

Release Statement

Modelled gridded population estimates for the Democratic Republic of Congo version 4.2.

13 March 2025

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Abstract

This data release provides gridded population estimates (spatial resolution of 3 arc-seconds, approximately 100-metre grid cells) for the Democratic Republic of Congo (DRC), along with uncertainty estimates. The data is a mosaic of gridded population estimates produced for eleven provinces namely Tanganyika, Maniema, Haut-Katanga, Haut-Lomami, Kasai, Kasai-Oriental, Kwilu, Lomami, Mongala, Sankuru, Tshopo. The project team used the Pre-Distribution Registration Survey (PDRS) data from the National Malaria Control Programme (PNLP) collected as part of anti-malarial campaigns in the DRC, settlement extent and geospatial covariates to model and estimate population numbers at grid cell level using a Bayesian statistical hierarchical modelling framework.

These data were produced by the WorldPop Research Group at the University of Southampton. This work was part of the GRID3 – Phase 2 Scaling project, with funding from the Gates Foundation (INV-044979). Project partners included GRID3 Inc, the Center for Integrated Earth System Information (CIESIN) within the Columbia Climate School at Columbia University, and WorldPop at the University of Southampton. The PDRS data from the malaria insecticide treated net (ITN) distribution campaigns was collected, processed, anonymised and shared by the PNL and its implementing partners. The settlement extent data was prepared and shared by CIESIN. The provincial data has been clipped to GRID3-CIESIN health area extent (CIESIN, 2025).

This data is a mosaic of eleven province-specific data sets, listed here with their Data Object Identifiers:

- Haut-Katanga province [doi: 10.5258/SOTON/WP00811]
- Haut-Lomami province [doi: 10.5258/SOTON/WP00812]
- Maniema province [doi: 10.5258/SOTON/WP00809]
- Tanganyika province [doi: 10.5258/SOTON/WP00810]
- Kasai province [doi: 10.5258/SOTON/WP00789]
- Kasai-Oriental province [doi: 10.5258/SOTON/WP00788]
- Kwilu province [doi: 10.5258/SOTON/WP00779]
- Lomami province [doi: 10.5258/SOTON/WP00780]
- Mongala province [doi: 10.5258/SOTON/WP00785]
- Sankuru province [doi: 10.5258/SOTON/WP00792]
- Tshopo province [doi: 10.5258/SOTON/WP00786]

The projection for all GIS files is the geographic coordinate system WGS84 (World Geodetic System 1984).

For more detailed information on these datasets, kindly refer to the readme files for each province.

The authors followed rigorous procedures designed to ensure that the used data, the applied method and thus the results are appropriate and of reasonable quality. If users encounter apparent errors or misstatements, they should contact WorldPop at release@worldpop.org.

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SUGGESTED CITATION

Yankey O., Nnanatu C., Boo G., Chaudhuri S., Krishnaveni K S, Megheib M, Bonnie A., Chamberlain H., Lazar A. N., Tatem A. J. 2025. Bottom-up gridded population estimates for the Democratic Republic of Congo, version 4.2. WorldPop. <https://wopr.worldpop.org/?COD/Population/v4.2>

Reference

Center for Integrated Earth System Information (CIESIN), Columbia University, Ministère de la Santé Publique, Hygiène et Prévention, Democratic Republic of the Congo, and GRID3. 2025. GRID3 COD - Health Areas v4.0. New York: Columbia University. <https://doi.org/10.7916/nnew-da26>. Accessed 16 March, 2025.