



Wittgenstein Centre

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FOR DEMOGRAPHY AND  
GLOBAL HUMAN CAPITAL

A COLLABORATION OF IIASA, VID/ÓAW, WU

# The Wittgenstein Centre Data Explorer

© Wittgenstein Centre for Demography  
and Global Human Capital

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# Wittgenstein Centre Data Explorer

Explore, select and download data of the global population projections by age, sex and education published by Lutz, Butz, and K.C. (2014). Access the executive summary [↗](#).



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Selection

Data

Assumptions

## 1. Indicators

Indicator Type

Population & Human Capital Stocks

Indicator

Population Size (000's)

## 2. Geography

Country

Type or click for countries

Region

Type or click for regions

Include countries of selected regions

## 3. Breakdown

Sex

Both

Age

All

Include all age groups

## 4. Time Horizon

Scenario

Medium (SSP2)

Year

2010

Include all times

View Data [↗](#)

Download

All data about the projections and reconstruction of population by age, sex and level of education are available in the: [Wittgenstein Centre Data Explorer](http://www.wittgensteincentre.org/dataexplorer)

[www.wittgensteincentre.org/dataexplorer](http://www.wittgensteincentre.org/dataexplorer)



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## 1. Indicators

### Indicator Type

### Indicator



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[Selection](#)[Data](#)[Assumptions](#)

## 1. Indicators

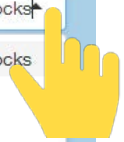
### Indicator Type

Population & Human Capital Stocks

Population & Human Capital Stocks

Demographic Changes

New Aging Indicators



All kinds of indicators are available

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## 1. Indicators

### Indicator Type

Population & Human Capital Stocks

Population & Human Capital Stocks

Demographic Changes

New Aging Indicators



All kinds of indicators are available

## Population and human capital stocks indicators:

- Population size
- Population size by education
- Sex ratio
- Dependency ratios
- Education distribution
- Mean years of schooling
- Measures of gender gap ...

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## 1. Indicators

### Indicator Type

Population & Human Capital Stocks

Population & Human Capital Stocks

Demographic Changes

New Aging Indicators



All kinds of indicators are available

## Demographic changes indicators:

- Growth rates
- Median age
- Total fertility rate (TFR)
- TFR by education
- Age specific fertility rates and CBR
- Mean age at child bearing
- Life expectancies
- Survival ratios and CDR
- Net migration ...

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## 1. Indicators

### Indicator Type

Population & Human Capital Stocks

Population & Human Capital Stocks

Demographic Changes

New Aging Indicators



All kinds of indicators are available

## New aging indicators:

- Prospective median age
- Age when life expectancy is below 15 years
- Prospective old age dependency ratio





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All data are available for **195 countries**, grouped by region and sub-regions

## 2. Geography

### Country

Algeria Angola Benin Botswana  
Burkina Faso Burundi Cameroon  
Cape Verde  
Central African Republic Chad  
Comoros Congo Cote d'Ivoire  
Democratic Republic of the Congo  
Djibouti Egypt Equatorial Guinea  
Eritrea Ethiopia Gabon Gambia  
Ghana Guinea Guinea-Bissau  
Kenya Lesotho Liberia  
Libyan Arab Jamahiriya Madagascar  
Malawi Mali Mauritania Mauritius  
Mayotte Morocco Mozambique  
Namibia Niger Nigeria Reunion  
Rwanda Sao Tome and Principe  
Senegal Sierra Leone Somalia  
South Africa Sudan Swaziland  
Togo Tunisia Uganda  
United Republic of Tanzania Zambia  
Zimbabwe

### Region

Africa

Include countries of selected regions



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All data are available for [195 countries](#), grouped by region and sub-regions

Most data are available [by sex and by age](#) up to 100+

### 3. Breakdown

#### Sex

Both Male Female

#### Age

All 0--4 5--9 10--14 15--19 20--24  
25--29 30--34 35--39 40--44  
45--49 50--54 55--59 60--64  
65--69 70--74 75--79 80--84  
85--89 90--94 95--99 100+

Include all age groups

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All data are available for **195 countries**, grouped by region and sub-regions

Most data are available **by sex and by age** up to 100+

The **projections** are available from **2010 to 2100** according to **7 scenarios**

**Scenario**

Medium (SSP2) |

Medium-Constant Enrolment Rate (SSP2-CER) ▲

Medium-Fast Track Education (SSP2-FT)

Rapid Development (SSP1)

Stalled Development (SSP3)

Inequality (SSP4)

Conventional Development (SSP5) ▼

Download

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All data are available for **195 countries**, grouped by region and sub-regions

Most data are available **by sex and by age** up to 100+

The **projections** are available from **2010 to 2100** according to **7 scenarios**

The **reconstruction** of levels of education are available from **1970 to 2010**

**Year**

1970	1975	1980	1985	1990	1995
2000	2005	2010			

Include all times

[View Data](#)

[Download](#)

# Wittgenstein Centre Data Explorer

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Selection **Data** Assumptions

Show  entries

Search:

Area	Scenario	Year	Age	Sex	Education	Population
South Africa	SSP2	2050	30--34	Both	Total	5130.08
South Africa	SSP2	2050	30--34	Male	Total	2648.53
South Africa	SSP2	2050	30--34	Female	Total	2481.55
South Africa	SSP2	2050	30--34	Both	Under 15	0.00
South Africa	SSP2	2050	30--34	Male	Under 15	0.00
South Africa	SSP2	2050	30--34	Female	Under 15	0.00
South Africa	SSP2	2050	30--34	Both	No Education	3.71
South Africa	SSP2	2050	30--34	Male	No Education	2.05
South Africa	SSP2	2050	30--34	Female	No Education	1.66
South Africa	SSP2	2050	30--34	Both	Incomplete Primary	13.64
South Africa	SSP2	2050	30--34	Male	Incomplete Primary	7.62
South Africa	SSP2	2050	30--34	Female	Incomplete Primary	6.02
South Africa	SSP2	2050	30--34	Both	Primary	210.64
South Africa	SSP2	2050	30--34	Male	Primary	113.16
South Africa	SSP2	2050	30--34	Female	Primary	97.48
South Africa	SSP2	2050	30--34	Both	Lower Secondary	893.87

[↶ Back to Selection](#)

## Indicator Details:

### Population Size by Education (000's)

De facto population in a country, region, or region, classified by sex and by five-year age groups. Available by level of educational attainment, in all scenarios, and at all geographical scales. Figures are presented in thousands.

Data for 1970 to 2010: Based on UN Population Division, World Population Prospects 2010

## Scenario Details:

### Multiple Scenarios Selected

See About tab for full scenario details.

## Access Data:

[Download](#)

Include ISO Country Codes

It is possible to view the data directly on the screen by clicking:

[View Data](#)



Or to download as CSV file to be opened in a worksheet:

[Download](#)





# Wittgenstein Centre Graphic Explorer

Explore, visualise and download graphics of the global population projections by age, sex and education published by Lutz, Butz, and K.C. (2014). [Access the executive summary](#).



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Pyramids

Population Size

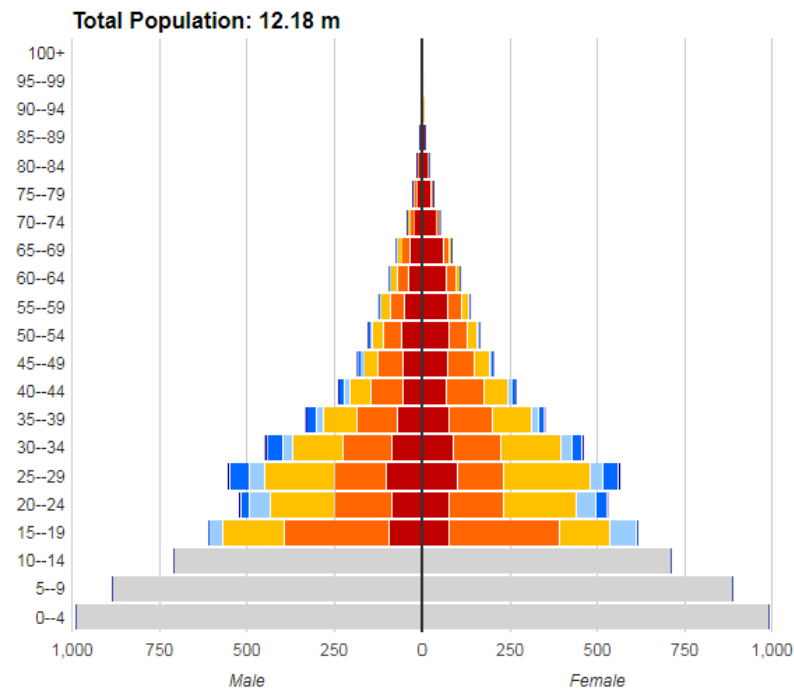
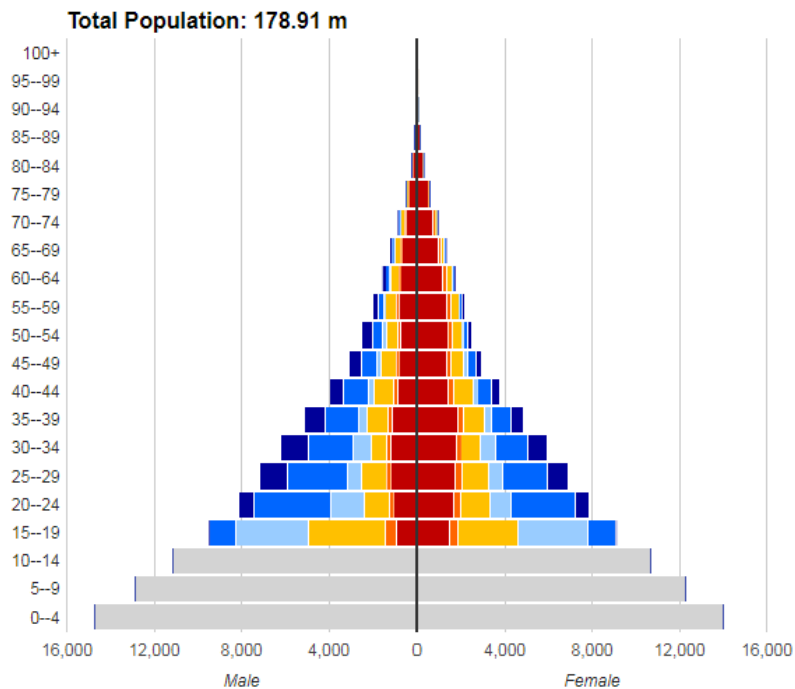
Map

Profile

**Area** Nigeria **Scenario** Medium (SSP2) **Area** Rwanda **Scenario** Medium (SSP2)

**Year** 1970 2015 2100 **Year** 1970 2015 2100

Legend: Under 15 (Grey), No Education (Red), Incomplete Primary (Orange), Primary (Yellow), Lower Secondary (Light Blue), Upper Secondary (Blue), Post Secondary (Dark Blue)



There is also a Graphic Explorer with pyramids of population by education that can be compared across time, countries and scenarios

The graphs can be downloaded and copied as pictures to any document

### Download Options:

File Type

PNG

PNG

PDF

Left Pyramid

Right Pyramid

# Wittgenstein Centre Graphic Explorer

Explore, visualise and download graphics of the global population projections by age, sex and education published by Lutz, Butz, and K.C. (2014). Access the executive summary [here](#).



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Pyramids Population Size Map Profile

Area

World

Scenario

Medium (SSP2)

Area

World

Scenario

Rapid Development (SSP1)

Year

1970

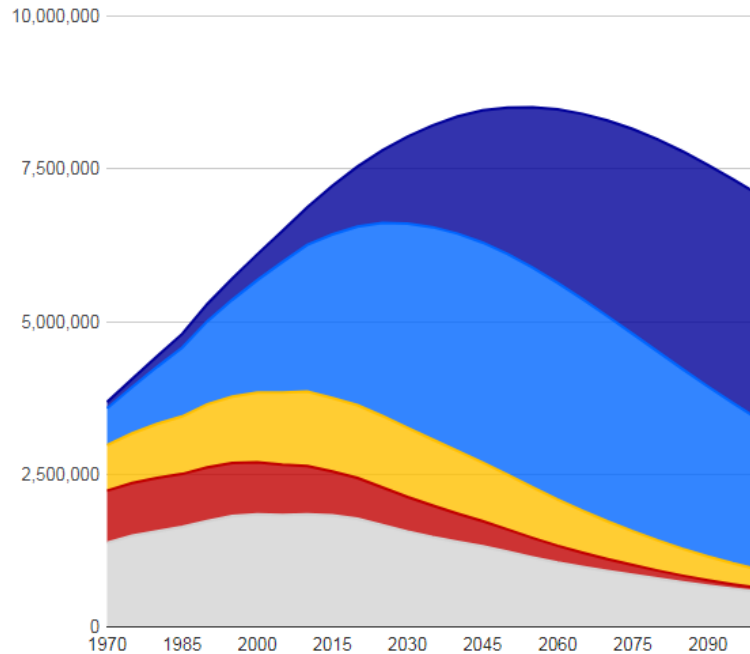
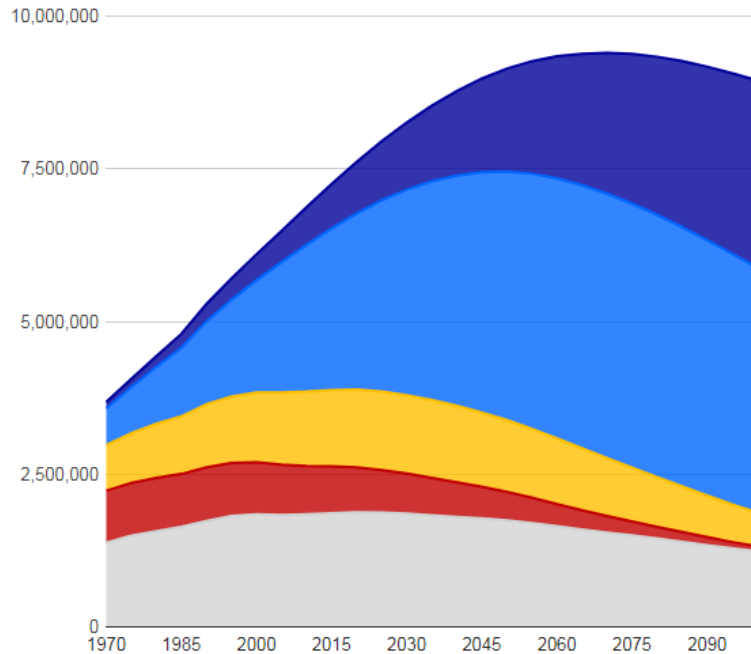
2100

Year

1970

2100

Under 15 No Education Primary Secondary Post Secondary



Other graphs are available such as stacked area charts to show the composition of the total population during a period...



# Wittgenstein Centre Graphic Explorer

Explore, visualise and download graphics of the global population projections by age, sex and education published by Lutz, Butz, and K.C. (2014). Access the executive summary [↗](#).



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... or maps

[Pyramids](#)[Population Size](#)[Map](#)[Profile](#)

Indicator

Gender Gap in Mean Years Schooling  
(25+)

Area

World

Scenario

Medium (SSP2)

Time

1 970

2 100

Age

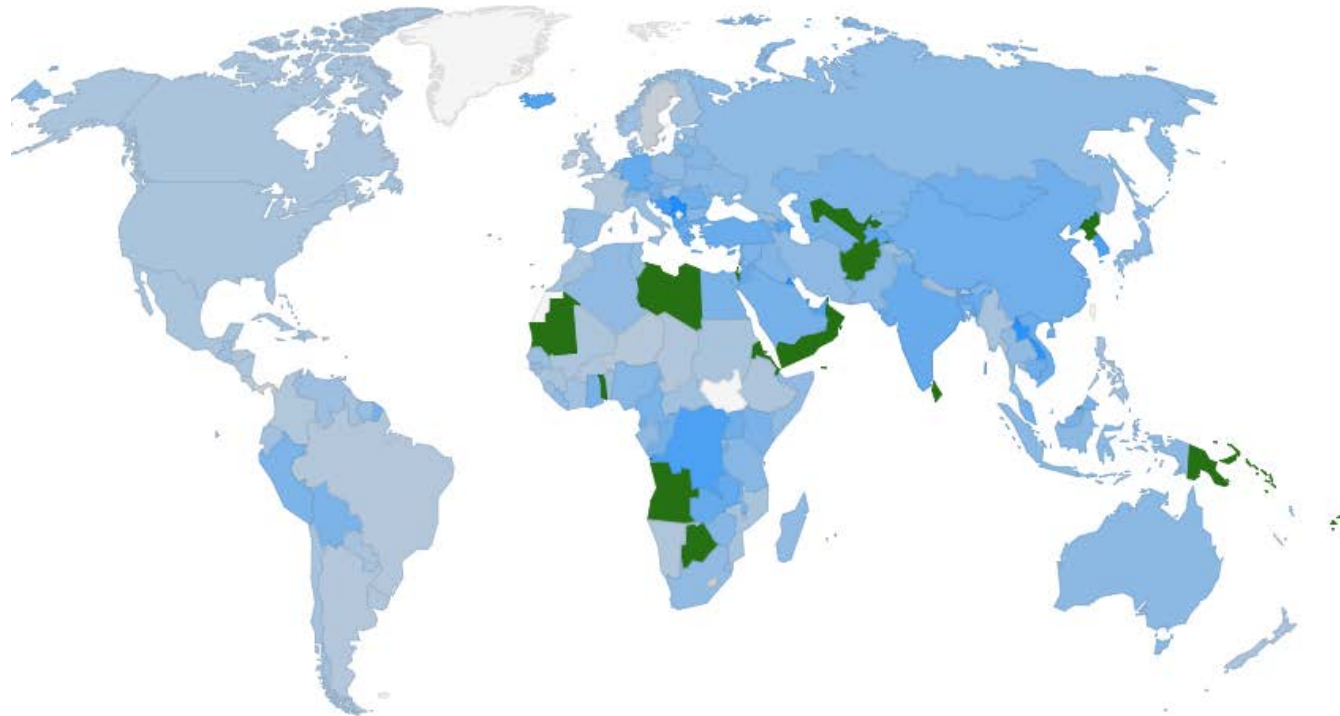
Not available

Sex

Not available

Education

Not available





## Further Details



More detailed information on how to use this web application. Further reading on the data from the global population projections by age, sex and education is provided in [Lutz, Butz, and K.C. \(2014\)](#). Access the executive summary [↗](#).



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[Details](#)
[FAQ](#)
[Scenario Definitions](#)
[Education Definitions](#)

### General:

Question	Answer
What is <b>WIC</b> and what does it do?	The <a href="#">Wittgenstein Centre for Demography and Global Human Capital (WIC)</a> is based in Vienna and Laxenburg, Austria. It is a collaboration between the <a href="#">International Institute for Applied Systems Analysis (IIASA)</a> , the <a href="#">Vienna Institute of Demography of the Austrian Academy of Sciences (VID/OEAW)</a> , and the <a href="#">Vienna University of Economics and Business (WU)</a> . Its aim is to be a world leader in the advancement of demographic methods and their application to the analysis of human capital and population dynamics by combining the three partner organizations' strengths in the fields of demography, human capital formation, and analysis of the returns to education.
Is there a <b>registration</b> required for downloading content from the web site?	No registration is required for accessing, selecting, and downloading data.
Which <b>data</b> can be found in the WIC Data Explorer?	The WIC Data Explorer currently includes data on the following topics for all countries with more than 100,000 inhabitants in 2010: total population and population growth, population ageing, education fertility, mortality, and migration. Some indicators are not available in every scenario, by education, and/or at all geographical scales.
What are the <b>data sources</b> for the WIC Data Explorer?	The data provided comes from population projections carried out by researchers at WIC. The research is based on the <a href="#">World Population Prospects: The 2010 revision</a> by the UN Population Division where information on total population and sex was obtained.
How <b>reliable</b> is the provided data?	The projections until 2100 are based on collected census and survey data for the base year (around 2010). They follow different what-if scenarios to show the development over time if certain criteria are met. For more information see <a href="#">K.C. and Lutz, 2014</a> and the Scenario Definitions tab.
Who is the <b>copyright</b> holder and what are the regulations for redissemination? How should I <b>cite</b> data from the website?	The copyright of all data provided in the WIC Data Explorer belongs to the Wittgenstein Centre for Demography and Global Human Capital and its researchers. Data can be used for personal calculations and publications but must always be attributed as follows: 'Source: Wittgenstein Centre for Demography and Global Human Capital (WIC) Wittgenstein Centre Data Explorer. Version 1.2 2015'
Can I put a <b>link to the WIC Data Explorer</b> on my website?	Yes, webmasters can place links to the WIC Data Explorer without special permission. Nevertheless, we would appreciate <a href="#">notification</a> if you do so.

Further details about

- Frequently asked questions (FAQ)
- Scenario definitions
- Education definitions
- Source and credits

are available in the About section

Online now:  
Version 1.1 of the Wittgenstein Centre Data explorer

Coming soon (Winter 2017-2018):  
Version 2.0 with  
more countries, more education categories, and more recent data

Stay tuned:  
[www.wittgensteincentre.org/dataexplorer](http://www.wittgensteincentre.org/dataexplorer)



Credits: Data Explorer Team at the Wittgenstein Centre for Demography and Global Human Capital

Concept and Coordination: Guy J. Abel, Anne Goujon, Jakob Eder and Ramon Bauer

Data: Samir K.C.

Web Interface: Guy J. Abel

## Researchers who participated in the development of the projections:

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Melinda Mills  
François Pelletier

### Web interface built using:

shiny: Chang, W., Cheng J., Allaire, J.J., Xie, Y. & McPherson, J. (2013). shiny: Web Application Framework for R. R package version 0.11.1  
Additional R packages used for data manipulations and visualisation:  
dplyr: Wickham, H., & Francois, R. (2015). dplyr: A Grammar of Data Manipulation. R package version 0.4.1  
googleVis: Gesmann, M., & de Castillo, D. (2011). Using the Google visualisation API with R. The R Journal, 3(2), 40-44.  
magrittr: Bache, S.M. & Wickham, H. (2015). magrittr: A Forward-Pipe Operator for R. R package version 1.5  
markdown: Allaire, J.J., Horner, J., Marti, V. & Porte, N. (2015). markdown: Markdown rendering for R. R package version 0.7.4  
reshape2: Wickham, H. (2007). Reshaping Data with the reshape Package. Journal of Statistical Software, 21(12), 1-20.  
saves: Daróczy, G. (2013). saves: Fast load variables. R package version 0.5  
Converting HTML plots to PDF and PNG: <http://wkhtmltopdf.org>