INTERNAL FILES INFOS

<Some files changes include :>

- -files parsed from weird formats OR transformed into a certain format (CRU/ BCG files)
 - -empty data filling > later will be handled by models (the vision)

>>

- -fields changed for others on certain versions -> (eg. quantite facturee reajustee -> use of quantite facturee on last version, FOB negative -> elimnate the data row, Djibouti renamed Ethiopia, if no montant fob given then calculate it through Prix * quantity)
- -have one name for each product across all files (example P205 same as Phosphorus pentoxide elsewhere)
- -for Prod_ file, units are 000 metric tons/year for urea and kt/y for phosphate
 - -fields can have different names per versions(Capitals, extra spaces)
 - -add subregion for each country
- -added extra fields (project is operational or not (consider all plants as projects -may or may not be operational-), calculate avg from a string like "230 300")
 - -data aggregation (Cru Data / Premium week data)
 - -merge geolocations of companies with prod_ companie
 - -files may have different versions structures + fields names
 - -files to update a dataset may differ between two structures
- -lifemoz map data blended with the OSL/AGRIBOOSTERS... programs that are given on the excel attached to map data excel
 - -save dates dd/mm/yyyy
 - -each file filtered for the data given in the json file structures

AFRICA FERTLIZER (SCRAPPED API LINKS)

Note: for the APIS they may timeout and throw errors and such, doesn't mean data doesn't exist, just retry until it's working
Data:
imports:
1 - Fertilizers Total Import Volumes by Country Over Time (17 countries)

exports:

3 - Fertilizers Total Export Volumes by Country Over Time (12 country)

2 - Fertilizers Annual Import Volumes by Product (13 products 17 countries)

4 - Fertilizers Annual Export Volumes by Product (up until 2022 / 12 countries 5 products)

volumes:

5 -Total Fertilizer Production Volumes by Country Over Time (9 countries)

prices:

6 - Fertilizers Historical International Price Trends (for 16 products)

Country-wise Fertilizer Data:

- 7 Apparent Fertilizer Consumption by Country
- 8 National Average Fertilizer Consumption

REQUEST HEADERS

headers for the next requests will be:

```
"headers": {
    "accept": "application/json",
    "accept-language": "en-US,en;q=0.9",
    "content-type": "application/json",
    "sec-ch-ua": "\"Chromium\";v=\"116\", \"Not)A;Brand\";v=\"24\", \"Google Chrome\";v=\"116\"",
    "sec-ch-ua-mobile": "?0",
    "sec-ch-ua-platform": "\"Windows\"",
    "sec-fetch-dest": "empty",
    "sec-fetch-mode": "cors",
    "sec-fetch-site": "cross-site",
    "Referer": "https://africafertilizer.org/",
    "Referrer-Policy": "strict-origin-when-cross-origin"
    },
    "
```

REQUEST LINKS AND REQUEST BODY

```
const link = 'https://admin.vifaakenya.org/api/imports/regional/totalImportVolumesByCountry'
const body = {
 "years": [2023, 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014],
 "countriesSelected": [800519, 978660, 2, 805187, 683945, 3, 804180, 670465, 804873, 710067,
708364, 1, 777170, 804482, 690942, 778657, 805560],
 "lang": "en"
}
const year = 2023;
 const link = 'https://admin.vifaakenya.org/api/imports/regional/byCountry'
 const body = {
  yearSelected: year,
  countriesSelected: [800519, 978660, 2, 805187, 683945, 3, 804180, 670465, 804873, 710067,
708364, 1, 777170, 804482, 690942, 778657, 805560],
  productsSelected: [17, 287, 13, 285, 11, 281, 7, 278, 21, 52, 276, 274, 0],
  lang: "en"
 }
3)
const link = "https://admin.vifaakenya.org/api/exports/regional/totalExportVolumesByCountry"
const body = {
 "years": [2023, 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014],
 "countriesSelected": [2, 805187, 683945, 3, 804180, 670465, 804873, 708364, 777170, 804482,
690942, 805560],
 "lang": "en"
}
```

```
const link = "https://admin.vifaakenya.org/api/exports/regional/byCountry";
const body = {
 "yearSelected": 2022,
 "countriesSelected": [800519, 2, 805187, 683945, 3, 804180, 670465, 804873, 708364, 777170,
804482, 690942, 805560],
 "productsSelected": [13, 281, 21, 52, 0],
 "lang": "en"
};
5)
const link = "https://admin.vifaakenya.org/api/production/regional/totalProductionVolumesByCountry"
const body = {
 "years": [2023, 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010],
 "countriesSelected": [2, 3, 670465, 683945, 777170, 804180, 804482, 805187, 805560],
 "productsSelected": [13, 17, 281, 287, 52, 0],
 "lang": "en"
}
6)
const link = "https://admin.vifaakenya.org/api/fob/historicalSeriesByProducts"
const body = {
 "productOriginsSelected": [2041604, 22030, 22033, 22035, 82621, 22047, 22049, 22051, 22031,
22055, 22039, 22038, 22041, 22037, 22043, 22045],
 "dates": [],
 "unit": "USD_MT",
 "currencyCode": "USD",
```

```
"lang": "en"
```

7)

const link = "https://admin.vifaakenya.org/api/consumption/ApparentConsumption"

```
const year = 2022
const body = {
   "yearSelected": year,
   "countriesSelected": [800519, 978660, 2, 805187, 683945, 3, 804180, 670465, 804873, 708364, 710067, 777170, 1, 804482, 690942],
   "productsSelected": [0, 7, 11, 13, 17, 21, 52, 274, 276, 278, 281, 285, 287],
   "lang": "en"
}
```

8)

For this there's a request for each country (there's two types of responses for these countries):

> National Average Fertilizer Consumption - by Product Ton (straight forward)

example in : https://viz.africafertilizer.org/#/nigeria/use

> National Average Fertilizer Consumption (needs translating x to years and y to value per ton)

example in: https://viz.africafertilizer.org/#/kenya/use

This Data is by cropland not by Nutrient (nutrient exists for only 6 out of 8) can

add it upon request

Kenya:

```
{
       kenya:
       const link = "https://admin.vifaakenya.org/api/consumption/consumptionByProduct";
       const body = {
         "nutrients": [2768212, 2768213, 2768211],
         "years": [2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013, 2012],
         "landArea": 125895,
         "zoneSelected": false,
         "treePlantation": false,
         "countryIso": "KE",
         "lang": "en"
       };
}
Nigeria:
{
const link = "https://admin.vifaakenya.org/api/consumption/consumptionByCropland"
const body = {
 "years": [2023, 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013],
 "dataSources": [125897, 125898],
```

```
"zoneSelected": false,
 "treePlantation": false,
 "countryIso": "NG",
 "lang": "en"
}
}
Ghana:
{
 Const link = "https://admin.vifaakenya.org/api/consumption/consumptionByCropland"
 const body = {
 "years": [2023, 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013],
 "dataSources": [125897, 125898],
 "zoneSelected": false,
 "treePlantation": false,
 "countryIso": "GH",
 "lang": "en"
 }
}
```

Senegal:

```
{
       const link = "https://admin.vifaakenya.org/api/consumption/consumptionByProduct";
       const body = {
        "nutrients": [2768212, 2768213, 2768211],
        "years": [2022, 2021, 2020, 2019, 2018, 2017, 2016],
        "landArea": 125895,
        "zoneSelected": false,
        "treePlantation": false,
        "countrylso": "SN",
        "lang": "en"
       };
}
Zambia:
{
       const link = "https://admin.vifaakenya.org/api/consumption/consumptionByProduct";
       const body = {
         "nutrients": [2768212, 2768213, 2768211],
         "years": [2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014],
         "landArea": 125895,
         "zoneSelected": false,
```

"treePlantation": false,

```
"countryIso": "ZM",
         "lang": "en"
       };
}
Malawi:
{
       const link = "https://admin.vifaakenya.org/api/consumption/consumptionByProduct";
       const body = {
         "nutrients": [2768212, 2768213, 2768211],
         "years": [2022, 2021, 2020, 2019, 2018, 2017, 2016],
         "landArea": 125895,
         "zoneSelected": false,
         "treePlantation": false,
         "countryIso": "MW",
         "lang": "en"
       };
}
Ethiopia:
{
const link = "https://admin.vifaakenya.org/api/consumption/consumptionByProduct";
       const body = {
         "nutrients": [2768212, 2768213, 2768211],
         "years": [2022, 2021, 2020, 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011],
         "landArea": 125895,
         "zoneSelected": false,
         "treePlantation": false,
```

```
"countryIso": "ET",

"lang": "en"

};
```

IMF API DATA

For this Public Api there's countries dictionary which you'll find attached to the email

Gross public debt, percent of GDP

https://www.imf.org/external/datamapper/api/v1/d

Reserves (Months of Imports)

(This will probably be neglected due to having Official Reserve Assets from worldbank)

https://www.imf.org/external/datamapper/api/v1/BRASS_MI

>update frequency

```
imf:
    IMF updated monthly / quarterly
```

VIFA:

```
Market Prices: Updated weekly
```

Fertilizer Demand and Supply: Updated monthly

Fertilizer Policies and Regulations: Updated quarterly

Fertilizer Research and Development: Updated annually

Internal files:

plants : annual

capacities : quarterly

CRU + premium : weekly

sales :? to be discussed with saad

bcg :? to be discussed with saad

EXTRA:

- There's still few in real time Apis to be added such as Refinitiv/Bloomberg And the marine tracking Api