

Package ‘bangladesh’

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Title Provides Ready to Use Shapefiles for Geographical Map of Bangladesh

Description Usually, it is difficult to plot choropleth maps for Bangladesh in 'R'. The 'bangladesh' package provides ready-to-use shapefiles for different administrative regions of Bangladesh (e.g., Division, District, Upazila, and Union). This package helps users to draw thematic maps of administrative regions of Bangladesh easily as it comes with the 'sf' objects for the boundaries. It also provides functions allowing users to efficiently get specific area maps and center coordinates for regions. Users can also search for a specific area and calculate the centroids of those areas.

Version 1.0.0

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Encoding UTF-8

LazyDataCompression gzip

LazyData true

RoxygenNote 7.1.1

Depends R (>= 3.5.0)

Imports tmap, sf

Suggests dplyr, ggplot2, knitr, rmarkdown, scales, viridis

VignetteBuilder knitr

NeedsCompilation no

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area_names	<i>Banlgadesh administrative levels names in English</i>
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Description

A dataset containing Division, District, Upazila, and Union names

Usage

```
area_names
```

Format

A data frame with 5160 rows and 4 variables:

District district (admin level 2) names

Division division (admin level 1) names

Upazila upazila (admin level 3) names

Union upazila (admin level 3) names

Source

Bangladesh Bureau of Statistics

bd_plot	<i>sample function for plotting map of different administrative levels</i>
---------	--

Description

uses tmap

Usage

```
bd_plot(level = "country", type = "static")
```

Arguments

level	Administrative level of bangladesh. Should be one of: "country", "division", "district", "upazila", "union"
type	Plotting mode: "static" or "interactive"

Value

Static or interactive plot for administrative levels

Examples

```
# Plot static map of district
bd_plot(level = "district", type = "static")
```

bd_search	<i>search for specific areas</i>
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Description

uses sf

Usage

```
bd_search(searchFor, level = "division", as.is = FALSE, coordinates = FALSE)
```

Arguments

searchFor	search keyword
level	administrative level of bangladesh. Should be one of: "country", "division", "district", "upazila", "union"
as.is	boolean, if TRUE, matches exact keyword as given
coordinates	boolean, if TRUE, returns centroids of searched areas (latitudes and longitudes)

Value

A data frame

Examples

```
bd_search("amtali", level = "union", as.is = TRUE, coordinates = TRUE)
```

get_area_names	<i>get area names in English, available in the shapefiles</i>
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Description

get area names in English, available in the shapefiles

Usage

```
get_area_names()
```

Value

A data frame with area names in English

Examples

```
names <- get_area_names()
```

get_coordinates	<i>get centroids of administrative areas</i>
-----------------	--

Description

uses sf

Usage

```
get_coordinates(level = "division")
```

Arguments

level administrative level of bangladesh. Should be one of: "division", "district", "upazila", "union"

Value

A data frame containing latitudes and longitudes

Examples

```
get_coordinates(level = "division")
get_coordinates(level = "district")
```

get_divisions	<i>get partial maps for divisions</i>
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Description

get partial maps for divisions

Usage

```
get_divisions(divisions, level = "division")
```

Arguments

divisions	character vector for division names. Can take multiple divisions.
level	administrative level of bangladesh. Should be one of: "division", "district", "upazila", "union"

Value

shapefile for given administrative level

Examples

```
get_divisions(divisions = "Sylhet", level = "upazila")
```

get_map	<i>get shapefile for different administrative levels</i>
---------	--

Description

get shapefile for different administrative levels

Usage

```
get_map(level = "country")
```

Arguments

level	administrative level of bangladesh. Should be one of: "country", "division", "district", "upazila", "union"
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Value

shapefile for given administrative level

Examples

```
country <- get_map("country")
division <- get_map("division")
district <- get_map("district")
```

map_country	<i>Banlgadesh administrative level 0 shapefile</i>
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Description

A shapefile containing level 0 administrative boundaries

Usage

```
map_country
```

Format

A shapefile with 3 variables:

Country country (admin level 0) name

ADM0_PCODE admin level 0 codes

geometry MULTIPOLYGON for administrative areas

Source

Banlgadesh Bureau of Statistics

map_district	<i>Banlgadesh administrative level 2 shapefile</i>
--------------	--

Description

A shapefile containing level 2 administrative boundaries

Usage

```
map_district
```

Format

A shapefile with 7 variables:

District district (admin level 2) names

ADM2_PCODE admin level 2 codes

Division division (admin level 1) names

ADM1_PCODE admin level 1 codes

Country country (admin level 0) name

ADM0_PCODE admin level 0 codes

geometry MULTIPOLYGON for administrative areas

Source

Bangladesh Bureau of Statistics

map_division	<i>Banlgadesh administrative level 1 shapefile</i>
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Description

A shapefile containing level 1 administrative boundaries

Usage

map_division

Format

A shapefile with 5 variables:

Division division (admin level 1) names

ADM1_PCODE admin level 1 codes

Country country (admin level 0) name

ADM0_PCODE admin level 0 codes

geometry MULTIPOLYGON for administrative areas

Source

Bangladesh Bureau of Statistics

map_union

Banlgadesh administrative level 4 shapefile

Description

A shapefile containing level 4 administrative boundaries

Usage

map_union

Format

A shapefile with 11 variables:

Union upazilla (admin level 4) names

ADM4_PCODE admin level 4 codes

Upazila upazilla (admin level 3) names

ADM3_PCODE admin level 3 codes

District district (admin level 2) names

ADM2_PCODE admin level 2 codes

Division division (admin level 1) names

ADM1_PCODE admin level 1 codes

Country country (admin level 0) name

ADM0_PCODE admin level 0 codes

geometry MULTIPOLYGON for administrative areas

Source

Bangladesh Bureau of Statistics

map_upazila

Banlgadesh administrative level 3 shapefile

Description

A shapefile containing level 3 administrative boundaries

Usage

map_upazila

Format

A shapefile with 9 variables:

Upazila upazilla (admin level 3) names
ADM3_PCODE admin level 3 codes
District district (admin level 2) names
ADM2_PCODE admin level 2 codes
Division division (admin level 1) names
ADM1_PCODE admin level 1 codes
Country country (admin level 0) name
ADM0_PCODE admin level 0 codes
geometry MULTIPOLYGON for administrative areas

Source

Bangladesh Bureau of Statistics

pop_district_2011 *Banlgadesh population census-2011 data for district level*

Description

A dataset containing total population, population by age groups and gender for each districts (administrative level 2) in bangladesh

Usage

pop_district_2011

Format

A data frame with 64 rows and 25 variables:

district district (admin level 2) names
admin2Pcode district codes
division division (admin level 1) names
admin1Pcode division codes
population population in 2011
P00_04 population in age group 0-4
P05_09 population in age group 5-9
P10_14 population in age group 10-14
P15_19 population in age group 15-19

P20_24 population in age group 20-24
P25_29 population in age group 25-29
P30_34 population in age group 30-34
P35_39 population in age group 35-39
P40_44 population in age group 40-44
P45_49 population in age group 45-49
P50_54 population in age group 50-54
P55_59 population in age group 55-59
P60_64 population in age group 60-64
P65_69 population in age group 65-69
P70_74 population in age group 70-74
P75_80 population in age group 75-80
P80plus population in age group 80+
Child child population
Male male population
Female female population

Source

Bangladesh Bureau of Statistics

pop_division_2011 *Banlgadesh population census-2011 data for division level*

Description

A dataset containing total population, population by age groups and gender for each divisions (administrative level 1) in bangladesh

Usage

pop_division_2011

Format

A data frame with 64 rows and 23 variables:

division division (admin level 1) names
admin1Pcode division codes
population population in 2011
P00_04 population in age group 0-4
P05_09 population in age group 5-9

P10_14 population in age group 10-14
P15_19 population in age group 15-19
P20_24 population in age group 20-24
P25_29 population in age group 25-29
P30_34 population in age group 30-34
P35_39 population in age group 35-39
P40_44 population in age group 40-44
P45_49 population in age group 45-49
P50_54 population in age group 50-54
P55_59 population in age group 55-59
P60_64 population in age group 60-64
P65_69 population in age group 65-69
P70_74 population in age group 70-74
P75_80 population in age group 75-80
P80plus population in age group 80+
Child child population
Male male population
Female female population

Source

Bangladesh Bureau of Statistics

pop_upazila_2011 *Banlgadesh population census-2011 data for upazila level*

Description

A dataset containing total population, population by age groups and gender for each upazilas (administrative level 3) in bangladesh

Usage

pop_upazila_2011

Format

A data frame with 64 rows and 29 variables:

upazila upazila (admin level 3) names
admin3Pcode upazila codes
district district (admin level 2) names
ADM2_PCODE district codes
division division (admin level 1) names
ADM1_PCODE division codes
population population in 2011
P00_04 population in age group 0-4
P05_09 population in age group 5-9
P10_14 population in age group 10-14
P15_19 population in age group 15-19
P20_24 population in age group 20-24
P25_29 population in age group 25-29
P30_34 population in age group 30-34
P35_39 population in age group 35-39
P40_44 population in age group 40-44
P45_49 population in age group 45-49
P50_54 population in age group 50-54
P55_59 population in age group 55-59
P60_64 population in age group 60-64
P65_69 population in age group 65-69
P70_74 population in age group 70-74
P75_80 population in age group 75-80
P80plus population in age group 80+
Child child population
Male male population
Female female population

Source

Bangladesh Bureau of Statistics

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