# Package: rGhanaCensus (via r-universe)

October 9, 2024

Title 2021 Ghana Population and Housing Census Results as Data Frames
Version 0.1.0
<b>Description</b> Datasets from the 2021 Ghana Population and Housing Census Results. Users can access results as 'tidyverse' and 'sf'-Ready Data Frames. The data in this package is scraped from pdf reports released by the Ghana Statistical Service website <a href="https://census2021.statsghana.gov.gh/">https://census2021.statsghana.gov.gh/</a> . The package currently only contains datasets from the literacy and education reports. Namely, school attendance data for respondents aged 3 years and above.
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Encoding UTF-8
<b>Roxygen</b> list(markdown = TRUE)
RoxygenNote 7.1.2
Maintainer Ama Owusu-Darko <aowusuda@asu.edu></aowusuda@asu.edu>
<b>Depends</b> R (>= $3.5.0$ )
LazyData true
Suggests dplyr, knitr, magrittr, rmarkdown, sf, tmap
VignetteBuilder knitr
<pre>URL https://github.com/ktemadarko/rGhanaCensus,</pre>
https://ktemadarko.github.io/rGhanaCensus/
BugReports https://github.com/ktemadarko/rGhanaCensus/issues
Repository https://ktemadarko.r-universe.dev
RemoteUrl https://github.com/ktemadarko/rghanacensus
RemoteRef HEAD
<b>RemoteSha</b> 41ae31239c9679f9bb7fa04a667b917bf785bf37
Contents
Ghana_2021_school_attendance

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Ghana\_2021\_school\_attendance

Ghana School Attendance Indicator data

## **Description**

The Ghana\_2021\_school\_attendance dataset contains school attendance indicators for respondents in the 16 regions of Ghana surveyed in the 2021 Ghana Population and Housing Census.

• Details -Age range of survey respondents in this data set 3 years and above.

#### Usage

Ghana\_2021\_school\_attendance

#### **Format**

A data frame with 64 rows and 10 variables:

- Region
  - A factor with 16 levels with the names of the regions in Ghana
- Gender
  - A factor with 2 levels
- Locality
  - A factor with 2 levels describing with the respondents surveyed lived in an urban or rural area
- Currently\_Attending\_School
  - numeric column with the raw count values of survey respondents aged 3 years and above currently attending school
- Percent\_Currently\_Attending\_School
  - A numeric column with the derived percentage of
  - ((Currently\_Attending\_School)/Sum\_of\_Respondents\_(3\_years\_and\_above))\*100 to two decimal places
- Never\_Attended\_School
  - A numeric column with the raw count values of survey respondents aged 3 years and above who have never attended school
- Percent\_Never\_Attended\_School
  - A numeric column with the derived percentage of
  - ((Never\_Attended\_School)/Sum\_of\_Respondents\_(3\_years\_and\_above))\*100 to two decimal places
- Dropped\_out\_of\_School

- A numeric column with the raw count values of survey respondents aged 3 years and above who were in school but dropped out
- Percent\_Dropped\_out\_of\_School
  - A numeric column with the derived percentage of
  - ((Dropped\_out\_of\_School)/Sum\_of\_Respondents\_(3\_years\_and\_above))\*100 to two decimal places
- Sum\_of\_Respondents\_(3\_years\_and\_above)
  - A numeric column with the raw sum values in each row.
  - That is sum of (Currently\_Attending\_School, Never\_Attended\_School, Dropped\_out\_of\_School) in each row

## Source

- · School attendance data
- Scraped from Ghana Statistical Service published 2021 Ghana Population and Housing Census Results Volume 3D Literacy and Education PDF Reports

https://statsghana.gov.gh/gssmain/fileUpload/pressrelease/2021%20PHC%20General%20Report% 20Vol%203D\_Literacy%20and%20Education.pdf

- Ghana regional administrative boundaries geometry data
- Downloaded from Humanitarian data exchange website on 7th January, 2022

https://data.humdata.org/dataset/ghana-administrative-boundaries

Ghana\_2021\_school\_attendance\_geometry

Ghana School Attendance Indicator data plus geometry

## **Description**

The Ghana\_2021\_school\_attendance\_geometry dataset contains school attendance indicators for respondents in the 16 regions of Ghana surveyed in the 2021 Ghana Population and Housing Census plus Ghana regional administrative boundaries.

• Details Age range of survey respondents in this data set 3 years and above.

#### Usage

Ghana\_2021\_school\_attendance\_geometry

#### **Format**

A data frame with 64 rows and 10 variables:

- Region
  - A factor with 16 levels with the names of the regions in Ghana
- Gender
  - A factor with 2 levels
- Locality
  - A factor with 2 levels describing with the respondents surveyed lived in an urban or rural area
- · Currently Attending School
  - numeric column with the raw count values of survey respondents aged 3 years and above currently attending school
- Percent Currently Attending School
  - A numeric column with the derived percentage of
  - ((Currently\_Attending\_School)/Sum\_of\_Respondents\_(3\_years\_and\_above))\*100 to two decimal places
- · Never Attended School
  - A numeric column with the raw count values of survey respondents aged 3 years and above who have never attended school
- Percent\_Never\_Attended\_School
  - A numeric column with the derived percentage of
  - ((Never\_Attended\_School)/Sum\_of\_Respondents\_(3\_years\_and\_above))\*100 to two decimal places
- Dropped\_out\_of\_School
  - A numeric column with the raw count values of survey respondents aged 3 years and above who were in school but dropped out
- Percent\_Dropped\_out\_of\_School
  - A numeric column with the derived percentage of
  - ((Dropped\_out\_of\_School)/Sum\_of\_Respondents\_(3\_years\_and\_above))\*100 to two decimal places
- Sum\_of\_Respondents\_(3\_years\_and\_above)
  - A numeric column with the raw sum values in each row.
  - That is sum of (Currently\_Attending\_School, Never\_Attended\_School, Dropped\_out\_of\_School) in each row

#### Source

- · School attendance data
- Scraped from Ghana Statistical Service published 2021 Ghana Population and Housing Census Results Volume 3D Literacy and Education PDF Reports

 $https://statsghana.gov.gh/gssmain/fileUpload/pressrelease/2021\%20PHC\%20General\%20Report\%20Vol\%203D\_Literacy\%20and\%20Education.pdf$ 

- Ghana regional administrative boundaries geometry data
- Downloaded from Humanitarian data exchange website on 7th January, 2022

https://data.humdata.org/dataset/ghana-administrative-boundaries

## **Examples**

```
## Not run:
#Example
#Create a interactive map with the package tmap that displays the
#regional distribution of percentage of students 3 years or older who have dropped out of school.
#Load required packages
library(sf)
library(tmap)
library(dplyr)
library(magrittr)
#Load geometry data
data("Ghana_2021_school_attendance_geometry", package = "rGhanaCensus")
#Convert to sf data frame and assign a name
#In this example, "Ghana_edu_sf" will be the name of the sf data frame created.
Ghana_edu_sf<- sf::st_as_sf(Ghana_2021_school_attendance_geometry)</pre>
#Use tmap to create interactive map
tmap_mode("plot")
Ghana_edu_sf %>%
               dplyr::filter(Locality=="Urban") %>%
               tm_shape()+
               tm_polygons(id="Region", col="Percent_Dropped_out_of_School")+
               tm_text(text="Percent_Dropped_out_of_School")+
               tm_facets(by="Gender")
## End(Not run)
```

## **Index**