# COD-PS Cameroon Update Year 2023 / Reference Year 2023

### **Objective of This Explanatory Technical Note**

This explanatory technical note provides supplementary notes on the strengths and limitations of each Common Operational Dataset on Population Statistics (COD-PS) against the projections by the WPP 2022 Revision of the UN to enable informed humanitarian decision-making.

### **Structure of Supplementary Note**

This supplementary note is organized into the following sections:

- 1. Metadata
- 2. Methodological Documentation
- 3. Intrinsic Population Growth Rates (ADM-0 & 1)
- 4. Population counts by age and sex (ADM-0)
- 5. Relative population size by age and sex (ADM-1)

### 1. Metadata

Item	Metadata
Country	Cameroon
Source(s)	BUCREP Cameroun
Source(s) Link(s)	http://www.bucrep.cm/index.php/fr/telechargement/category/82-projections-demographiques
Population Data Type (Census enumeration, Direct estimate, or Population projection)	Population projection
Year of the Baseline Population	2012
Reference year of this COD-PS	2023
Publication year of this COD-PS	2023
ADM-1 Name	Région
ADM-1 Number of Units	12
ADM-1 Sex and Age Disaggregation	Sex and age disaggregated by 5-year age groups

Item	Metadata
ADM-1 Open-ended Age Group	80+
ADM-2 Name	N/A
ADM-2 Number of Units	N/A
ADM-2 Sex and Age Disaggregation	N/A
ADM-2 Open-ended Age Group	N/A
ADM-3 Name	N/A
ADM-3 Number of Units	N/A
ADM-3 Sex and Age Disaggregation	N/A
ADM-3 Open-ended Age Group	N/A
General Notes	Cameroon has not conducted a census since 2005. The next census is planned for 2024. The last census in Cameroon dates back 17 years and recent demographic dynamics since the last census are limited and of variable quality and plausibility.
Data Limitations	There has been substantial internal migration in Cameroon since 2005, but this COD-PS is constructed with an assumption of negligible internal migration. So it is recommended that further work is done to adjust the COD-PS with available data on recent internal migration flows, where possible.
COD-PS Demographic Data Quality Assessment	Data quality assessment of projected ADM-1 age-sex pyramids was carried out against the ADM-0 projected age-sex distribution produced for the UN's World Population Prospects 2022 Revision (WPP 2022). This comparison check was mostly consistent, except for differences for Ville du Douala that are to be exepcted due to higher labor-related rural-to-urban migration and lower fertility for the capital city area.

## 2. Methodological Documentation

Item	Methodological Documentation
Methodology Used	Top-down polynomial interpolation was applied to the 2005 census population to build population projections on which this COD-PS is based. Specifically, the historical data from 1976, 1987, and 2005 censuses were used to extract population dynamics to create national postcensal population projections, then a mix of quota and ratio method was applied (using the ratios from the 2005 census counts) to split the national-level

Item	Methodological Documentation
	projections to each region. Note that due to the rapid demographic growth of the metropolises of Yaoundé and Douala, separate projections were made for the two surrounding regions, Centre and Littoral, without their respective metropolises to better appreciate their demographic evolution. Thus, the same procedure applied to derive the projections for the regions within the country was then used to derive the projections for each metropolis within its region.
Baseline Population	2005 census
Post-enumeration survey (PES)	The PES was carried out in 2006 but the final figure for under-enumeration could not be found within the PES report itself.
Assessment and Adjustment of the Baseline Population	The projection report did not contain explicit details on the assessment and adjustment of the baseline population, but note that the post-enumeration survey (PES) took place in 2006 and the projections were based on the historical population dynamics from 1976 to 2005.
Fertility (births)	This COD-PS assumes a slow decline in fertility over time, leading to significant decline in the under-5 population and relative reduction in the under-15 population.
Mortality (deaths)	This COD-PS assumes a relative increase in the 65+ population and stagnation of the working-age population.
International migration (net migration)	The NSO assumed net international migration to be zero, due to the lack of sufficient data to empirically account for international migration dynamics in and out of Cameroon.
Internal migration (migration within country)	The NSO assumed net internal migration to be zero, due to the lack of sufficient data to empirically account for internal migration dynamics within Cameroon.

### 3. Intrinsic Population Growth Rates (ADM-0 & 1)

At ADM-0, the implied postcensal (2005-2023) population growth rates (2.64% per year: female 2.65%, male 2.63%) are consistent with the rates implied by the UN's population projections (2006: 2.73%, 2012: 2.82%, 2016: 2.94%, 2019: 2.75%, 2022: 2.60%) published in the 2022 revision of the World Population Prospects (WPP).

At ADM-1, during the postcensal period the NSO projects the highest growth rates for the coastal city of Douala (3.50% per year), city of Yaoundé (3.54% per year), and region of Nord (3.68% per year). In contrast, the NSO projects the lowest growth rate for the region of Littoral (without Douala) (-0.19% per year), reflecting the rural (Littoral rural areas) to urban (Douala City) migration within the region.

	Last	Last					
ADM-1	Census, Female	Census, Male	CODPS, Female	CODPS, Ma <b>l</b> e	PGR(%), Female	PGR(%), Male	PGR(%), Both
Adamaoua	445,376	438,913	751,854	709,075	2.91	2.66	2.79
Centre (sans Yaoundé)	551,028	549,180	842,041	828,620	2.36	2.29	2.33
Est	386,610	385,145	614,111	612,685	2.57	2.58	2.58
Extrême- Nord	1,576,545	1,535,247	2,602,111	2,576,701	2.78	2.88	2.83
Littoral (sans Douala)	350,966	348,744	336,189	340,210	-0.24	-0.14	-0.19
Nord	851,032	836,927	1,664,805	1,612,090	3.73	3.64	3.68
Nord- Ouest	900,091	828,862	1,254,145	1,114,911	1.84	1.65	1.75
Ouest	914,569	805,478	1,177,226	1,007,498	1.40	1.24	1.32
Sud	313,312	321,343	416,627	441,016	1.58	1.76	1.67
Sud-Ouest	649,257	666,822	1,008,655	1,008,176	2.45	2.30	2.38
Ville de Douala	956,883	969,630	1,799,036	1,815,823	3.51	3.49	3.50
Ville de Yaoundé	936,131	945,745	1,769,446	1,785,812	3.54	3.53	3.54
Total	8,831,800	8,632,036	14,236,246	13,852,617	2.65	2.63	2.64

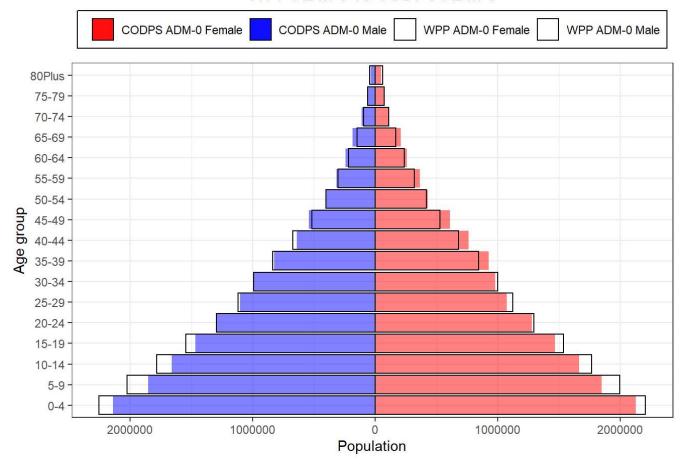
### 4. Population Counts by age and sex (ADM-0)

Below, we compare the population structure across sex and age groups between the NSO and WPP projections at the national level. The sex and age specific population counts of this COD-PS at ADM-0 are generally consistent with the WPP ADM-0 projection. The most notable differences are found in 5-19 year olds for both sexes and 35-49 year old females. The NSO projects less 5-19 year olds than WPP (5-9 years by 7.27% female and 8.52% male, 10-14 years by 5.81% female and 6.85% male, 15-19 years by 4.73% female and 5.02% male). Conversely, the NSO projects more 35-49 year old females than WPP (35-39 years by 10.05%, 40-44 years by 11.97%, 45-49 years by 15.93%).

	CODPS-WPP, Female	Difference(%)	CODPS-WPP, Male	Difference(%)
0-4	-78,305	-3.55	-114,274	-5.07
5-9	-144,806	-7.27	-172,472	-8.52
10-14	-102,495	-5.81	-121,930	-6.85

	CODDC WDD Forcels	Difference(0/)	CODDC WDD Mala	Difference (0/)
	CODPS-WPP, Female	Difference(%)	CODPS-WPP, Male	Difference(%)
15-19	-72,755	-4.73	-77,428	-5.02
20-24	-18,538	-1.43	1,177	0.09
25-29	-48,858	-4.35	-14,626	-1.31
30-34	-22,040	-2.21	-1,217	-0.12
35-39	84,732	10.05	-13,981	-1.67
40-44	81,404	11.97	-34,104	-5.08
45-49	84,121	15.93	24,716	4.78
50-54	15,532	3.72	1,762	0.44
55-59	42,894	13.39	13,750	4.55
60-64	22,036	9.30	25,601	11.83
65-69	43,208	25.80	36,488	24.92
70-74	1,988	1.77	15,972	17.16
75-79	1,501	2.00	3,198	5.35
80Plus	-10,968	-18.09	-9,712	-21.66
	1,501	2.00	3,198	5.35

#### WPP ADM-0 vs CODPS ADM-0



### 5. Relative population size by age and sex (ADM-1)

Below, we compare the relative population proportions for 5-year age groups by sex between the NSO ADM-1 projections and the WPP ADM-0 projections. While most of the ADM-1 areas exhibit similar population proportions by sex and age within each other and compared to WPP ADM-0, the two metropolises - Douala and Yaounde - show distinctly different population structures. For Douala and Yaounde, the NSO projects relatively low proportions of children and relatively high proportions of working age adults, 35 years old and older, compared to the WPP ADM-0 projection as well as other ADM-1 areas.

