

West Africa Coastal Vulnerability Mapping:
Population Projections, 2030 and 2050

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DESCRIPTION

This data set was used as an indicator in the analysis presented in the report, "Mapping the Exposure of Socioeconomic and Natural Systems of West Africa to Coastal Climate Stressors" (de Sherbinin et al., 2014; de Sherbinin et al., 2015). The table below provides information about the indicator as it was used in the analysis, including a description of the input data (where relevant) and of the processing completed to produce the indicator.

Title:	Population Projections, 2030 and 2050
Rationale:	This indicator provides insight into areas that may be particularly exposed to climate stressors owing to future high population growth in the West Africa region.
Data Set:	The Population Projections, 2030 and 2050 data set was based on an unreleased working version of Gridded Population of the World (GPW) Version 4, 2010 population count raster, aggregated to a coarser 5 arc-minute resolution. Bryan Jones of Baruch College produced the projections based on the Shared Socioeconomic Pathway 4 (SSP4) (O'Neill, 2014). SSP4 reflects a divided world in which the cities, which have relatively high standards of living, are attractive to

	<p>internal and international migrants. In low income countries, rapidly growing rural populations live on shrinking areas of arable land due to both high population pressure and expansion of large-scale mechanized farming by international agricultural firms. This pressure induces large migration flows to the cities, contributing to fast urbanization, although urban areas do not provide many opportunities for the poor and there is a massive expansion of slums and squatter settlements. This scenario may not be the most likely for the West Africa region, but it has internal coherence and is at least plausible.</p> <p>Gridded Population of the World, Version 4: http://sedac.ciesin.columbia.edu/data/collection/gpw-v4.</p>
Units:	Number of persons per grid cell
Limitations:	
Spatial Extent:	Ten Guinea Current countries of coastal West Africa: Guinea-Bissau, Guinea, Sierra Leone, Liberia, Cote d'Ivoire, Ghana, Togo, Benin, Nigeria, Cameroon.
Spatial Resolution:	5 arc-minute (~10 km)
Time Period:	2030 and 2050
Additional Notes:	Projections of GPWv4 2010 population counts to 2030 and 2050 based on the Shared Socioeconomic Pathway 4 (SSP4) were produced by Bryan Jones of Baruch College.

ACCESSING THE DATA

SEDAC URL: <http://sedac.ciesin.columbia.edu/data/collection/wacvm>.

Permanent URL: <https://doi.org/10.7927/H48K7719>.

The data are available as compressed zipfiles of GeoTIFFs or shapefiles. Downloaded files need to be uncompressed in a single folder using either WinZip (Windows file compression utility) or similar application before they can be accessed by your GIS software package. Users should expect an increase in the size of downloaded data after decompression.

The data are stored in geographic coordinates of decimal degrees based on the World Geodetic System spheroid of 1984 (WGS84).

DISCLAIMER

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USE CONSTRAINTS

Users are free to use, copy, distribute, transmit, and adapt the work for commercial and non-commercial purposes, without restriction, as long as clear attribution of the source is provided.

RECOMMENDED CITATION(S)

Data set:

Jones, B. 2018. West Africa Coastal Vulnerability Mapping: Population Projections, 2030 and 2050. Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC).
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