COD-PS Cambodia 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	Cambodia
Source(s)	Cambodia National Institute of Statistics
Source(s) Link(s)	https://www.nis.gov.kh/nis/Census2019/Population%20Projection.pdf
Population Data Type (Census enumeration, Direct estimate, or Population projection)	Population projection
Year of the Baseline Population	2019
Reference year of this COD-PS	2023
Publication year of this COD-PS	2023
ADM-1 Name	Province, Special Administrative Unit (Phnom Penh)
ADM-1 Number of Units	25
ADM-1 Sex and Age Disaggregation	Sex and age disaggregated by 5-year age groups

Item	Metadata
ADM-1 Open-ended Age Group	80+
General Notes	Unlike the previous population projections based the 2013 intercensal survey (compared against the 2008 census), the Cambodia NSO 2019-2030 postcensal projections show almost uniform projected growth rates across all ADM-1 level. Moreover, ADM-1 level projections were built with a purely mathematical method in the absence of reliable subnational fertility, mortality, and internal/international migration data.
Data Limitations	The end users should take caution that the projected postcensal growth rates across all ADM-1 units are almost uniform, which is unlikely.
COD-PS Demographic Data Quality Assessment	The COD-PS was assessed against ADM-0 estimates and projections published in the World Population Prospects (2022 Revision) by the United Nations Department of Economic and Social Affairs (UN-DESA).

2. Methodological Documentation

Item	Methodological Documentation
Methodology Used	The cohort component method was applied to the 2019 census. In the absence of reliable internal migration data, the NSO used the ratio method to build subnational projections at the ADM-1 level from the national projection.
Baseline Population	2019 census
Post-enumeration survey (PES)	The national population undercount was 2.5% (396,587). The percentage undercount in Phnom Penh was higher than in the provinces, with 6.3% (141,985) in the capital, versus 1.9% (354,602) in the provinces.
Assessment and Adjustment of the Baseline Population	The baseline population was checked and corrected for under-enumeration and age misreporting for the age group 0-4 years. The assessment led to the following adjustment for 0-4 year olds: the number of males from the 2019 census was increased by a factor of 5.7% and the number of females were increased by a factor of 6.8%.
Fertility (births)	The medium variant scenario assumes that fertility will decline from 2.51 (2019) to 1.94 by 2030.
Mortality (deaths)	The medium variant scenario assumes that life expectancy at birth will increase from 75.8 years in 2019 (female: 76.8, male: 74.8) to 82.0 years in 2019 (female: 83.2, male: 80.8). Note that due to the overestimation of household mortality in the 2019 census, only infant mortality and model life tables was used to construct the life tables.
International migration (net migration)	Due to the lack of reliable data and the 2008 and 2019 censues not being strictly comparable, and also the intercensal estimates not being reliable

Item	Methodological Documentation		
	enough, the component of international migration has been assumed to be negligible then assumed as zero.		
Internal migration (migration within country)	No reliable data was available for internal migration, therefore the ratio method was applied to build subnational projections at the ADM-1 level.		

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

At ADM-0, the postcensal population growth rate of this COD-PS is 1.53% per year (females 1.42%, males 1.64%). This is generally consistent with the implied growth rates published in the World Population Prospects 2022 Revision (2020: 1.23%, 2021: 1.10%, 2022: 1.04%).

At ADM-1, the NSO projects almost uniform postcensal growth rates across all regions, for each sex as well as both sexes. This is unlikely, compared to the post-2008 (previous census year) growth rates implied in the population projections published after the 2013 intercensal survey.

	Last Census,	Last Census,	CODPS,	CODPS,	PGR(%),	PGR(%),	PGR(%),
ADM-1	Female	Male	Female	Male	Female	Male	Both
Banteay Meanchey	448,882	442,176	474,954	472,234	1.41	1.64	1.52
Battambang	524,191	506,731	554,684	541,178	1.41	1.64	1.52
Kampong Cham	484,579	445,668	512,881	475,966	1.42	1.64	1.53
Kampong Chhnang	284,296	260,570	300,904	278,283	1.42	1.64	1.53
Kampong Speu	467,989	439,239	495,278	469,094	1.42	1.64	1.53
Kampong Thom	363,024	341,596	384,187	364,813	1.42	1.64	1.53
Kampot	316,777	297,152	335,250	317,352	1.42	1.64	1.53
Kandal	641,352	600,902	678,756	641,750	1.42	1.64	1.53
Кер	22,345	21,767	23,644	23,243	1.41	1.64	1.52
Koh Kong	64,608	65,553	68,353	70,010	1.41	1.64	1.52
Kratie	194,576	192,866	205,872	205,974	1.41	1.64	1.52
Mondul Kiri	46,522	48,813	49,209	52,130	1.40	1.64	1.52
Oddar Meanchey	141,369	144,014	149,557	153,803	1.41	1.64	1.52

	Last Census,	Last Census,	CODPS,	CODPS,	PGR(%),	PGR(%),	PGR(%),
ADM-1	Female	Male	Female	Male	Female	Male	Both
Pailin	38,287	39,365	40,503	42,044	1.41	1.65	1.53
Phnom Penh	1,216,757	1,142,441	1,287,704	1,220,100	1.42	1.64	1.53
Preah Sihanouk	153,735	166,831	162,588	178,170	1.40	1.64	1.52
Preah Vihear	130,746	132,706	138,319	141,727	1.41	1.64	1.52
Prey Veng	578,229	515,296	612,082	550,322	1.42	1.64	1.53
Pursat	223,206	210,964	236,213	225,299	1.42	1.64	1.53
Ratanak Kiri	111,180	113,636	117,617	121,360	1.41	1.64	1.52
Siemreap	534,573	513,994	565,685	548,930	1.41	1.64	1.52
Stung Treng	84,120	87,200	88,987	93,130	1.41	1.64	1.52
Svay Rieng	285,405	257,881	302,097	275,409	1.42	1.64	1.53
Takeo	485,803	445,608	514,184	475,896	1.42	1.64	1.53
Tboung Khmum	412,475	390,663	436,508	417,217	1.42	1.64	1.53
Total	8,255,026	7,823,632	8,736,016	8,355,434	1.42	1.64	1.53

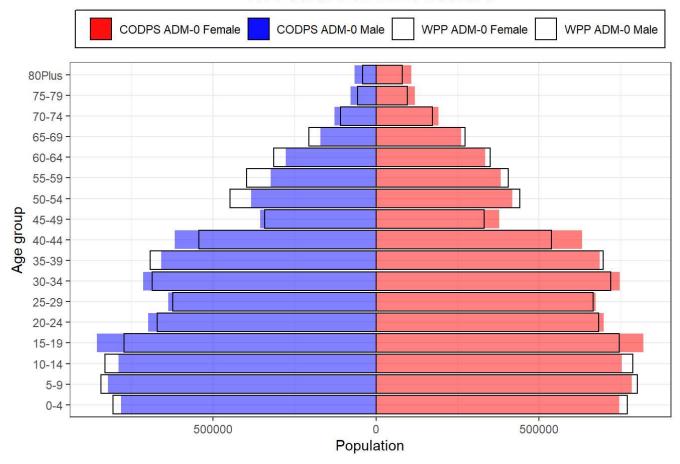
4. Population Counts by age and sex (ADM-0)

Below, we compare the population structure across sex and age groups between the NSO and WPP projections at the national level. The NSO ADM-0 projection is generally consistent with the WPP 2022 ADM-0 projection with minor variations.

	CODPS-WPP, Female	Difference(%)	CODPS-WPP, Male	Difference(%)
0-4	-23,792	-3.09	-25,116	-3.11
5-9	-15,640	-1.95	-20,298	-2.41
10-14	-32,612	-4.14	-41,206	-4.96
15-19	75,317	10.11	83,878	10.86
20-24	14,697	2.15	27,472	4.09
25-29	8,564	1.29	13,632	2.19
30-34	26,474	3.67	27,216	3.96
35-39	-11,816	-1.70	-33,768	-4.87
40-44	95,116	17.69	73,665	13.55

	CODPS-WPP, Female	Difference(10)	CODPS-WPP, Male	Difference(%)
45-49	45,057	13.57	13,998	4.10
50-54	-22,984	-5.20	-64,888	-14.48
55-59	-23,090	-5.70	-73,898	-18.59
60-64	-15,552	-4.44	-37,764	-12.01
65-69	-12,382	-4.53	-35,773	-17.40
70-74	17,958	10.36	18,218	16.74
75-79	22,423	23.24	21,644	38.69
80Plus	28,014	34.61	23,862	56.90

WPP ADM-0 vs CODPS ADM-0



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

Below compares relative population proportions by sex and age between NSO ADM-1 and WPP ADM-0 projections. The NSO projects the population proportions of many provinces to closely resemble the age and sex structure of the NSO projection at ADM-0. The NSO projects Phnom Phen (capital city) and costal province Preah Sihanouk (largest foreign direct investment in Cambodia) with relatively lower proportions of children and relatively higher proportions of working age adults.

