# Project Fisheries - FRB Cesab training

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The project is available on github

#### 1. R work environment

For this project we used:

• Targets to manage our workflow



• renv to make our R environment reproducible



• Rmarkdown to generate both this presentation and a Latex report



• ggplot2 to visualize our data

## 2. Question

How much carbon (C), nitrogen (N), and phosphorus (P) is extracted every year from the Barents Sea through fishing ?



### 2. Data

#### 2.1. Data extracted

- Carbone (C), Nitrogen (N), Phosphorus (P) content (% of dry mass) from Jabot, F. et al., (2020): Dataset for the article "Body stoichiometry of heterotrophs: assessing drivers of interspecific variations in elemental composition". figshare. Dataset. https://doi.org/10.6084/m9.figshare.13366310.v1
- Tonnage from Sea Around Us We downloaded data for the Barents Sea area on the Website: https://www.seaaroundus.org/



• Taxonomic data from the Global Biodiveristy Information Facility (GBIF)



#### 2.2. Data manipulation

Having two different dataset has required to join them. However, the species name were not exactly noted the same way on the two documents. Therefore we had to do some cleaning on both datasets.

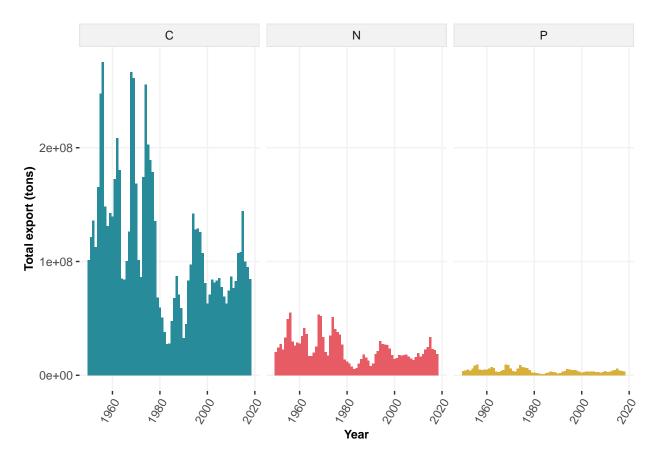
### 2.3. Final dataset

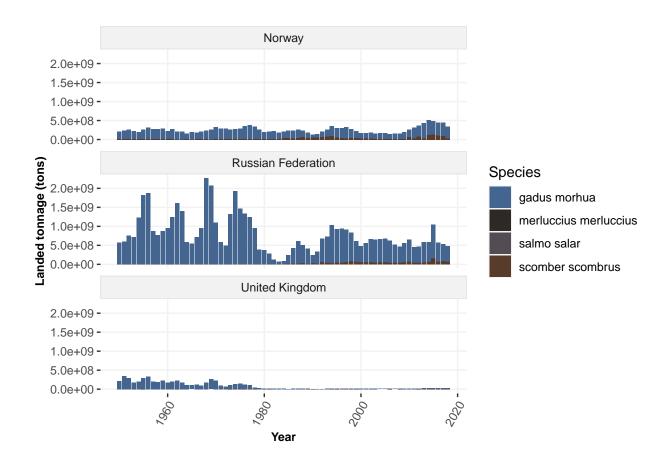
Our final dataset contains:

- \* Carbone (C)
- \* Nitrogen (N)
- \* Phosphorus (P)
- \* Species (n species of fishes)
- \* Tonnage
- \* Countries
- \* Type of gear

## 3. Analyses and vizualisation

## Representation of our results





## 4. Workflow

 $vizualisation\ of\ tar\_visnetwork$ 

