

Third Assignment

Third Assignment: Benin

As we said in the previous assignment, we chose the country of Benin to work on our project. In particular we would like to address a specific question: **What impact does decentralization have on the performance of the health provision system in Benin?**

To do so, we need both data for the country and for the single municipalities to better analyze the situation and to find an appropriate answer to our main question. Thus, our first step is to web scrape data from the WB and the Who on Benin as a country, related to public health expenditure, health expenditure per capita, improved sanitation facilities, density of health infrastructures per 100000 population. In fact, as we already mentioned, decentralization in Benin only began in the 2000s with establishment of 77 municipalities and transfer of competencies from central to local governments. Consequently, let's see the trend of the last years concerning this country on behalf of health related variables.

Firstly, we need to load the dataset.

```
library(WDI)
```

```
## Loading required package: RJSONIO
```

```
healthpublicexpend<-WDI(indicator= c('SH.XPD.PUBL', 'SH.XPD.PCAP', 'SH.STA.ACSN'))  
subset(healthpublicexpend, country=='Benin')
```

##	iso2c	country	year	SH.XPD.PUBL	SH.XPD.PCAP	SH.STA.ACSN
## 190	BJ	Benin	2005	49.69	25.21	11.2
## 191	BJ	Benin	2006	50.22	26.47	11.7
## 192	BJ	Benin	2007	50.75	28.78	12.2
## 193	BJ	Benin	2008	50.95	31.02	12.7
## 194	BJ	Benin	2009	53.35	31.80	13.2
## 195	BJ	Benin	2010	51.17	30.48	13.7
## 196	BJ	Benin	2011	52.10	33.73	14.2

This dataset includes these variables:

- (i) **health expenditure per capita (SH.XPD.PCAP)**, meaning the sum of public and private health expenditures as a ratio of total population. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation. Data are in current U.S. dollars.
- (ii) **public health expenditure (SH.XPD.PUBL)**, which consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds.
- (iii) **improved sanitation facilities (SH.STA.ACSN)**, which actually refers to the access to improved sanitation facilities as the percentage of the population using improved sanitation facilities. The indicator includes flush/pour flush (to piped sewer system, septic tank, pit latrine), ventilated improved pit (VIP) latrine, pit latrine with slab, and composting toilet.

The second dataset is taken from the WHO indicators.