Comparing health facility location data for Senegal

Andy South @afrimapr

2022-03-04

DRAFT

Code for this document

Initial comparison of data from COUS & DPRSS.

The aim is to see if we can develop code to help with the process of improving health facility location data by comparing and combining data from different sources.

COUS provided an Excel file with two sheets.

COUS Sheet2 for Saint Louis has 9 rows and 130 columns including coordinates and attributes such as the numbers of beds and staff.

DPRSS provided the names of facilities and regions for the whole country in a file with **374 rows and 1** column.

COUS data Names of facilities.

cous_names

EPS1 de Richard Toll
Centre de Sante de Dagana
Centre de Sante de Saint Louis
Centre de Sante Amadou Malick Gaye
Centre de Sante de Pete
Centre de santé de Richard Toll
HOPITAL REGIONAL DE SAINT LOUIS
CHR NDioum
Centre de santé de Ross Bethio

DPRSS data Lets look at the first 9 rows of the DPRSS data.

dprss_names

[-] RM Saint-Louis
[-] Dagana
CS Dagana
DPC de Dagana
PM MAC Dagana
PS 4e Et 5e Secteur
[-] PS Bokhol
Case de Geum Yalla
PS Bouteyni

We can see that sometimes rows indicate regions, e.g. [-] RM Saint-Louis and [-] Dagana. Also sometimes a row with a [-] indicates a facility that has control over others e.g. [-] PS Bokhol. This makes it difficult to analyse the data automatically because it is difficult to detect whether a row refers to a facility or not. It may be that if a row has a [-] and does not have PS, CS or Case then it is not a facility.

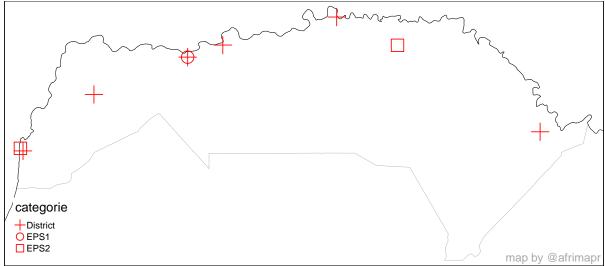
We can compare the COUS & DPRSS tables above to check whether the facility names in the COUS data appear exactly the same as in the DPRSS data. We would need to be able to write code to find matching names to be able to write a reproducible pipeline for comparing data.

An initial search by eye shows the mismatches between naming in the two datasets.

cous_names	dprss_names
EPS1 de Richard Toll	EPS 1 Richard Toll
Centre de Sante de Dagana	CS Dagana
Centre de Sante de Saint Louis	CS Saint - Louis
Centre de Sante Amadou Malick Gaye	?
Centre de Sante de Pete	[-] CS Pete
Centre de santé de Richard Toll	CS Richard Toll
HOPITAL REGIONAL DE SAINT LOUIS	?
CHR NDioum	?Antenne de Ndioum
Centre de santé de Ross Bethio	[-] CS Ross Bethio

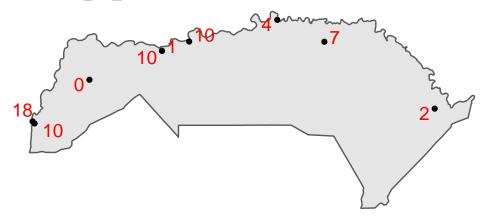
Categories of COUS health facilities Saint Louis

COUS health facilities Saint Louis 2022

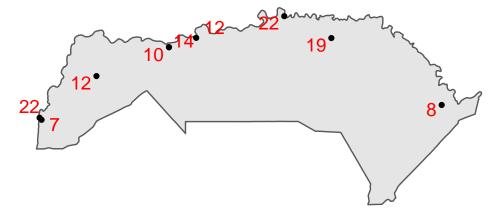


Numbers of beds (lits) in different wards from COUS data

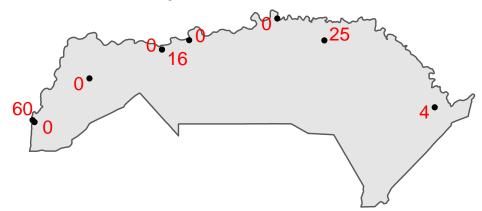
COUS lits_en_sau



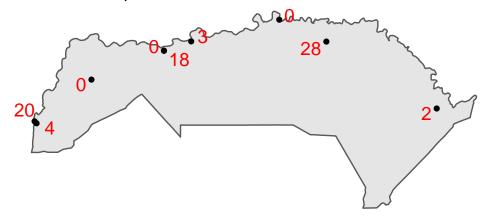
COUS lits_en_medecine



COUS lits_en_chirurgie



COUS lits_en_pediatrie



COUS lits_en_reanimation

