

# Project Fisheries - FRB Cesab training

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The project is available on *github*

## 1. R work environment



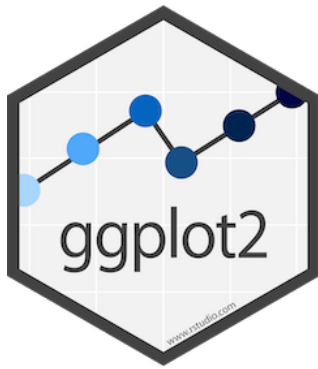
Targets to manage our workflow



renv to make our R environment reproducible



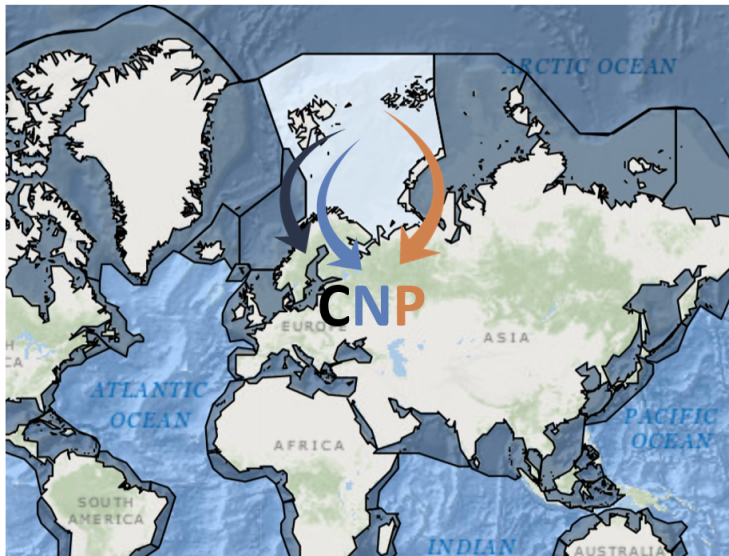
rmarkdown to generate both this presentation and a Latex report



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 Biodiversity 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.

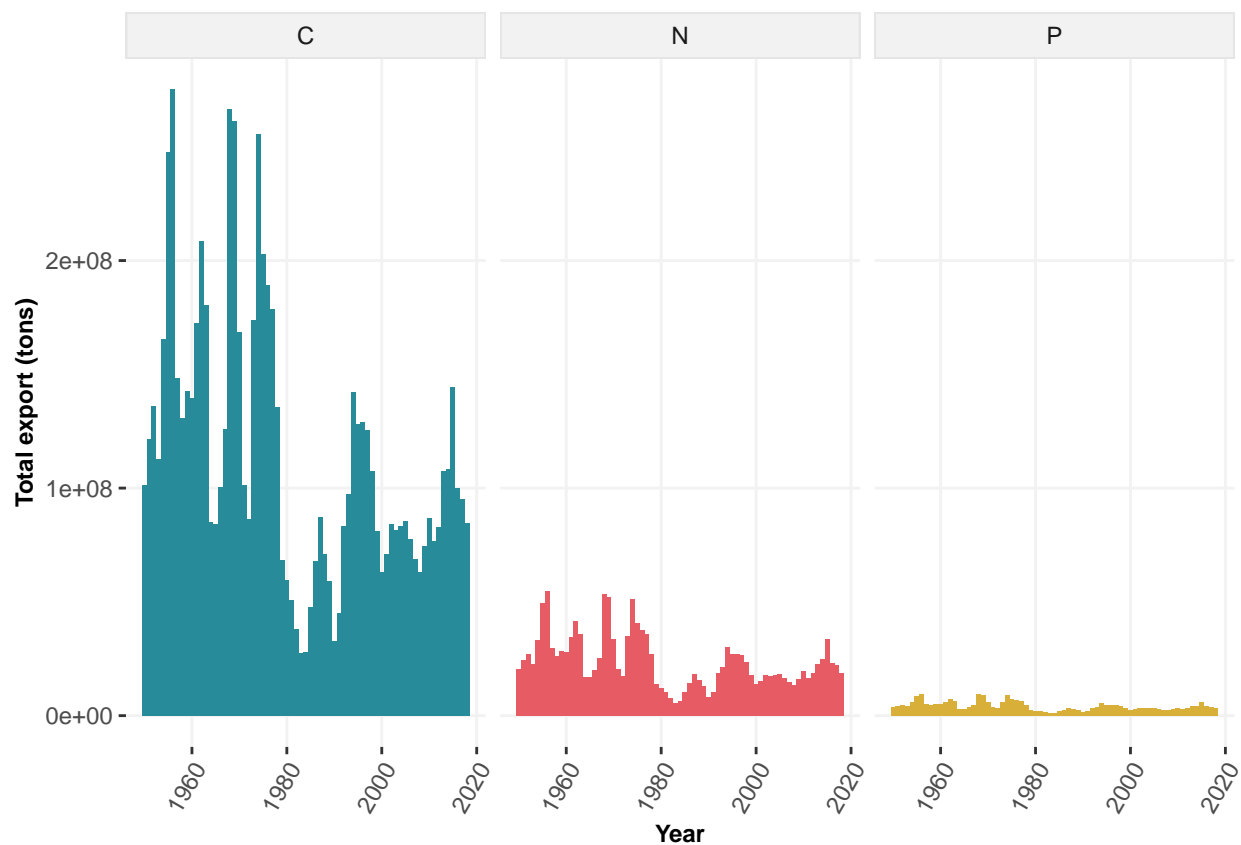
## 2.3. Final dataset

Our final dataset contains:

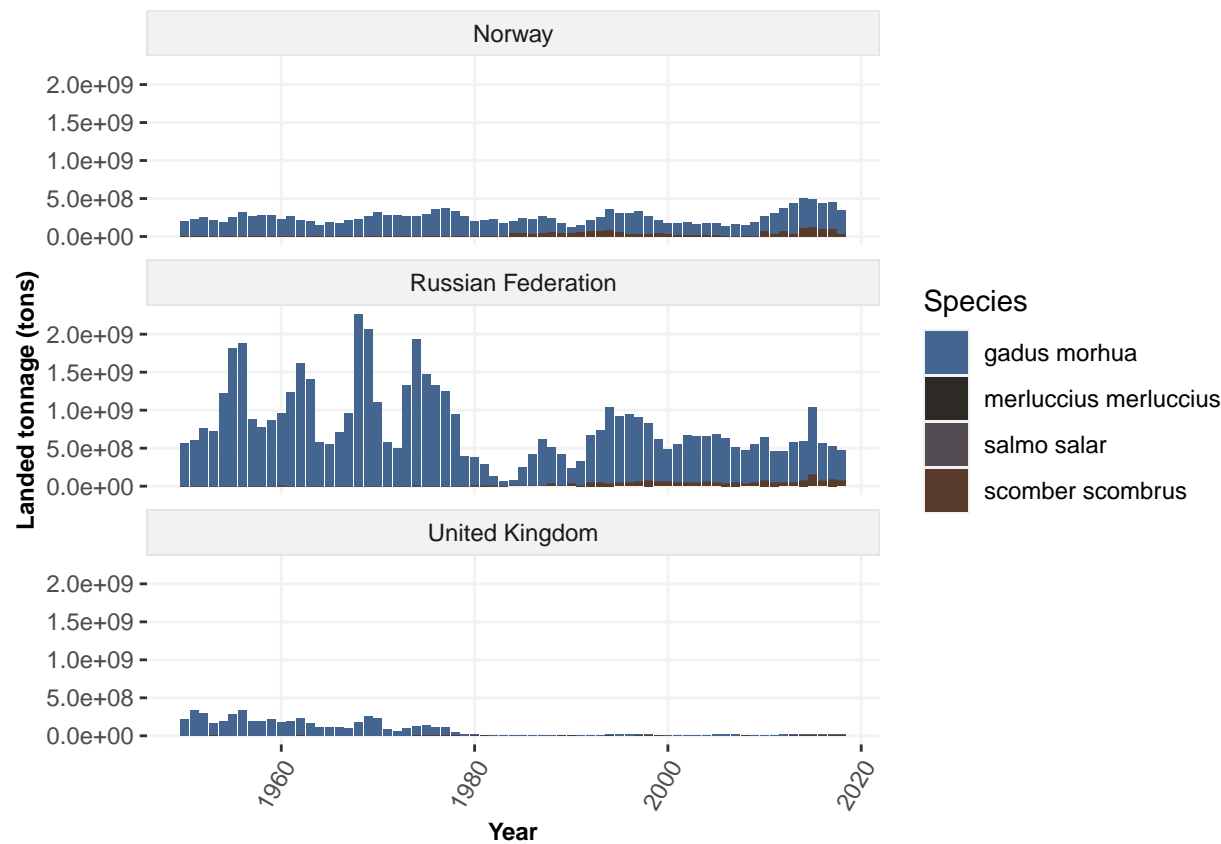
- Carbon (C)
- Nitrogen (N)
- Phosphorus (P)
- Species (n species of fishes)
- Tonnage
- Countries
- Type of gear

## 3. Analyses and vizualisation

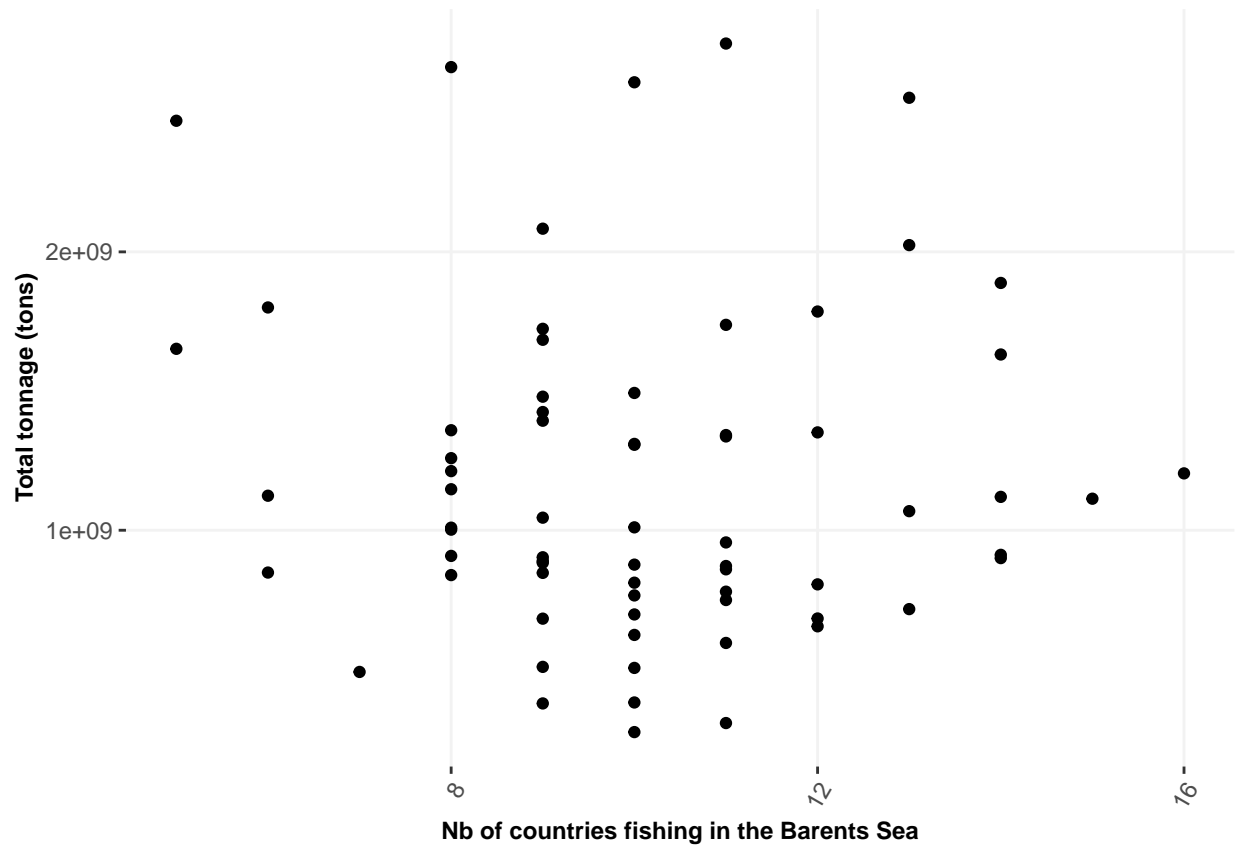
C, N, P data



Important counrty catch data



A surprising plot



## 4. Workflow

vizualisation of tar\_visnetwork

