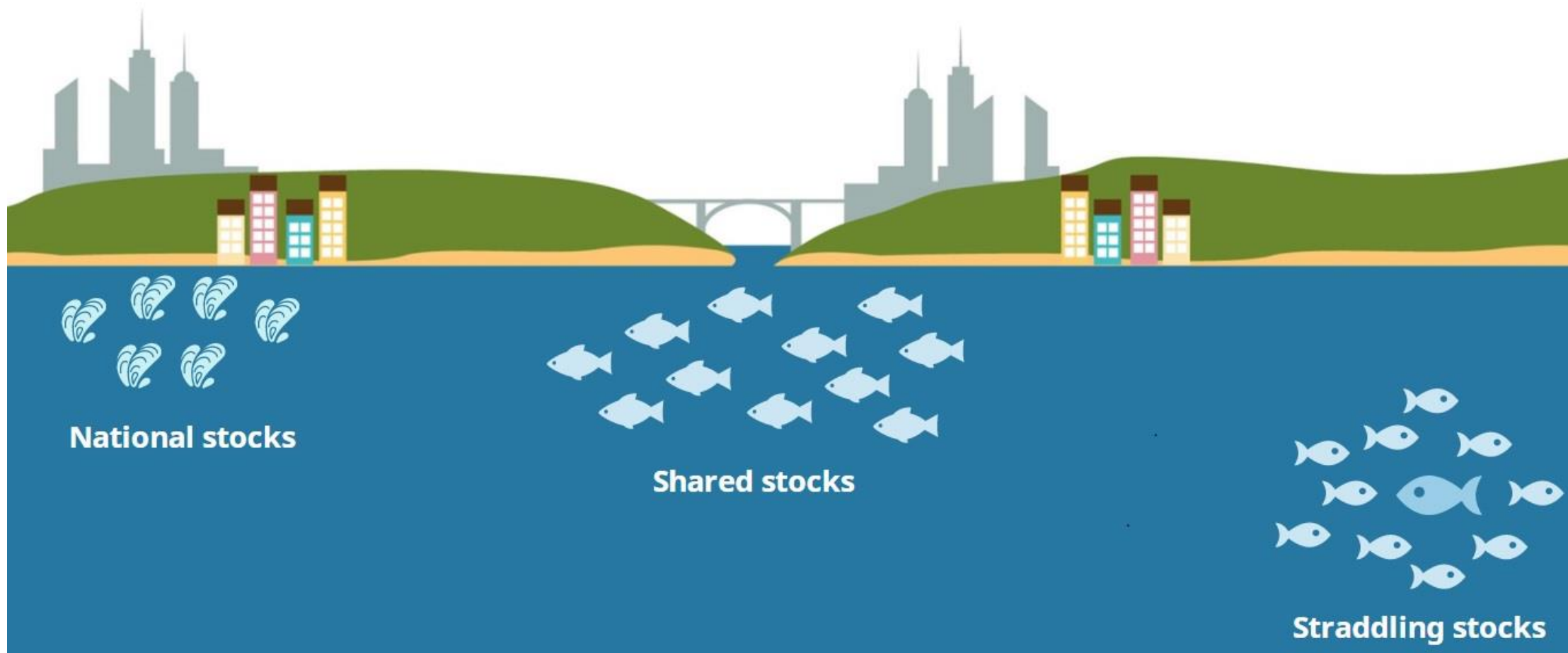


Review of RECOFI list of shared stocks – RECOFI Area

FIRMS controlled term "Jurisdictional Distribution": how the fish stock distribution overlaps marine jurisdictions.

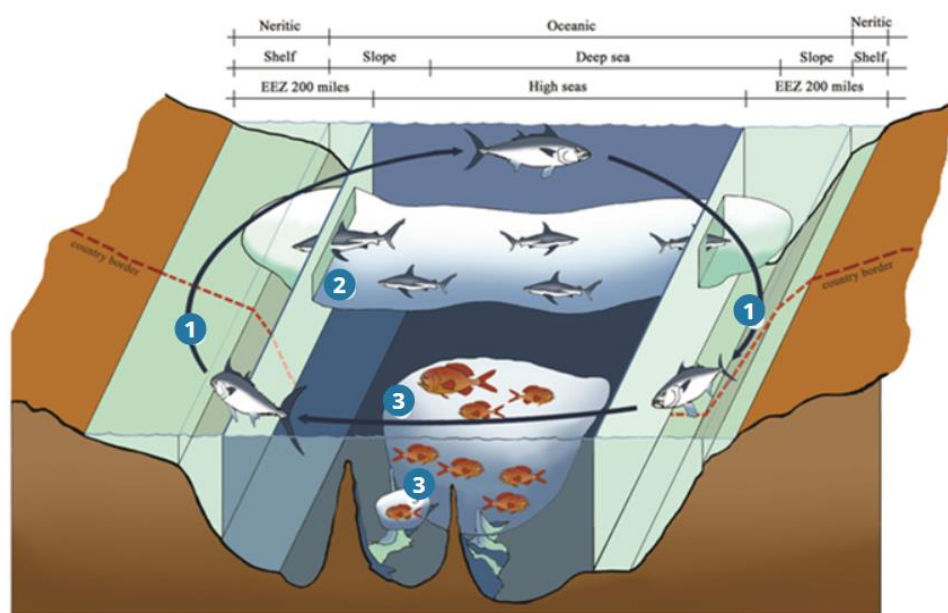
Jurisdictional distribution	Definition
National	Marine resource distributed exclusively within one EEZ. (DRAFT)
Shared between nations	Marine resources whose distribution overlaps two or more EEZs. (DRAFT)
Highly migratory	Marine Resource capable of migrating relatively long distances, which is likely to occur both within EEZs and high seas. These are technically straddling stocks, but given their peculiar characteristics they are often managed by specific management bodies, and are here kept as a separate category. (FSC11, 2019)
High Seas Purely	Marine resource whose distribution is exclusively within high seas. (DRAFT)
Straddling between High Seas and EEZ	Marine Resource whose distribution overlaps EEZ(s) and areas beyond national jurisdiction. (FSC11, 2019)
Unspecified	Information not available. (DRAFT)

Review of RECOFI list of shared stocks – RECOFI Area

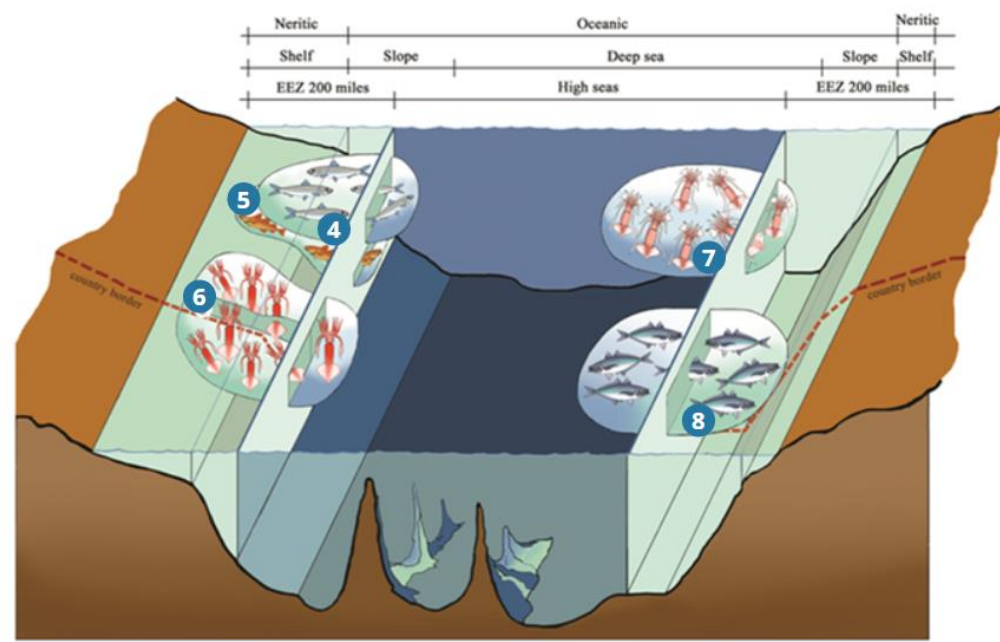


Source: © FAO, 2019. FAO elearning Academy. SDG Indicator 14.4.1 - Fish stocks sustainability.

Review of RECOFI list of shared stocks – RECOFI Area



- 1** Highly migratory
- 2** Straddling (extensive distribution)
- 3** High seas



- 4** Pelagic straddling (mostly within EEZ)
- 5** Demersal straddling (mostly within EEZ)
- 6** Straddling (transboundary)
- 7** Straddling (mostly in high seas)
- 8** Straddling (evenly distributed)

Source: © FAO, 2019. FAO elearning Academy. SDG Indicator 14.4.1 - Fish stocks sustainability.

Species reported in the SDG 14.4.1 vs. FIRMS stocks inventory

Number of occurrences in the SDG 14.4.1 questionnaire and FIRMS inventory

SDG	FIRMS	Scientific name
1	7	Carangoides gymnostethus
2	7	Lethrinus lentjan
2	7	Sepia pharaonis
2	7	Siganus canaliculatus
	7	Penaeidae shrimp nei
4	6	Epinephelus coioides
2	6	Portunus pelagicus
1	6	Rastrelliger kanagurta
	6	Lethrinus borbonicus
	6	Cephalopis miniata
	6	Thunnus tonggol
3	5	Lethrinus nebulosus
1	5	Gnathanodon speciosus
	6	Carcharhinidae
3	3	Argyrops spinifer
	3	Sardinella longiceps
2	2	Scomberomorus commerson
1	2	Lethrinus microdon

SDG	FIRMS	Scientific name
	2	Diagramma pictum
	2	Stolephorus spp
2	1	Pampus argenteus
2	1	Penaeus semisulcatus
1	1	Euthynnus affinis
	1	Penaeus indicus
1		Drepane longimana
1		Brachirus orientalis
2		Carangoides bajad
3		Lutjanus malabaricus
1		Acanthopagrus bifasciatus
2		Acanthopagrus latus
1		Acanthopagrus arabicus
1		Atule mate
1		Ariomma indicum
1		Carangoides malabaricus
1		Drepane punctata

Species reported in the SDG 14.4.1 vs. FIRMS stocks inventory

Number of occurrences in the SDG 14.4.1 questionnaire and FIRMS inventory

SDG	FIRMS	Scientific name
1		Eleutheronema tetradactylum
1		Cephalopholis hemistiktos
1		Encrasicholina punctifer
1		Crenimugil seheli
1		Duskytail grouper
1		Epinephelus multinotatus
1		Grammoplites suppositus
2		Pomodasys kaakan
2		Rachycentron canadum
2		Rhabdosargus haffara
1		Epinephelus areolatus
1		Epinephelus bleekeri
1		Epinephelus polylepis
1		Gerres longirostris
1		Liza klunzingeri
1		Loligo spp.
1		Lutjanus fulviflamma
1		Lutjanus johnii

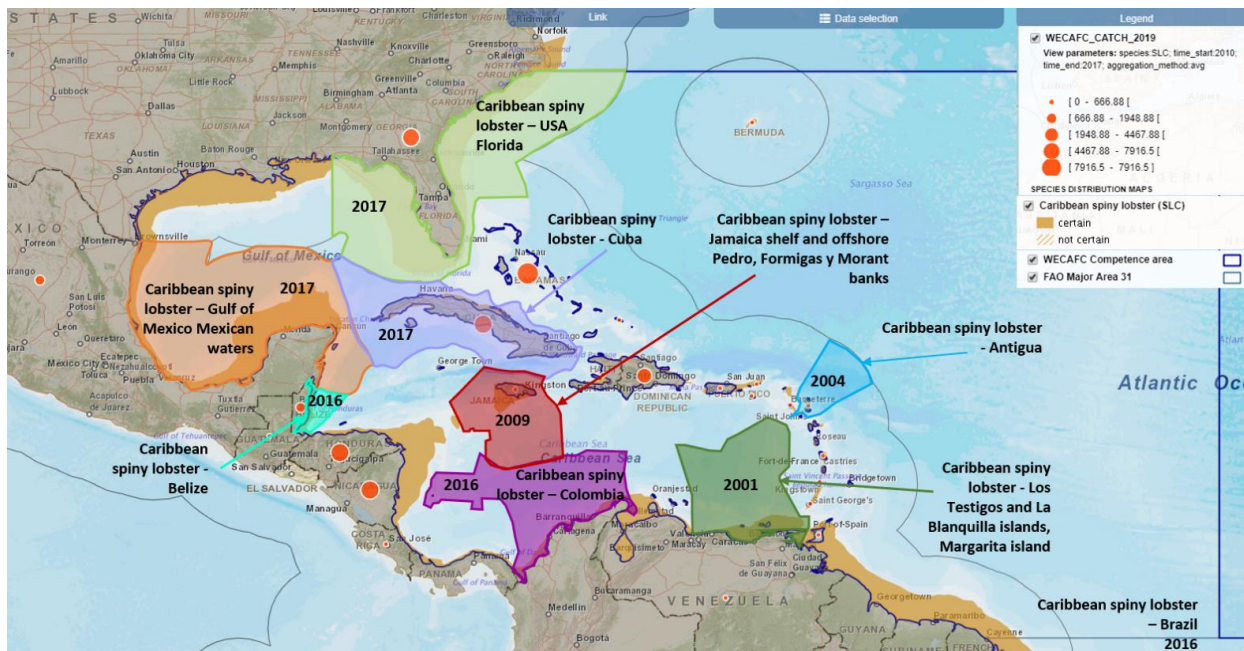
SDG	FIRMS	Scientific name
1		Nemipterus bipunctatus
1		Nemipterus japonicus
1		Netuma bilineata
1		Netuma thalassina
1		Otolithes argenteus
1		Otolithes ruber
1		Parastromateus niger
1		Parupeneus margaritatus
1		Penaeus semisulcatus
1		Pinjalo pinjalo
1		Platax orbicularis
1		Platycephalus indicus
1		Plectorhinchus sordidus
1		Plectropomus areolatus
1		Plectropomus pessuliferus
1		Plicofollis dussumieri
1		Plicofollis layardi
1		Psettodes erumei

Species reported in the SDG 14.4.1 vs. FIRMS stocks inventory

Indicator	Bahrain	Iran	Iraq	Kuwait	Oman	Qatar	Saudi Arabia
TOTAL SPECIES or SPECIES Groups in the RECOFI region (reported so far in SDG 14.4.1 questionnaire or in FIRMS inventory)	81						
TOTAL SPECIES (FIRMS inventory)	14	16	9	16	20	19	11
TOTAL SPECIES (SDG 14.4.1 questionnaire)	0	30	0	8	0	39	16
FIRMS-SDG matching	-	3	-	2	-	12	4
SPECIES reported in the WGFM11 Report (2019, Annex D)	0	0	0	4	13	10	0

Examples of shared stocks

Spiny lobster assessment units in WECAFC region



Sardinella assessment units in CECAF region

FIRMS Results List.

Results for: sardinella
 Found in all domains: Resource: 34

Showing: 1-15

Dataset	Description
Resource	All resources - Southern Areas of the Eastern Central Atlantic (FAO Statistical Area 34) : 2005
Resource	Bonga shad - Southern Area of Eastern Central Atlantic : 2009
Resource	Madeiran sardinella and Round sardinella - Benin, Côte d'Ivoire, Ghana and Togo : 2009
Resource	Madeiran sardinella and Round sardinella - Cameroon and Nigeria : 2009
Resource	Madeiran sardinella and Round sardinella - Gabon, Congo, Democratic Republic of the Congo and Angola : 2016
Resource	Madeiran sardinella and Round sardinella - Guinea-Bissau, Guinea, Sierra Leone and Liberia : 2016
Resource	Madeiran sardinella - Angola, Congo and Gabon (South) : 2000
Resource	Madeiran sardinella - Cape Verde : 1996
Resource	Madeiran sardinella - Côte d'Ivoire, Ghana, Togo and Benin : 2016
Resource	Madeiran sardinella - Guinea : 2000
Resource	Madeiran sardinella - Guinea Bissau : 2000
Resource	Madeiran sardinella - Mauritania, Senegal and Gambia : 2005
Resource	Madeiran sardinella - Nigeria and Cameroon : 2016

Examples of shared stocks

Marine Resource Fact Sheet

CECAF Scientific advice 2016

Madeiran sardinella - Côte d'Ivoire, Ghana, Togo and Benin

Sardinelle plate (Sardinella maderensis) - stock ouest (Côte d'Ivoire, Ghana, Togo et Bénin); Flat sardinella (Sardinella maderensis) - western stock (Côte d'Ivoire, Ghana, Togo and Benin)

[Citation](#)

Owned by Food and Agriculture Organization (FAO) – More

Monitoring period

Previously monitored as: Sardinellas - Cote d'Ivoire, Ghana, Togo and Benin.

Related observations

Locate in inventory [+](#)

Species:

Sardinella maderensis



FAO Names: en - Madeiran sardinella,
 fr - Grande allache, es - Machuelo

Fishery Indicators

Production: Catch

Geographic extent of Madeiran sardinella - Côte d'Ivoire, Ghana, Togo and Benin



Management

Management unit: Yes

Source of information

FAO. 2016. Fishery Committee for the Eastern Central Atlantic, Report of the seventh session of the Scientific Sub-Committee, Tenerife, Spain, 14–16 October 2015 / Comité des pêches pour l'Atlantique Centre-Est Rapport de la septième session du Sous-Comité scientifique. Tenerife, Espagne 14-16 octobre 2015. FAO Fisheries and Aquaculture Report / FAO Rapport sur les pêches et l'aquaculture No. 1128. Rome, Italy. [PDF](#)

FAO. 2015. Report of the FAO/CECAF Working Group on the Assessment of Small Pelagic Fish – Subgroup South. Pointe Noire, Congo, 17–23 March 2014. Rapport du Groupe de travail FAO/COPACE sur l'évaluation des petits poissons pélagiques – Sous-groupe Sud. Pointe Noire, Congo, 17-23 mars 2014. CECAF/ECAF Series / COPACE/PACE Série No. 15/75 Rome, FAO. 157 pp. [PDF](#)

Biological State and Trend

State & Trend Descriptors

	Partner	FIRMS
Exploitation rate	$F_{cur}/F_{0.1} = 106\%$; $F_{cur}/F_{MSY} = 96\%$	Not applicable
Abundance level	$B_{cur}/B_{0.1} = 105\%$	Not applicable
FAO Categories		
Exploitation state	Fully exploited	

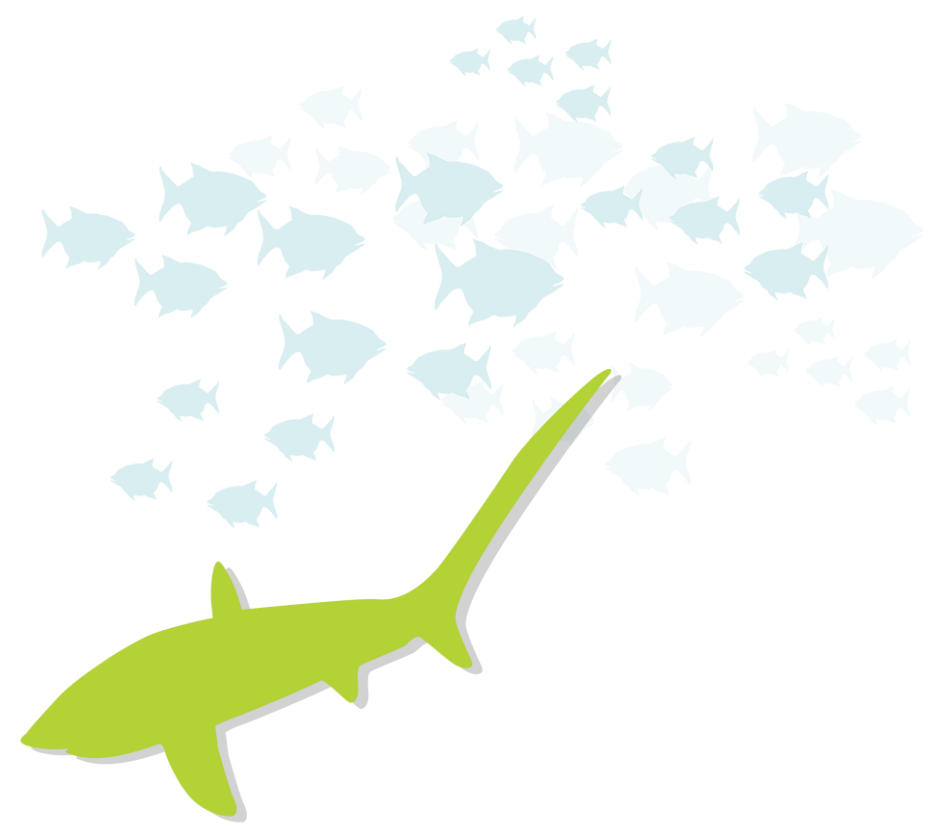
$F_{cur}/F_{0.1}$: Ratio between the observed fishing mortality coefficient during the last year of the series and $F_{0.1}$.

F_{cur}/F_{MSY} : Ratio between the observed fishing mortality coefficient during the last year of the series and the coefficient that would give a maximum sustainable yield over the long term.

$B_{cur}/B_{0.1}$: Ratio between the estimated biomass for the last year and the biomass corresponding to $F_{0.1}$.

Unless otherwise indicated, the indicators were based on the Schaefer dynamic production stock assessment model.

Questions?





Thank you ▪ Merci
Благодарю ▪ ¡Muchas gracias!
謝謝 ▪ شكرا

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