

# NATIONAL POPULATION ESTIMATE 2021



## From the National Statistician

The National Statistical Office (NSO) is the lead agency responsible for the collection, compilation, analysis and dissemination of official statistics. Population data is the fundamental denominator of planning and decision making for governments of all levels, institutions, development partners and other entities which strive to contribute to the development goals of our country.

NSO in partnership with UNFPA has released the Population Estimates 2021 for PNG, that was generated through the use of satellite images and household surveys to respond to the demand for up-to-date data.

The Population Estimates 2021 for PNG provides information on the population disaggregated by age and sex. In addition to the national level, estimates were generated at the regional, provincial, district and LLG levels.

The generation of the Population Estimates using this technology is the first of its kind in the Pacific region enhancing capacity at NSO to acquire proficiency in this 21st century.

Progressing the generation of the Population Estimates 2021 would not have been successful without the financial support from the Australian Government and AusPNG Partnership. Furthermore, the continued support from the United Nations Population Fund (UNFPA) in providing the technical leadership in engaging WorldPop, an applied research group at the University of Southampton (UK), and in placing the PNG NSO amongst other NSOs around the globe which are advancing into the use of modern technological methods to produce data and statistics important for nation building is appreciated.

Gratitude is also extended to the WorldPop for their expertise in carrying out the estimation of PNG's population and to the Rotarians Against Malaria for sharing their provincial population data which was used as one of the inputs in the generation of population estimates.

I am also indebted to the NSO Project Management Team for their tireless efforts in managing the technical and administrative aspects of this exercise for the successful generation of population estimates for PNG.

Mr. John Igitoi  
National Statistician

## About the Estimate

The Population Estimate 2021 provides the total population count at the National, Provincial, District and LLG levels and also by age and sex. The estimate can support decision making and planning in combination with other datasets, it can be used to quantify the education needs of an area and inform us of the stresses on the existing services and infrastructure.

### How is this estimate calculated?

The estimation uses a series of different datasets to calculate the population of a geographic or administrative area. It starts by looking at areas where there have been recent, reliable population data collection exercises. In Papua New Guinea, this includes the Urban Structural Listing and Household Survey for the Long Lasting Insecticidal Net Distribution by Rotarians Against Malaria.

The strength of relationship between the population data and the socio-economic, environmental and geographical characteristics, influences which methods are used in population estimation. Some of these characteristics, such as night-time lights, distance to health providers and other facilities, and slope are measured using aerial images that are collected from satellites. The relationship between population size and geographic characteristics can then be used to estimate the population of the areas for which we do not have recent observations.



This method has been applied in areas where the collection of data is not possible to undertake or to complete, in countries such as Afghanistan, Burkina Faso, Nigeria, Colombia, Democratic Republic of the Congo, and Zambia, through the technical support of the WorldPop. This is the first time this method has been used in the Pacific. It is a valuable tool for measuring our region's remote populations and Papua New Guinea is at the forefront of this state-of-the-art technological solution for population estimation.

### How accurate is the estimate?

The Population Estimate has a 3% margin of error at the national level.

The generated estimate does not replace a National Population and Housing Census which remains the most reliable source of information not only on population counts but also the socio-demographic and economic characteristics of the population at the lowest level of geographic subdivision of the country.

TOTAL POPULATION  
**11,781,559**

**MALE**  
**6,142,585**

**FEMALE**  
**5,638,974**

**HIGHLANDS REGION**  
**4.57m**

**MOMASE REGION**  
**3.04m**

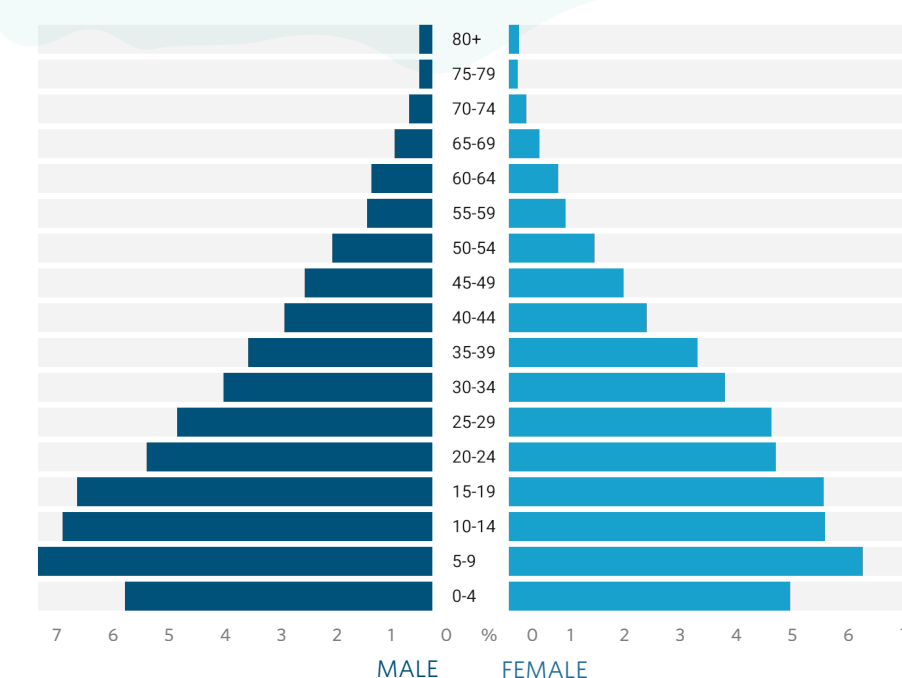
**SOUTHERN REGION**  
**2.41m**

**NEW GUINEA ISLANDS REGION**  
**1.76m**

### POPULATION KEY INDICATORS

Key Indicators	Estimates
Sex ratio ((no. of males/no. of females) X 100)	108.9
Percentage of working age population (15 – 64 years old)	61.6
Percentage of older population (65 years old and over)	2.7
Percentage of youth (15 to 24 years old)	21.6
Total dependency ratio (0-14 + 65 years old and over) / 15-64 years old	62.4
Children dependency ratio (0-14/15-64 years old)	58.1
Old-age dependency ratio (65 years old and over/15-64 years old)	4.3
Median age, both sexes	21.2
Median age, Male	20.8
Median age, Female	21.7
Percentage of population aged 18 and over	57.2
Percentage of women who are of reproductive age (15 to 49 years old)	55.4

### POPULATION BY AGE AND SEX



## POPULATION DATA PROJECT NATIONAL POPULATION ESTIMATE 2021



The Population Estimate 2021 is funded by the Australian Government with technical support from the United Nations Population Fund (UNFPA)





# SOUTHERN HIGHLANDS RESULTS

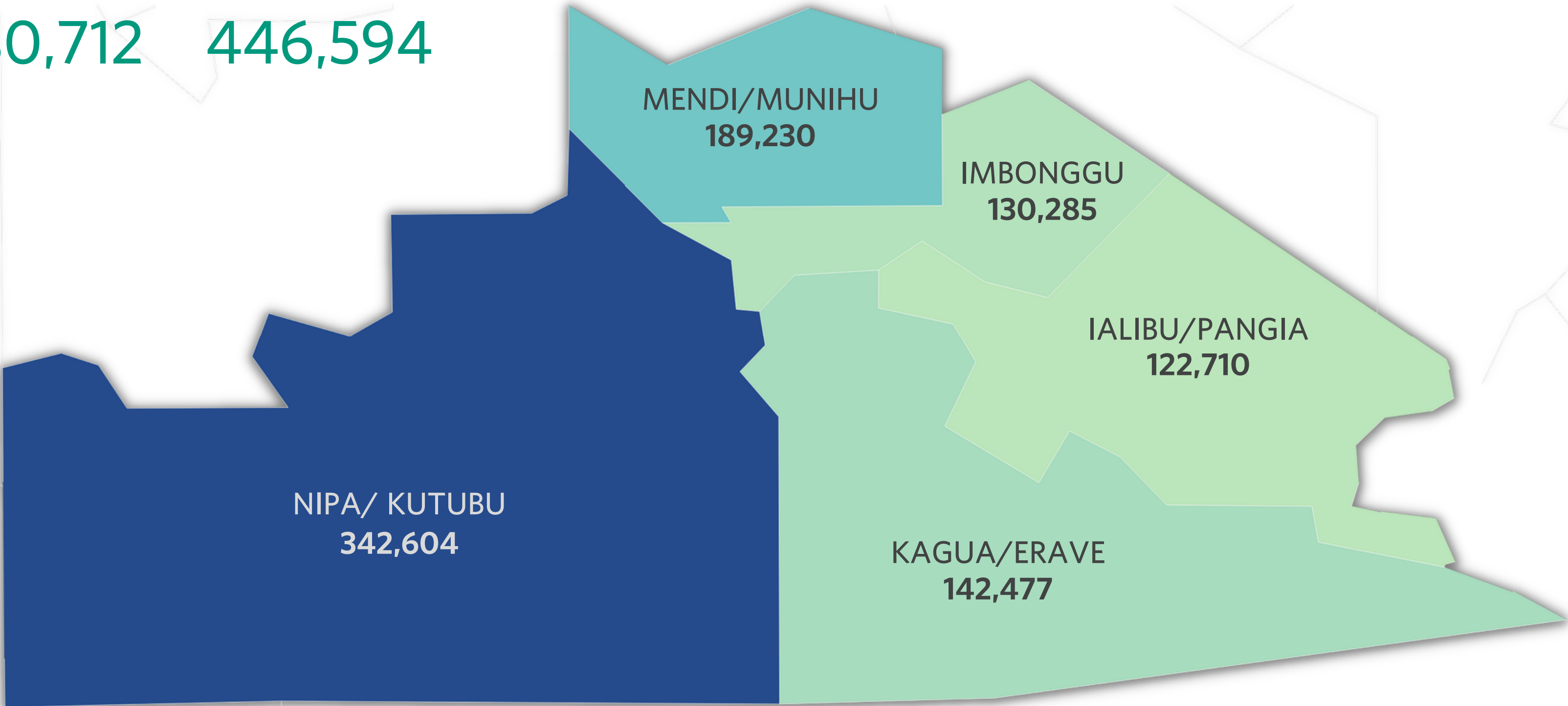


TOTAL POPULATION  
927,306

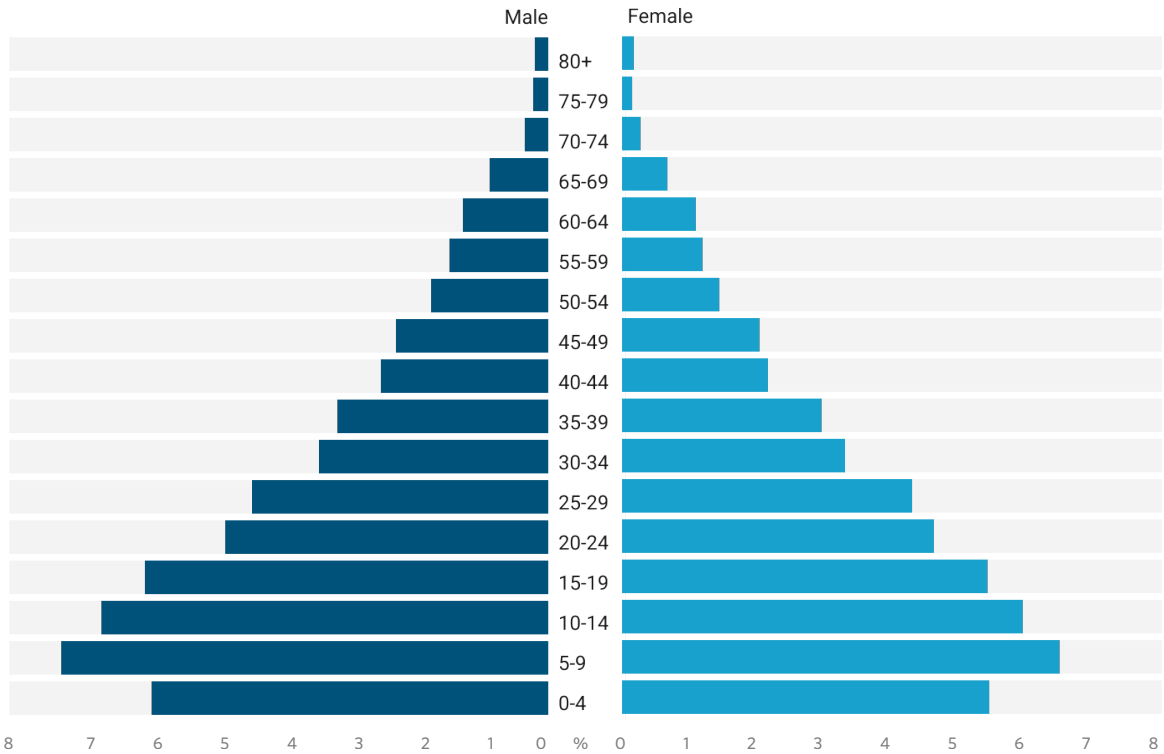
MALE 480,712  
FEMALE 446,594

Southern Highlands Population Estimate by District and LLG

District/LLG	Population
Ialibu/Pangia District	122,710
East Pangia Rural	29,205
Ialibu Urban	18,320
Kewabi Rural	38,309
Wiru Rural	36,876
Imbonggu District	130,285
Ialibu Basin Rural	35,564
Imbongu Rural	49,374
Lower Mendi Rural	45,347
Kagua/Erave District	142,477
Aiya Rural	38,557
Erave Rural	23,814
Kagua Rural	51,960
Kuare Rural	28,146
Mendi/Munihu District	189,230
Karints Rural	40,740
Lai Valley Rural	50,273
Mendi Urban	40,918
Upper Mendi Rural	57,299
Nipa/Kutubu District	342,604
Lake Kutubu Rural	29,571
Mt Bosavi Rural	6,162
Nembi Plateau Rural	95,221
Nipa Rural	117,302
Poroma Rural	94,348



Southern Highlands Population by Age and Sex



Key Indicators	Estimates
Sex ratio ((no. of males/no. of females) X 100)	107.6
Percentage of working age population (15 – 64 years old)	60.8
Percentage of older population (65 years old and over)	2.4
Percentage of youth (15 to 24 years old)	22.1
Total dependency ratio (0-14 + 65 years old and over / 15-64 years old)	64.6
Children dependency ratio (0-14/15-64 years old)	60.6
Old-age dependency ratio (65 years old and over/15-64 years old)	4.0
Median age, both sexes	20.3
Median age, Male	19.4
Median age, Female	21.4
Percentage of population age 18 and over	55.6
Percentage of women who are of reproductive age (15 to 49 years old)	57.0