

2025 DINA UPDATE FOR COUNTRIES OF THE SUB-SAHARAN AFRICA REGION

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Technical Note

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This note describes the construction of the WID pre-tax national inequality series for the 50 countries of Sub-Saharan African region.

Method

The starting point is the consumption inequality data from the World Bank's Poverty and Inequality Platform (PIP) provided at the percentile level. As of September 2025, the PIP database for Sub-Saharan Africa included data for 47 countries and a total of 239 points from nationally representative household surveys (World Bank, 2025). Information on the distribution of consumption is deemed to serve as a more reliable proxy for permanent income in economies characterized by widespread agrarian self-employment. Consequently, it provides a more accurate representation of income inequality in such contexts.

To construct year–country measures of inequality in pre-tax national income, we apply 4 transformations to these consumption-based indicators.

1. From consumption to income profiles.

Following the methodology outlined in Chancel et al. (2023), we adjust the consumption measures to derive income distributions, relying on estimated consumption–income profiles.

2. From post-tax to corrected pre-tax disposable income.

Household surveys tend to underrepresent top incomes and typically report income net of taxes. To address both limitations, we employ information from countries in Sub-Saharan Africa where survey and tax data are jointly available (notably Côte d'Ivoire and South Africa), and implement the correction procedure proposed by Blanchet, Flores, and Morgan (2022) to transform post-tax survey data into corrected pre-tax income estimates.

3. From disposable to national income.

We next extend our estimates from disposable income to national income by incorporating additional components, most notably capital income—including taxes on production and retained earnings. Given the limited availability of such data in African countries, we adopt a conservative adjustment strategy: the residual share of national income is distributed proportionally to individual income, assuming equal rates across the population.

4. From tabulations to the full distribution.

Finally, to recover continuous income distributions from the available percentile tabulations, we employ a non-parametric interpolation method that generates smooth and realistic generalized Pareto curves, following Blanchet, Fournier, and Piketty (2022).

Figure 1 illustrates the sequence of methodological steps applied to countries for which we rely on PIP data.

Figure 1: From PIP to DINA

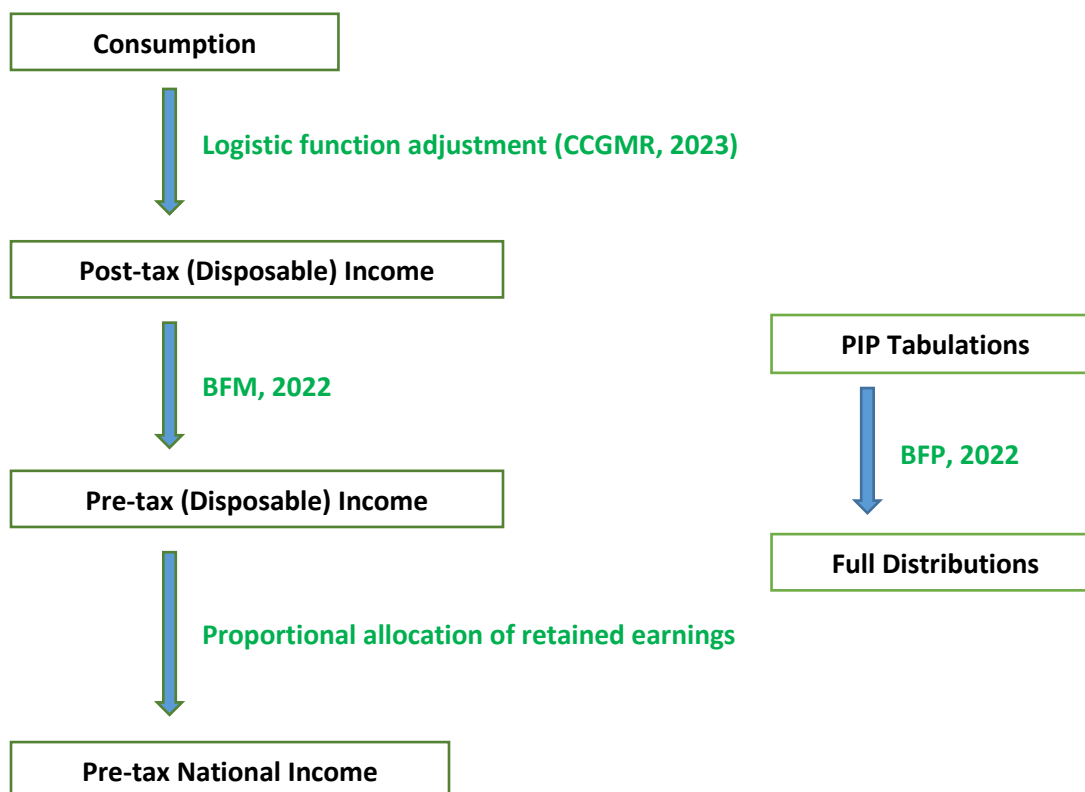


Table A in the Appendix provides the most recent datapoints for each country, as well as the additions relative to the previous DINA.

In the previous update, 4 countries had no data. Thanks to a recent data point for Equatorial Guinea, the number of countries is now down to three. For these countries, we follow the standard WIL procedure¹ and impute the distribution of national income from the distribution in other countries from the subregion:

- Eritrea <= Ethiopian inequality
- Somalia <= Eastern African inequality

¹ See Chancel, L., Flores, I., Moshrif, R., Nievas, G., Piketty, T. (2025). p.171

<https://wid.world/document/distributional-national-accounts-dina-guidelines-2025-methods-and-concepts-used-in-the-world-inequality-database/>

- Western Sahara <= Mauritania inequality.

Outlook

Work is underway towards integrating harmonized household survey data on 8 West African countries (Robilliard, 2025), and efforts to secure fiscal data are underway in Senegal, Namibia, Kenya, Rwanda and Uganda.

References

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A. Survey data points for countries in Sub-Saharan Africa

| Country | Number of survey points | First year | Last year |
|--------------------------|-------------------------|-------------|-------------|
| Angola | 3 | 2000 | 2018 |
| Benin | 5 | 2003 | 2021 |
| Botswana | 5 | 1985 | 2015 |
| Burkina Faso | 7 | 1994 | 2021 |
| Burundi | 5 | 1992 | 2020 |
| Cabo Verde | 3 | 2001 | 2015 |
| Cameroon | 5 | 1996 | 2021 |
| Central African Republic | 3 | 1992 | 2021 |
| Chad | 4 | 2003 | 2022 |
| Comoros | 2 | 2004 | 2014 |
| Congo | 2 | 2005 | 2011 |
| Cote d'Ivoire | 12 | 1985 | 2021 |
| DR Congo | 3 | 2004 | 2020 |
| Djibouti | 4 | 2002 | 2017 |
| Equatorial Guinea | 1 | 2022 | 2022 |
| Ethiopia | 6 | 1995 | 2021 |
| Eritrea | 0 | | |
| Gabon | 2 | 2005 | 2017 |
| Gambia | 5 | 1998 | 2020 |
| Ghana | 7 | 1987 | 2016 |
| Guinea | 6 | 1991 | 2018 |
| Guinea-Bissau | 6 | 1991 | 2021 |
| Kenya | 8 | 1992 | 2022 |
| Lesotho | 4 | 1986 | 2017 |
| Liberia | 3 | 2007 | 2016 |
| Madagascar | 9 | 1980 | 2021 |
| Malawi | 5 | 1997 | 2019 |
| Mali | 6 | 1994 | 2021 |
| Mauritania | 8 | 1987 | 2019 |
| Mauritius | 3 | 2006 | 2017 |
| Mozambique | 6 | 1996 | 2022 |
| Namibia | 4 | 1993 | 2015 |
| Niger | 8 | 1992 | 2021 |
| Nigeria | 9 | 1985 | 2022 |
| Rwanda | 6 | 2000 | 2023 |
| Sao Tome and Principe | 3 | 2000 | 2017 |
| Senegal | 7 | 1991 | 2021 |
| Seychelles | 4 | 1999 | 2018 |
| Sierra Leone | 3 | 2003 | 2018 |

| | | | |
|----------------|------------|-------------|-------------|
| Somalia | 0 | | |
| South Africa | 6 | 1993 | 2014 |
| South Sudan | 2 | 2009 | 2016 |
| Sudan | 2 | 2009 | 2014 |
| Swaziland | 4 | 1994 | 2016 |
| Tanzania | 5 | 1991 | 2018 |
| Togo | 5 | 2006 | 2021 |
| Uganda | 10 | 1989 | 2019 |
| Western Sahara | 0 | | |
| Zambia | 10 | 1991 | 2022 |
| Zimbabwe | 3 | 2011 | 2019 |
| Total | 239 | 1980 | 2023 |

Note: Bold indicates a new point compared to the previous update.