

# COD-PS Dominican Republic

## 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	Dominican Republic
Source(s)	Oficina Nacional de Estadística (ONE) Republica Dominicana
Source(s) Link(s)	<a href="https://www.one.gob.do/datos-y-estadisticas/temas/estadisticas-demograficas/estimaciones-y-proyecciones-demograficas">https://www.one.gob.do/datos-y-estadisticas/temas/estadisticas-demograficas/estimaciones-y-proyecciones-demograficas</a>
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	Región
ADM-1 Number of Units	10
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	Provincia
ADM-2 Number of Units	32
ADM-2 Sex and Age Disaggregation	Sex and age disaggregated by 5-year age groups
ADM-2 Open-ended Age Group	80+
General Notes	The NSO projects sex- and age-proportions for the majority of the ADM-1 projections similar to the WPP ADM-0 projection, with the exception of Región El Valle and Región Enriquillo. For Región El Valle and Región Enriquillo, western areas bordering Haiti, the NSO projects relatively higher fertility and lower proportions of working age adults. It should also be noted that the 2020 census round was postponed to the end of 2022.
Data Limitations	The net migration at the subnational level may not be very accurate, because the NSO had to assume that, in the absence of precise international migration information at the province level (ADM-2), the overall net outmigration balances of the country as a whole from the national projection affect all provinces equally.
COD-PS Demographic Data Quality Assessment	The COD-PS was assessed against ADM-0 estimates and projections published by the World Population Prospects (2022 Revision) from the United Nations Department of Economic and Social Affairs (UN-DESA).

## 2. Methodological Documentation

Item	Methodological Documentation
Methodology Used	Cohort component method was applied to the base population of the 2010 census results to produce 2000-2030 subnational projections on which this COD-PS is based. The subnational projections were first created at the provincial level (ADM-2) to take into account the unique population dynamics of each province based on the birth, death, international and internal migration data from the CRVS system for the period of 2001-2014 (with acknowledgement and adjustment for under-registration of births and deaths), then aggregated to the regional (ADM-1) and national (ADM-0) level. The 2002 census results were also taken into account to calibrate the intercensal population dynamics.
Baseline Population	2010 census
Post-enumeration survey (PES)	A Post enumeration survey (PES) was carried out following the 2010 census and it found a census omission of dwellings at 7% nationwide.

Item	Methodological Documentation
Assessment and Adjustment of the Baseline Population	The PES census omission rate of 7% at the national level led to an adjusted national population of 9,445,281 inhabitants for the 2010 census. In addition, prior to projection the mid-year provincial (ADM-2) populations between 2000 and 2010 were retrospectively estimated first using the available demographic information of the period between the two years, then reconciled against the total national populations of 2000 and 2010.
Fertility (births)	The provincial (ADM-2) level age-specific fertility rates for women 15-49 years and the corresponding total fertility rates (TFR) were obtained by using the fertility information from the 2002 and 2010 censuses (P/F method), which were then used to build fertility assumptions at each level (ADM-2, ADM-1, then ADM-0).
Mortality (deaths)	In the case of mortality, a set of five mortality tables were prepared for the same number of demographic regions, which do not necessarily coincide with the planning regions (10 regions, 32 provinces). For this purpose, the provinces (ADM-2) were grouped into 5 poverty level categories, classified by the Ministry of Economy, Planning and Development in the study Map of Poverty in the Dominican Republic 2014. Then, during population projection each province was subjected to the mortality pattern of the demographic region it was classified into. This procedure was carried out because the under-reporting of deaths in the Dominican Republic CRVS during the period of 2001-2014 was deemed significant enough to avoid forming a basis for building future mortality assumptions.
International migration (net migration)	For international migration, it has been assumed that, in the absence of precise information at the province level on migration patterns to and from outside the country, the overall net outmigration balances of the country as a whole from the national projection affect all provinces equally. Therefore, they were proportionally distributed by age and sex to each province.
Internal migration (migration within country)	For internal migration, processing the database of the censuses of the years 2002 and 2010, the number of recent interprovincial migrants (emigrants and immigrants) older than five years was obtained to estimate the balances of internal migration of the last five years prior to each of the 2002 census and 2010 census. The hypothesis of a gradual decrease in migratory balances was made, in such a way that in each successive period the migratory balances of the provinces were reduced by 5% with respect to the previous period.

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

At ADM-0, the implied postcensal population growth rates of this COD-PS (0.94% per year: female 0.97%, male 0.91%) are generally consistent with the UN's population projections published in the World Population Prospects (WPP) 2022 Revision (2011: 1.29%, 2014: 1.21%, 2017: 1.12%, 2020: 1.10%, 2022: 0.95%).

Since the last census, the NSO projects highest levels of growth in Región Ozama (1.58% per year: female 1.59%, male 1.57%), which contains the national capital Santo Domingo, and Región Yuma (1.61% per year: female 1.68%, male 1.55%), which is particularly known for its tourism industry. In contrast, the NSO projects negative growth for the westmostern landlocked area of Región El Valle (-0.43% per year: female -0.54%, male -0.32%), which borders Haiti and has little development overall.

<b>ADM-1</b>	<b>Last Census, Female</b>	<b>Last Census, Male</b>	<b>CODPS, Female</b>	<b>CODPS, Male</b>	<b>PGR(%), Female</b>	<b>PGR(%), Male</b>	<b>PGR(%), Both</b>
Región Cibao Nordeste	306,489	319,874	317,700	330,621	0.28	0.25	0.26
Región Cibao Noroeste	189,191	206,233	204,212	218,939	0.59	0.46	0.52
Región Cibao Norte	758,166	764,136	825,440	817,685	0.65	0.52	0.58
Región Cibao Sur	349,285	364,018	364,976	377,998	0.34	0.29	0.32
Región El Valle	140,591	155,789	131,014	149,441	-0.54	-0.32	-0.43
Región Enriquillo	178,284	191,589	185,728	201,021	0.31	0.37	0.34
Región Higuamo	280,154	283,252	291,360	294,802	0.30	0.31	0.30
Región Ozama	1,723,753	1,627,640	2,119,655	1,997,291	1.59	1.57	1.58
Región Valdesia	509,235	522,501	558,493	574,231	0.71	0.73	0.72
Región Yuma	296,361	312,071	368,698	381,850	1.68	1.55	1.61
Total	4,731,509	4,747,103	5,367,276	5,343,879	0.97	0.91	0.94

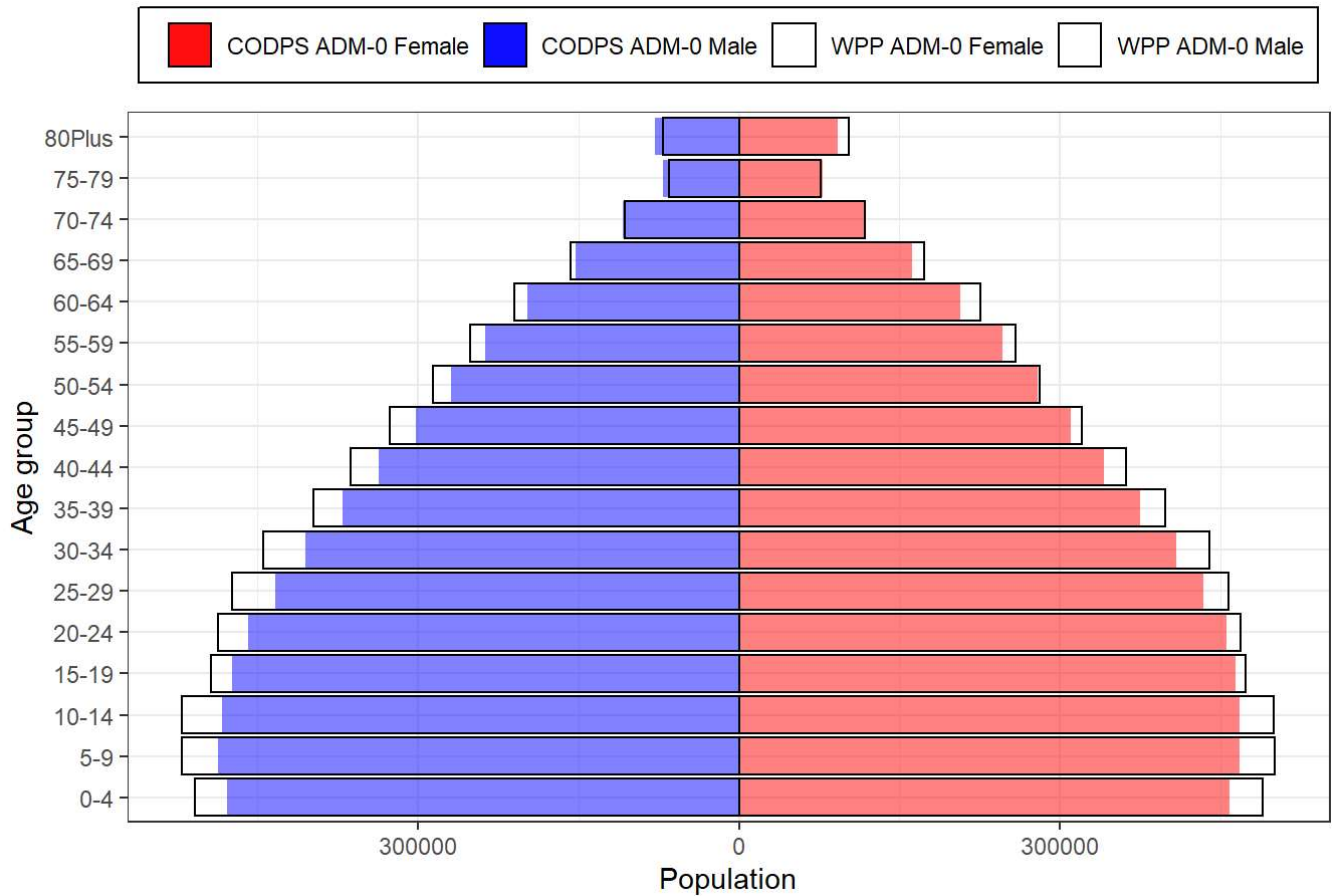
## 4. Population Counts by age and sex (ADM-0)

Below, we compare the population structure across sex and age groups between the NSO and WPP projections at the national level. The age- and sex-specific population counts of this COD-PS are lower than the WPP ADM-0 projection across almost all age groups, with the greatest differences across the age groups of 0-14 and 25-39 years (ranging from 5.87% to 8.85%). Overall, the projected population

size of this COD-PS (total 10,711,155) is 5.5% smaller than the WPP projection (total 11,332,971) at ADM-0.

	<b>CODPS-WPP, Female</b>	<b>Difference(%)</b>	<b>CODPS-WPP, Male</b>	<b>Difference(%)</b>
0-4	-30,910	-6.32	-29,850	-5.87
5-9	-33,476	-6.68	-34,102	-6.55
10-14	-31,688	-6.34	-37,030	-7.11
15-19	-9,336	-1.97	-19,962	-4.04
20-24	-13,658	-2.91	-28,584	-5.87
25-29	-23,952	-5.23	-40,376	-8.52
30-34	-30,897	-7.02	-39,394	-8.85
35-39	-23,872	-5.99	-27,698	-6.96
40-44	-20,328	-5.62	-27,208	-7.48
45-49	-10,597	-3.30	-24,006	-7.36
50-54	-2,430	-0.86	-16,222	-5.68
55-59	-12,428	-4.81	-14,592	-5.81
60-64	-19,590	-8.66	-11,492	-5.48
65-69	-11,280	-6.52	-5,396	-3.42
70-74	864	0.74	2,690	2.53
75-79	2,220	2.91	6,055	9.29
80Plus	-10,916	-10.58	7,622	10.79

## 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 sex- and age-proportions for the majority of the ADM-1 projections similar to the WPP ADM-0 projection, with the exception of Región El Valle and Región Enriquillo. For Región El Valle and Región Enriquillo, western areas bordering Haiti, the NSO projects relatively higher fertility and lower proportions of working age adults.

