

# Mapping competition between domestic and distant water fishing fleets in West Africa

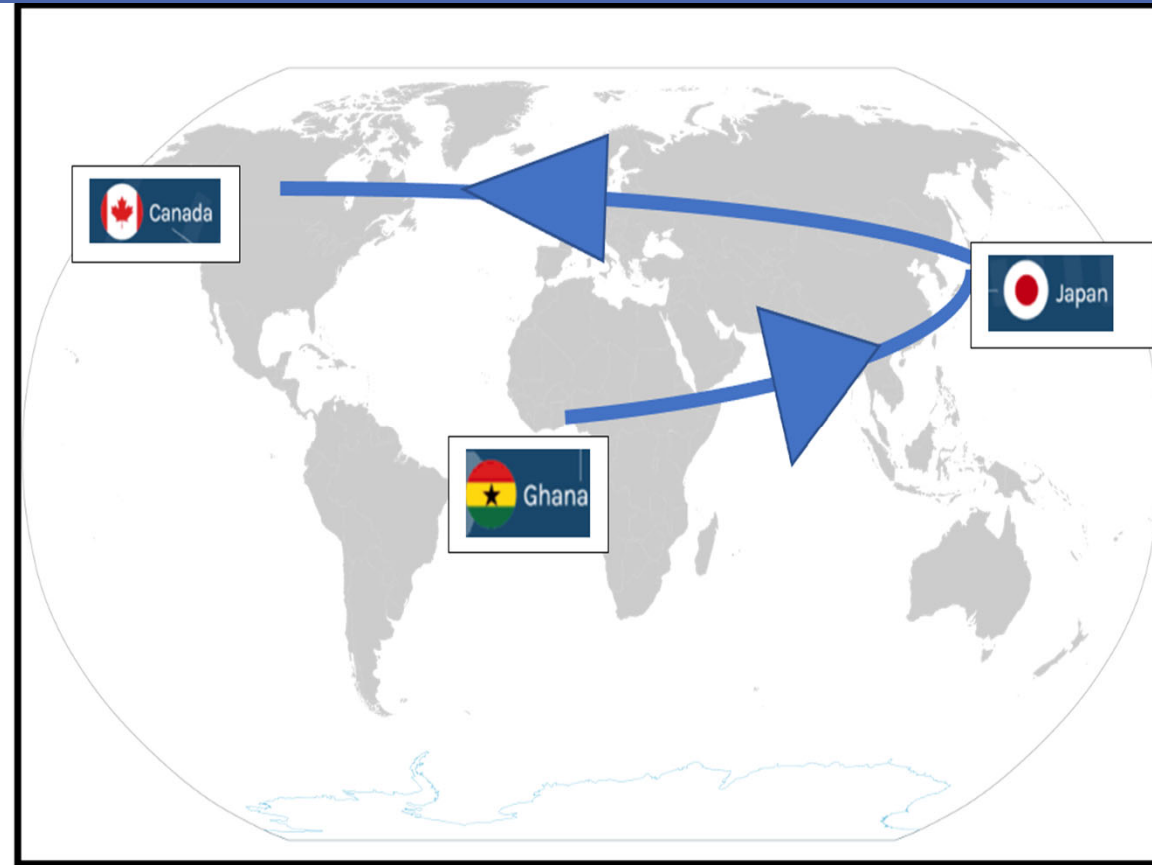
Dr. Ibrahim Issifu, Research Associate. University of British Columbia, Vancouver. Email: [i.Issifu@oceans.ubc.ca](mailto:i.Issifu@oceans.ubc.ca)





# Introduction

1. Marine plastic pollution;
2. Blue food assessment;
3. Economics of marine spatial planning;
4. Seafood trade flow;
5. Blue economy.



# Meet our team/Outline

Objective;

Methods,

Results;

Policy  
recommendations



Ibrahim Issifu  
Lead author,  
UBC, Canada



Rashid Sumaila  
Professor UBC Canada

**et al.**

# Background to West Africa...

US\$400 million annually;

Contributing \$24 billion to the African economy,

Employment to over 12 million people.

World Bank (2020).



# What is Distant Water Fishing?

DWFs are industrial fishing fleets operating outside the region of their flag state; better technology, subsidized etc.



# Why should you be concerned about DWF fishing?



# Research Objectives

- **Catch**

- (i) Identify how much catch is taken by DWFs from the EEZs of countries in West Africa as compared with those taken by domestic and/or regional catch;

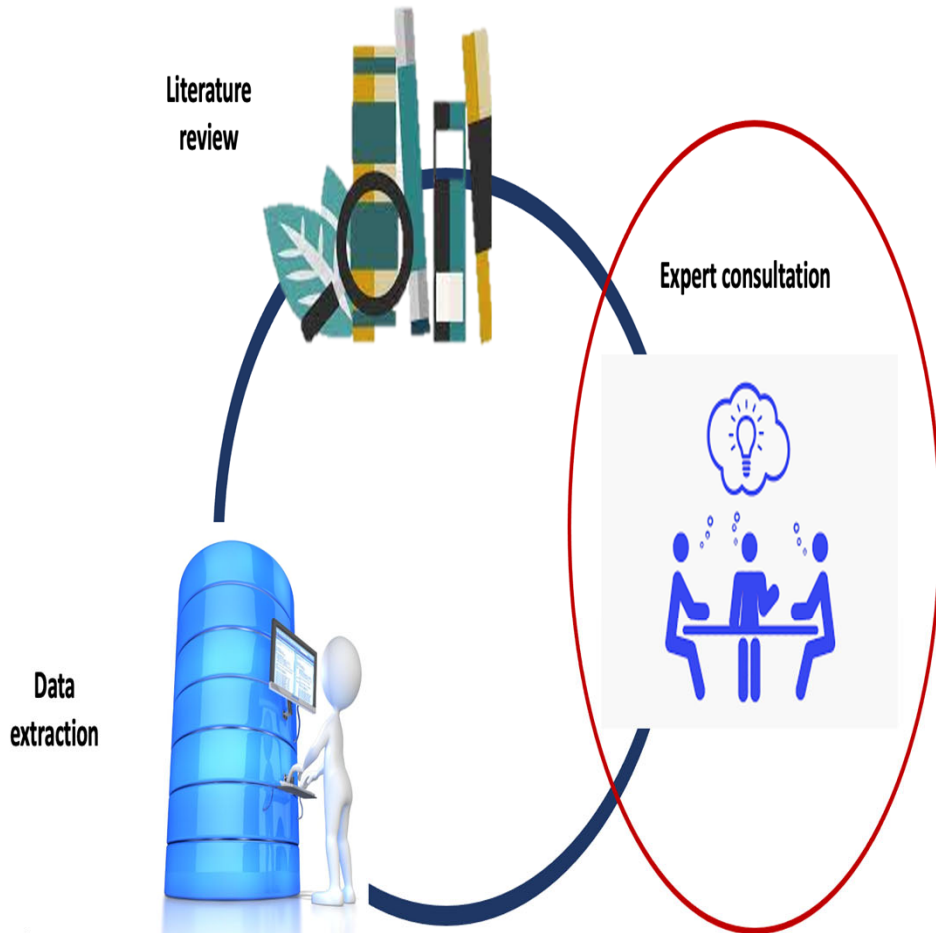
- **Spatial interaction**

- (ii) Assess the spatial overlaps of fishing activity by domestic, regional, and DWFs in West Africa;

- **Focal stock**

- (iii) Identify the most important stocks that are targeted by both domestic fleets and DWFs;

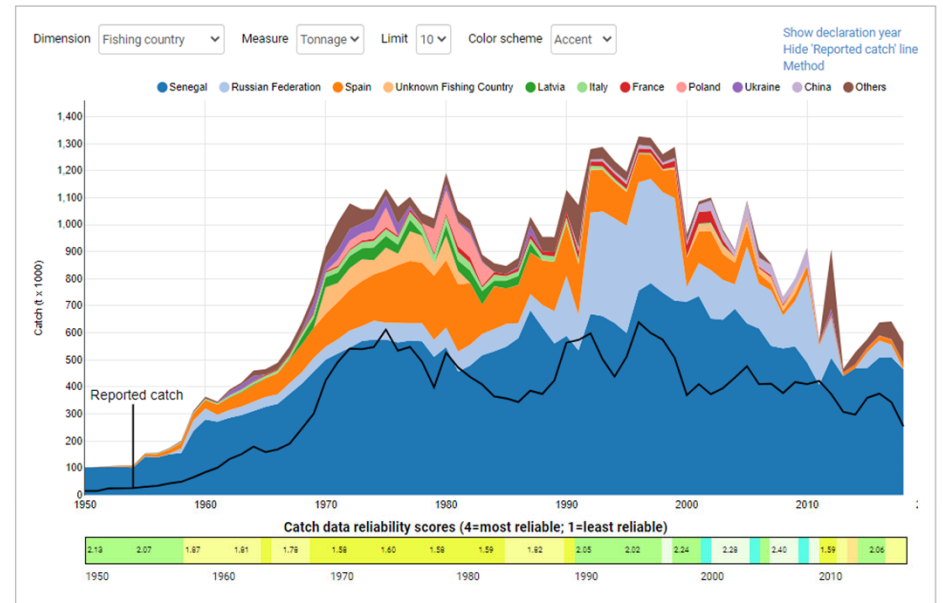
# Methods



Catches by Fishing country in the waters of Senegal

[Download Data](#)

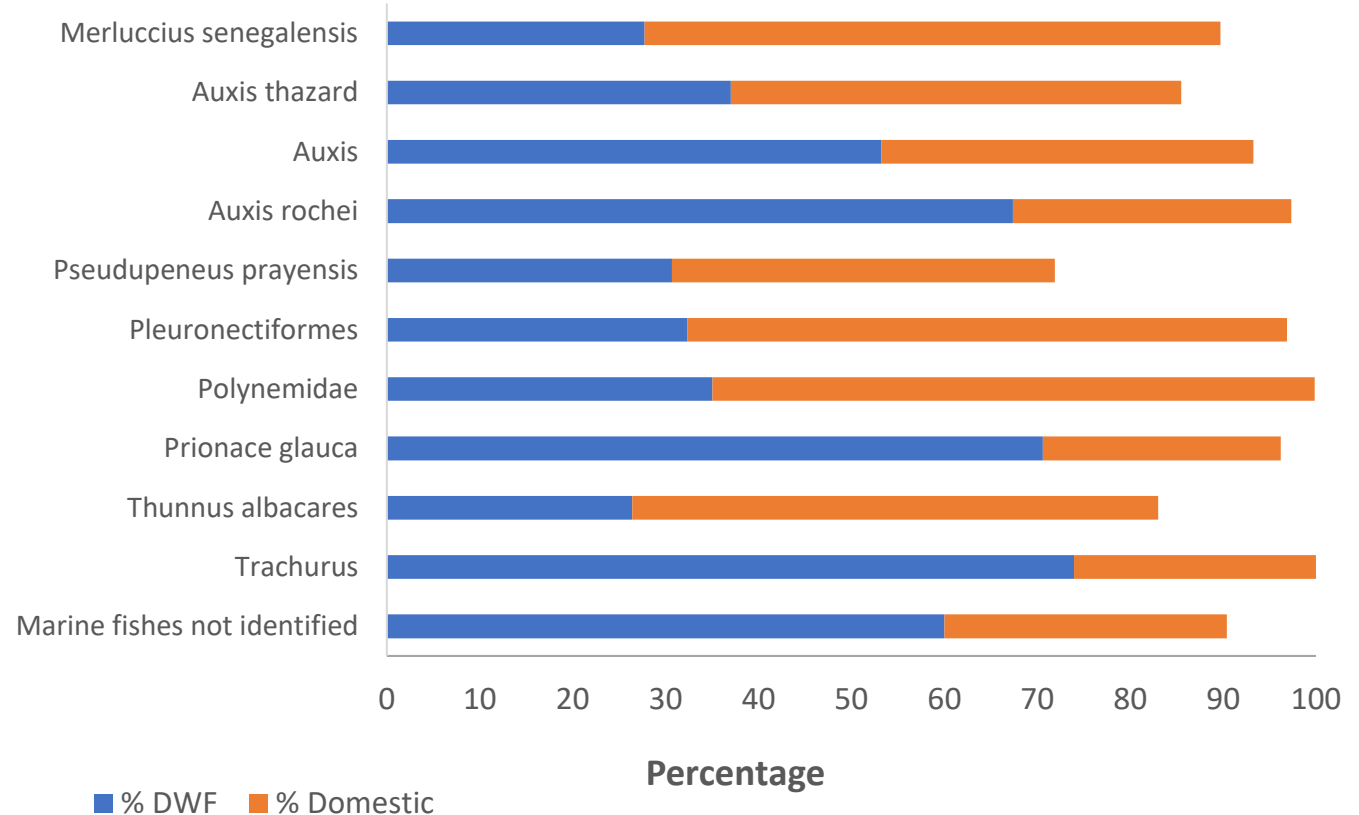
[Feedback](#)





## Percentage of annual average catch (2014-2018) by species taken by domestic and DWFs fleets

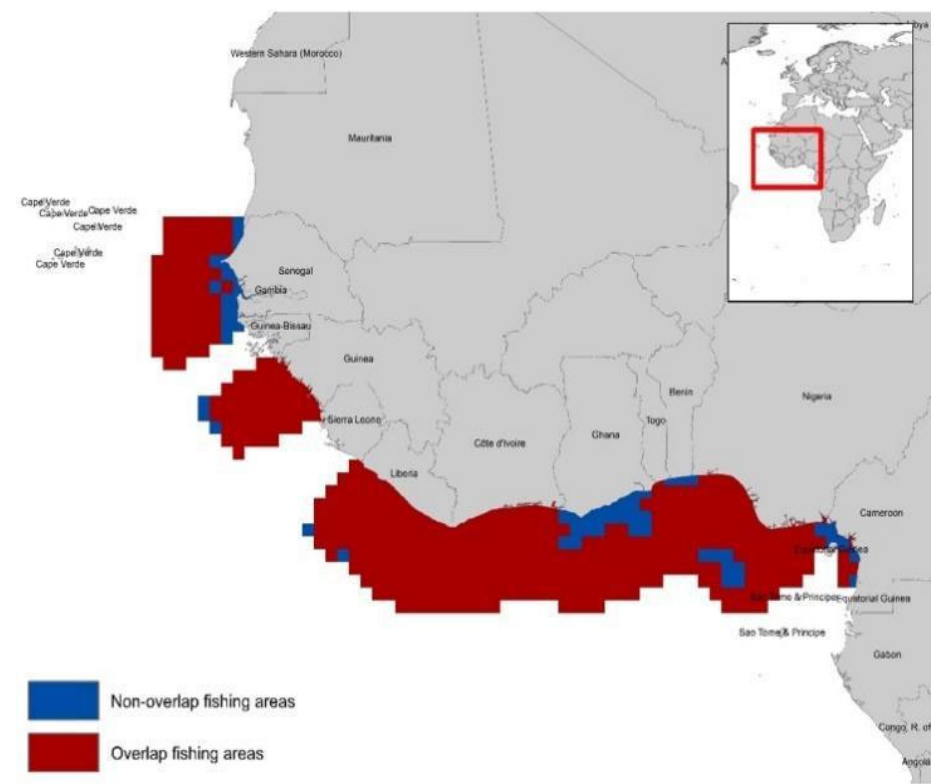
Domestic & DWF accounts for 31% and 59% respectively; Domestic flatfish; DWF targets horse mackerels (Trachurus), tuna (Auxis), blue shark.



Data Source: Sea Around Us (SAU).

Spatial overlap of the fishing areas in W/A. Red color areas indicate overlap and blue-color areas indicate no overlap between domestic, regional and DWF

About 90% of Senegal's EEZ is fished by DWF; and 48% of Ghana's EEZ.



# Policy Recommendations

- **Management plan**

(i) Develop fisheries management plan for the region i.e., focusing on effort and catch controls, mesh size regulations,

- **Model Vessel Day Scheme**

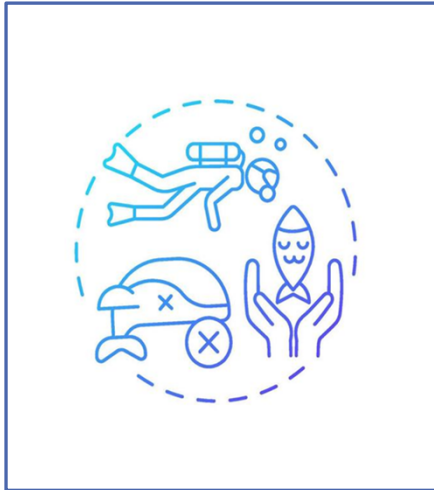
(ii) We recommend that the region should create a regional management body using the Pacific Islands Forum Fisheries Agency as a model

- **Good governance**

(iii) Improve monitoring, control and surveillance (MCS), and foster good governance.

(iv) Harmonize and enforce laws and codes of practice regarding illegal and illicit dealings in fishery resources.

# Recommendations



Protect marine  
& coastal  
systems

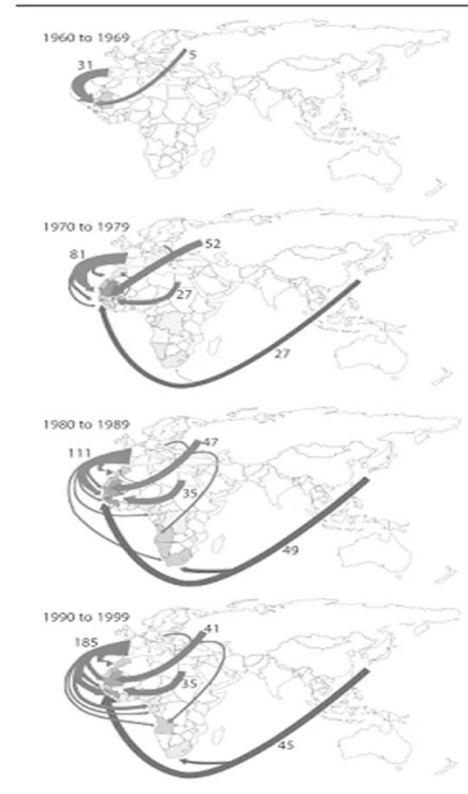
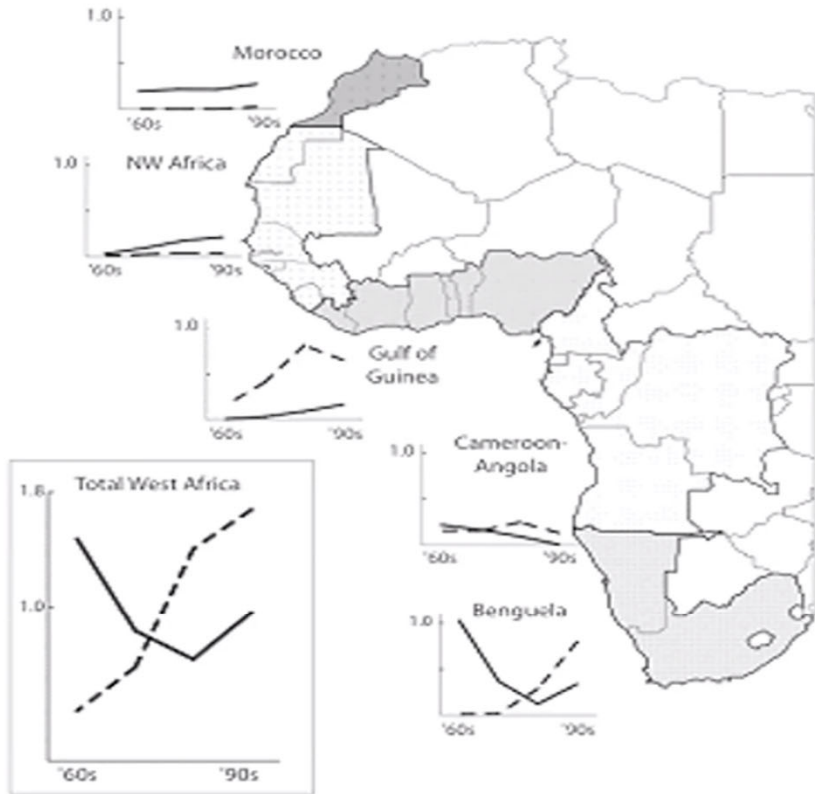


Enhance  
financial and  
physical  
security



Explore  
alternative  
economic  
sectors/maricul  
ture

Engage only in mutually beneficial/access agreements



Alder & Sumaila (2004): *J. Environment & Development*

## Topline findings

Declining trend of the pelagic fish catches in West Africa especially the waters of Ghana;

DWF targets several species (e.g., yellowfin tuna, blue shark, horse mackerels) in competition with national and regional fishing fleets;

DWFs operate in large proportions of the EEZs of the countries studied. E.g., 48 percent of Ghana's EEZ;

West Africa could model its regional management body after that of the Pacific Islands Forum Fisheries Agency (FFA).

# Thank you for your attention

Thanks to the COH  
@Legon for making  
this conference possible  
& CoastMan's project for  
financial support!



May 12-17, 2024

**Q&A time with @DrIbrahimIssifu**

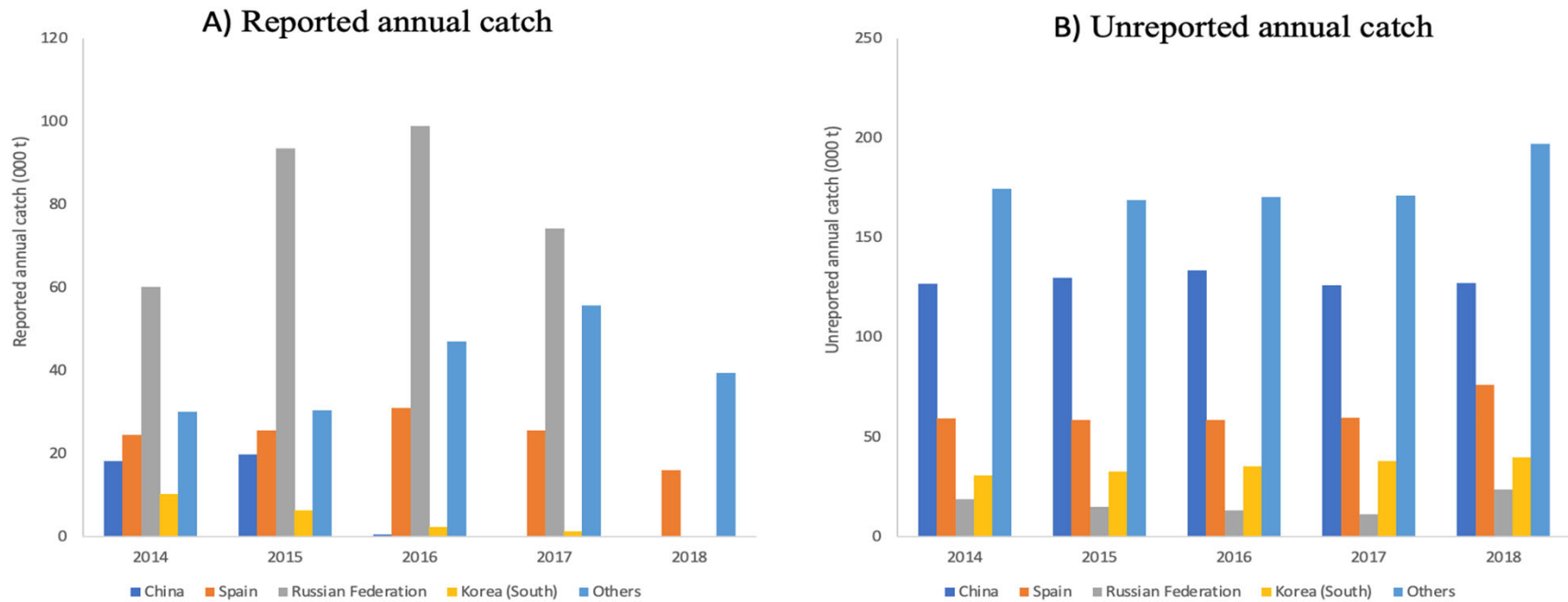
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## Focal species targeted by Domestic, Regional and DWF

Common name	Scientific name	Regional	DWF	Total	DWF (percent)
Marine fishes nei	Marine fishes not identified	302,356	453,707	756,062	60
Jacks, horse mackerels	Trachurus	15,466	43,993	59,459	74
Yellowfin tuna	Thunnus albacares	18,373	6,606	24,979	26
Blue shark	Prionace glauca	1,975	4,750	6,725	71
Flatfishes	Pleuronectiformes	4,052	1,940	5,992	32
Threadfins	Polynemidae	3,676	1,986	5,662	35
West African goatfish	Pseudupeneus prayensis	3,705	1,642	5,347	31



**Figure 3.** Reported and unreported annual catch (2014 – 2018) by DWFs operating in the West Africa region. **A).** The USA, Malta, South Korea, Ukraine, France, Germany, the Russian Federation, and Greece also have unreported catches ranging from 13,000 to 36,000 tonnes per year Other DWFs include Belize, Comoros, Curacao, El Salvador, Equatorial Guinea, France, Germany, Greece, Guatemala, Italy, Japan, Lithuania, Malta, Mauritania, Norway, Panama, Portugal, St. Vincent & the Grenadines, Taiwan, Ukraine, UK, and USA. **B)** China had the highest unreported average annual catches at 129,000 tonnes per year, followed by Spain with 66,000 tonnes per year. ‘Others’ include DWFs include Belize, Comoros, Curacao, El Salvador, Equatorial Guinea etc.