



Food and Agriculture
Organization of the
United Nations



FIRMS inventories

An overview on FIRMS and its reporting methodology

<http://firms.fao.org>



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Related to Agenda item 6: “FIRMS inventory – Introduction”
WECAFC-FIRMS Data workshop. Barbados, 19-21 January 2016

About the Partnership

- 14 intergovernmental organizations / 19 RFBs



Food and Agriculture Organization
of the United Nations



FIRMS target audience

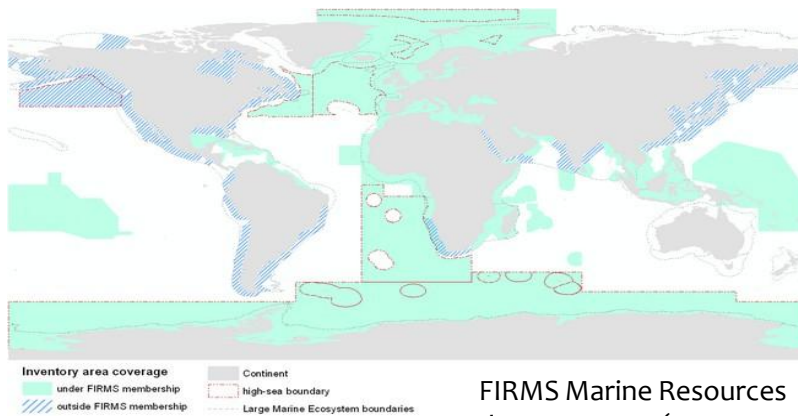
* RFBs:

- * to increase visibility beyond their area of competence (e.g. NAFO)
- * to provide a dissemination capacity when no other dissemination mechanism exists (e.g. CECAF)
- * to foster information exchange in context where data sharing is not practiced (e.g. RECOFI)
- * to be functional to needs of Fishery Management Plans (e.g. WECAFC)
- * regional dashboard of indicators for the State of environment (e.g. CLME+)
- * **National agencies** of governments dealing with fisheries reporting
- * Officers working on **global analyses** on state of fishery resources
- * **INGOs** promoting sustainable fisheries and keen to report on progress in fisheries management (e.g. SFP, Ocean Trust)
- * **General public**, to whom fishery data should be made available in more immediate and easy ways

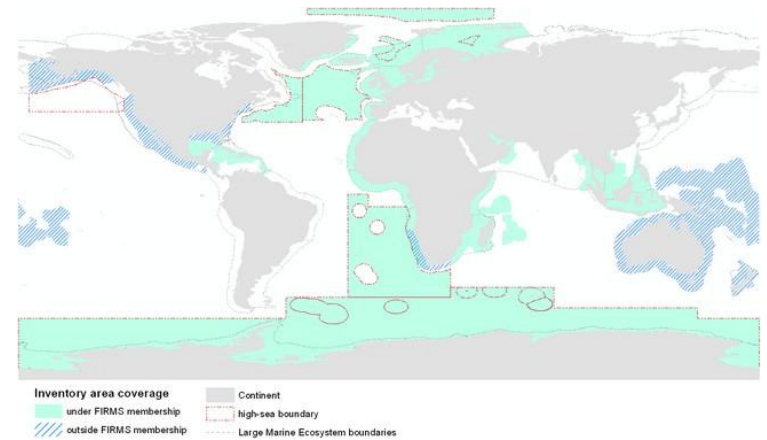
FIRMS Data coverage

FIRMS is reporting on **Marine Resources and Fisheries**

- Published inventory of **1082** stocks and **322** fisheries
- Status reports exist for about **600** stocks and **200** fisheries



FIRMS Marine Resources data coverage (tuna resources not included)



FIRMS Fisheries data coverage

WECAFC and FIRMS

- * **WECAFC 15** (March 2014) endorsed the Fisheries and Resources Monitoring System (FIRMS) partnership following the partnership proposal and arrangement formulated during the WECAFC-FIRMS Workshop on Marine Resources and Fisheries Inventories (November 2013)
- * **269** marine resources in the inventory, **44** reports published as fact sheets
- * **250** fisheries

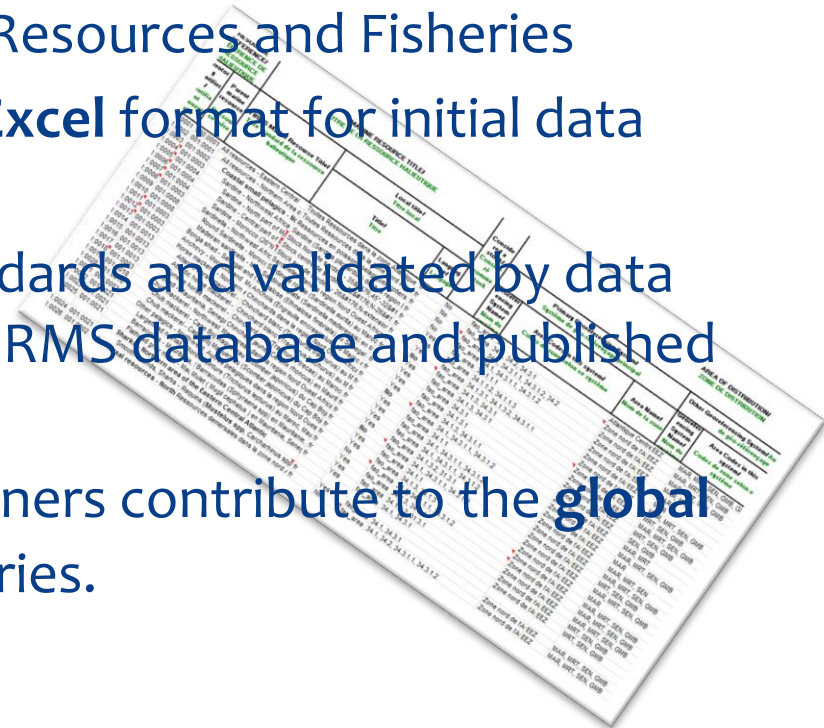
Sources: 2004 and previous reports.

Responsibilities, maintenance workflow and contribution to FIRMS governance

- * **Responsibilities:** WECAFC ensures overall coordination and holds overall publishing responsibility. WECAFC is responsible for the content of the marine resources inventory while countries are responsible for the content of the fisheries inventory.
WECAFC has the corporate responsibility for the overall consistency of the fisheries inventory, overview of strategic and policy aspects.
CRFM and OSPESCA: Fulfil an operational role to facilitate country contributions, hold ownership over subregional inventories, contribute to mobilize funding support.
- * **Governance:** WECAFC nominate a FIRMS focal point for the WECAFC region. Same CRFM and OSPESCA for the sub-regions.
- * **Maintenance:** Marine Resource reports can be published upon published WECAFC Working Group Reports. Countries can update the content of their fishery inventory on a routine basis.

FIRMS Marine Resource & Fishery inventories

- * Inventories constitute the **backbone** of the FIRMS knowledge base. Inventories provide the complete picture from which to **assess** current level of knowledge
- * Marine Resources and Fisheries are inventoried for **reporting purpose**
- * To capture **status and trends** of Marine Resources and Fisheries
- * The inventory is implemented using an **Excel** format for initial data input
- * Once harmonized according FIRMS standards and validated by data owners, information is stored into the FIRMS database and published as **fact sheets**
- * Through their data inputs in FIRMS, partners contribute to the **global inventory** of marine resources and fisheries.

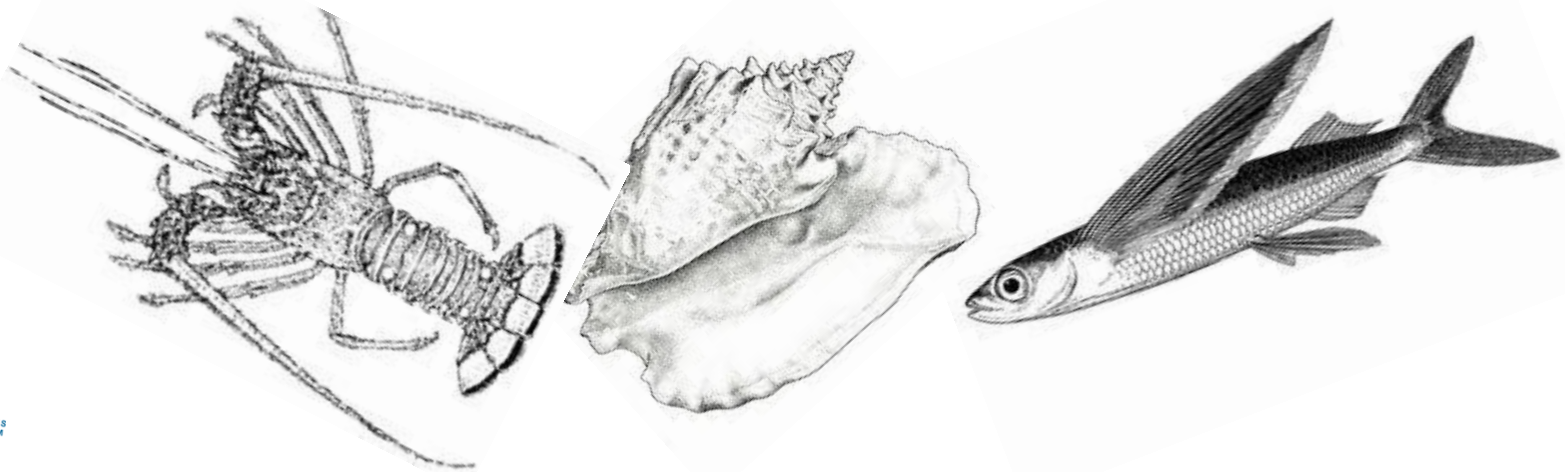


The image shows a tilted view of an Excel spreadsheet, likely representing the data input format for the FIRMS inventory. The spreadsheet contains numerous columns and rows of data, including headers for various categories and specific data points. The text is small and difficult to read, but the structure suggests a complex data table with multiple columns for different attributes and rows for individual entries.

FIRMS Marine Resource & Fishery inventories

- * **Marine Resource inventory:** a comprehensive list of aquatic resources of value to fisheries.

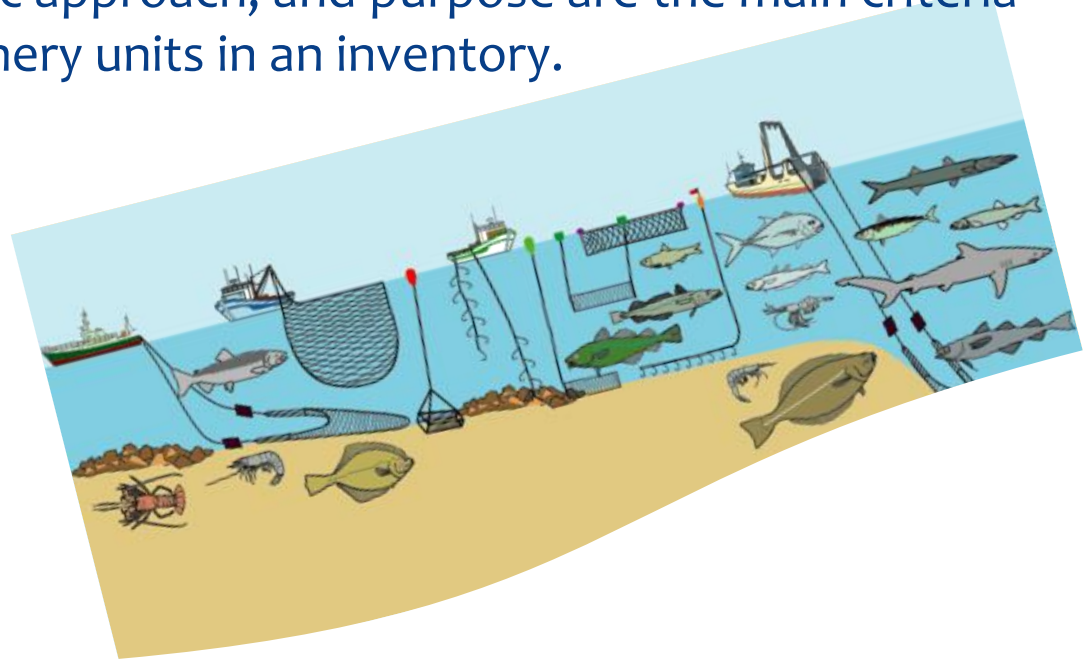
The aquatic resources are the biotic element of the aquatic ecosystem, including genetic resources, organisms or parts thereof, populations, etc. with actual or potential use or value (*sensu lato*) for humanity.



FIRMS Marine Resource & Fishery inventories

- * **Fishery inventory:** a comprehensive list of fishery units identified at an agreed scale and within a defined scope, including consideration of geographic reference, thematic approach, and purpose.

Geographic reference, thematic approach, and purpose are the main criteria driving the identification of fishery units in an inventory.



FIRMS Marine Resource & Fishery inventories

* One input many outputs

FIRMS REFERENCE / RÉFÉRENCE DE LA RESSOURCE / RESOURCE	MARINE RESOURCE TITLE / TITRE DE LA RESSOURCE / MARQUÉTIQUE		Country and a shared Council / Pays et Conseil partagé	AREA OF DISTRIBUTION / ZONE DE DISTRIBUTION				
	FIRMS Marine Resource Title / Titre standard de la ressource / Marquétique	Local title / Titre local		Primary Georeferencing System / Système de géo-étiquetage principal		Other Georeferencing System / Système de géo-étiquetage alternatif		
Code	Parent marine resource / Ressource mère	Local Title / Titre local	Language / Langage	UNITED NATIONS Geopoint System / Numéro de géopoint	Area Codes in this system / Codes de zone selon ce système	Area Name / Nom de la zone	UNITED NATIONS Geopoint System / Numéro de géopoint	Area Codes in this system / Codes de zone selon ce système
10001 000001	All resources - Eastern Central / Toutes Ressources dans la zone Atlantique E		No	fac_area 34		Atlantique Centre/EEZ	UAR, URT, SEN, GNB, G	
10002 001001	All resources - Northern Area / Toutes Ressources dans la zone Nord Atlantique		No	fac_area 34.1, 34.2, 34.3.1		* Zone nord de la EEZ	UAR, URT, SEN, GNB	
10003 001002	Coastal small pelagics - Ni Ressources en poissons pélagiques côtiers		No	fac_area 34.1, 34.3.1.1, 34.3.1.2, 34.2		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10004 001003	Sardine - Nord/Ouest Atlantique / Sardine (Sardinella sardinella) dans la région E		No	fac_area 34.1, 34.3.1.1, 34.3.1.2		Zone nord de la EEZ	UAR, URT	
10005 001004	Sardine - North part of EEZ / Stock Nord de sardine - 3588170.45°-32881° E		Yes	fac_area 34.1.1.1		Zone nord de la EEZ	UAR	
10006 001004	Sardine - Central part of EEZ / Stock centre de sardine - 3588170.45°-32881° E		Yes	fac_area 34.1.2, 34.1.3		Zone nord de la EEZ	UAR	
10007 001004	Sardine - Moroccan (GFT) stock sud de sardine - 2688176°N-2688881° E		Yes	fac_area 34.1.3.1, 34.1.3.2, 34.3.1.1		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10008 001005	Sardinella - Northwest Africa Sardinella dans la région Nord Ouest Afrique		No	fac_area 34.1.3, 34.3.1		Zone nord de la EEZ	URT, SEN, GNB	
10009 001006	Spotted Sardinella - Morocco Sardinelle mouché (Sardinella mouché) au Maroc		Yes	fac_area 34.1.3, 34.3.1		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10010 001008	Mediterranean sardinella - West Sardinelle plate (Sardinella mediterranea) en E		Yes	fac_area 34.3.1		Zone nord de la EEZ	URT, SEN, GNB	
10011 001002	Bonga shad - Senegal and (Chromis) (Chromis leptocephalus) au Sénégal		Yes	fac_area 34.1.3.1		Zone nord de la EEZ	SEN, GNB	
10012 001003	Anthony - Morocco and Al Anchoa (Engraulis encrasicolus) au Maroc		Yes	fac_area 34.1.3, 34.3.1.1		Zone nord de la EEZ	UAR, URT	
10013 001003	horne mackerel - Northwest Atlantic dans la région Nord Ouest Afrique		No	fac_area 34.1, 34.3.1.1, 34.3.1.2		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10014 001013	Atlantic horse mackerel - Chanchard blanc (Trachurus trachurus) au W		Yes	fac_area 34.1.1		Zone nord de la EEZ	UAR	
10015 001013	Atlantic horse mackerel - Chanchard blanc (Trachurus trachurus) au W		Yes	fac_area 34.1, 34.3.1.1, 34.3.1.2		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10016 001013	Atlantic horse mackerel - Chanchard noir (Trachurus trachurus) au Maroc		Yes	fac_area 34.1, 34.3.1.1, 34.3.1.2		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10017 001013	Sole - Mauritania, Senegal Chanchard jaune (Carrus moroccanus) en Mauritanie		Yes	fac_area 34.1.3.2, 34.3.1		Zone nord de la EEZ	URT, SEN, GNB	
10018 001003	Chub mackerel - Northwest Mauritania dans la région Nord Ouest Afrique		No	fac_area 34.1, 34.3.1.1, 34.3.1.2		Zone nord de la EEZ	URT, SEN, GNB	
10019 001016	Chub mackerel - Cape Bijou/Magasin (Scomber japonicus) de Cap Bijou		Yes	fac_area 34.1.1		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10020 001016	Chub mackerel - Cape Bijou/Magasin (Scomber japonicus) de Cap Bijou		Yes	fac_area 34.1.3, 34.1.3		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10021 001003	Other pelagics - Northwest Autres pélagiques dans la région Nord Ouest		No	fac_area 34.1, 34.3.1.1, 34.3.1.2		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10022 001002	Largemouth batfish - Hornu Centure (Chirocentrus labialis) au Maroc, Mauritanie		Yes	fac_area 34.1.3, 34.3.1		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10023 001021	Barracuda - Mauritania, Barracuda (Sphyrna spp.) en Mauritanie		Yes	fac_area 34.1.3.2, 34.3.1		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10024 001021	Fishery grey mullet - Mau Islet (Mullus cephalus) en Mauritanie, Senegal		Yes	fac_area 34.1, 34.3.1.1		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10024 001021	Sharks - Northern area of the Eastern Central Atlantic		Yes	fac_area 34.1, 34.3.1		Zone nord de la EEZ	UAR, URT, SEN, GNB	
10028 001002	Demersal resources - North Ressources démersales dans la zone nord E		No	fac_area 34.1, 34.2, 34.3.1.1, 34.3.1.2		Zone nord de la EEZ	UAR, URT, SEN, GNB	

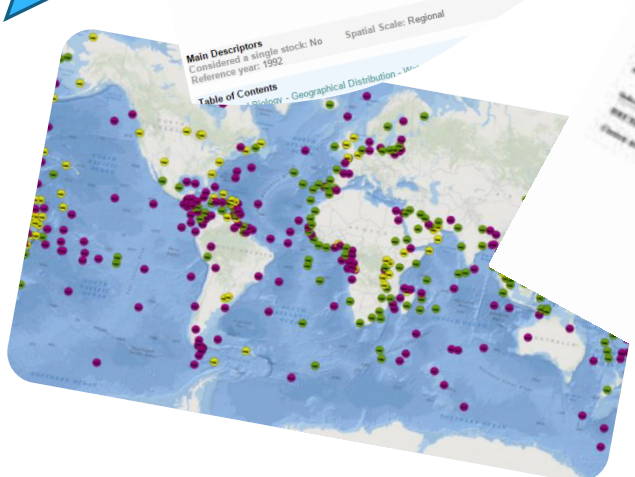
Marine Resource Fact Sheet
 Status of stocks and resources 2001
Caribbean spiny lobster - Los Testigos and La Blanquilla Islands, Margarita Island
 Caribbean spiny lobster - Between 11.38021° N and 11.82365° N and 63.11774° E and 64.60785° E, Los Testigos and La Blanquilla Islands, Margarita Island
 Owned by Food and Agriculture Organization (FAO) - Mire

Related observations
 Species: *Panulirus argus*

FAO Names: en - Caribbean spiny lobster, fr - Langouste blanche, es - Langosta común del Caribe

Geographic extent of Caribbean spiny lobster - Los Testigos and La Blanquilla Islands, Margarita Island

2000 km
 11° 38' 02" N, 63° 11' 30" W
 Map legend
 Area Details



FAO Fisheries and Aquaculture Statistics
 Fisheries and Aquaculture Statistics
 Fisheries and Aquaculture Statistics
 Fisheries and Aquaculture Statistics

FIRMS Marine Resource & Fishery inventories

- * Examples of fact sheets (not yet published)
 - * Saint Lucia Flyingfish Fishery <http://firms.fao.org/firms/fishery/906/en>
 - * Bahamas Lobster fishery <http://firms.fao.org/firms/fishery/970/en>
 - * Bahamas Queen Conch fishery <http://firms.fao.org/firms/fishery/969/en>

Fishery Fact Sheet
Fishery Resources Report 2014
Saint Lucia Flyingfish Fishery
Flyingfish Fishery

Owned by Food and Agriculture Organization (FAO) — more>>

Related observations

Location of Saint Lucia Flyingfish Fishery

APPROACH: FISHING ACTIVITY

Fishing Activity
Fishing Gear: Handline and pole-lines (hand operated) more>>
Type of production system: Commercial, Artisanal
Fishery Area: Saint Lucia, northwest and southeast coasts, Saint Lucia
Seasonality: October to July, ...

Harvested Resource
Target Species: Fourwing flyingfish
Associated Species: Margined flyingfish

Means of Production
Vessel Type: Other fishing vessels

Fishery Indicators
Nominal Effort: Number of vessels
Employment: Number of fishermen
Production: Landed Volume

Geographic reference: Saint Lucia
Spatial Scale: National
Reference year: 2014

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Fishing Activity - Management - Bibliography

Fishery Fact Sheet
Fishery Resources Report 2015
Bahamas Lobster fishery
Crawfish fishery

Owned by Food and Agriculture Organization (FAO) — more>>

Related observations

Overview: The lobster fishery is artisanal in nature, it is the number one fishery of the Bahamas, the resource which can be found in the shallow waters throughout the country, it is well managed, and harvest control rules are in place.

Location of Bahamas Lobster fishery

APPROACH: FISHING ACTIVITY

Fishing Activity
Fishing Gear: Miscellaneous gear
Type of production system: Commercial, Artisanal
Fishery Area: Bahamas
Seasonality: 1August - 31 March

Harvested Resource
Target Species: Caribbean spiny lobster
Associated Species: White margate

Means of Production
Vessel Type: Trap setters more>>

Fishery Indicators
Nominal Effort: Number of vessels
Employment: Number of fishermen
Production: Landed Volume

Geographic reference: Bahamas
Spatial Scale: National
Reference year: 2014

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Fishing Activity - Overview - Post Harvest - Management - Bibliography

Thank You!
¡Muchas Gracias!
Merci!