GENERAL STATISTICS OFFICE

THE POPULATION AND HOUSING CENSUS 2019

THE CURRENT STATUS AND DETERMINANTS OF FERTILITY IN VIET NAM

Ha Noi, June 2021

@ UNFPA Việt Nam/ Dương Bích Ngọc

GENERAL STATISTICS OFFICE

THE POPULATION AND HOUSING CENSUS 2019

THE CURRENT STATUS AND DETERMINANTS OF FERTILITY IN VIET NAM

Ha Noi, June 2021

FOREWORD

The 2019 Population and Housing Census was conducted at 0:00 on April 1, 2019 according to the Prime Minister's Decision No. 772/QD-TTg dated June 26, 2018. This is the fifth Population and Housing Census in Viet Nam since its reunification in 1975. The 2019 Population and Housing Census collects basic information on population and housing in the entire territory of the Socialist Republic of Viet Nam for the formulation of national socio-economic development policies and monitoring of the Sustainable Development Goals (SDGs) that the Government of Viet Nam has committed to implement.

Following the results of the Population and Housing Census released on 19 December 2019, the General Statistics Office (GSO) conducted an in-depth analysis of fertility in Viet Nam. This is one of the topics that is attracting the attention of researchers, managers, policymakers and society since it provides important information on fertility status and proposes appropriate policy recommendations in response to demographic and social changes for sustainable development.

The development of the monograph **"The current status and determinants of fertility in Viet Nam"** uses the previous and 2019 Population and Housing Censuses data. It provides a more in-depth analysis of the current status and changes in Viet Nam's fertility over the past 30 years, and differences in fertility among regions and population groups.

The results of the analysis presented in the monograph affirm a stable national fertility over the past decade. Still, the differences exist among regions, localities and population groups. In addition, the report also provided information on fertility of adolescents aged 10-19 which are more at risk of health problems due to early pregnancy and childbirth. Based on the research results, the monograph proposes policy recommendations related to fertility and other issues in Viet Nam to be addressed.

The monograph **"The current status and determinants of fertility in Viet Nam"** is developed by the GSO in collaboration with national experts under the technical support of the United Nations Population Fund (UNFPA). The GSO would like to thank UNFPA for its cooperation and support in the implementation of the 2019 Population and Housing Census in general and in compilation of this publication in particular. We would like to express our sincere thanks to the experts, UNFPA in Viet Nam, and UNFPA Asia-Pacific Regional Office (APRO) for their valuable contributions to the compilation and completion of this publication.

The GSO would like to introduce the publication "**The current status and determinants of fertility in Viet Nam"** to readers and data users.

GENERAL STATISTICS OFFICE

TABLE OF CONTENTS

LIST OF FIGURES

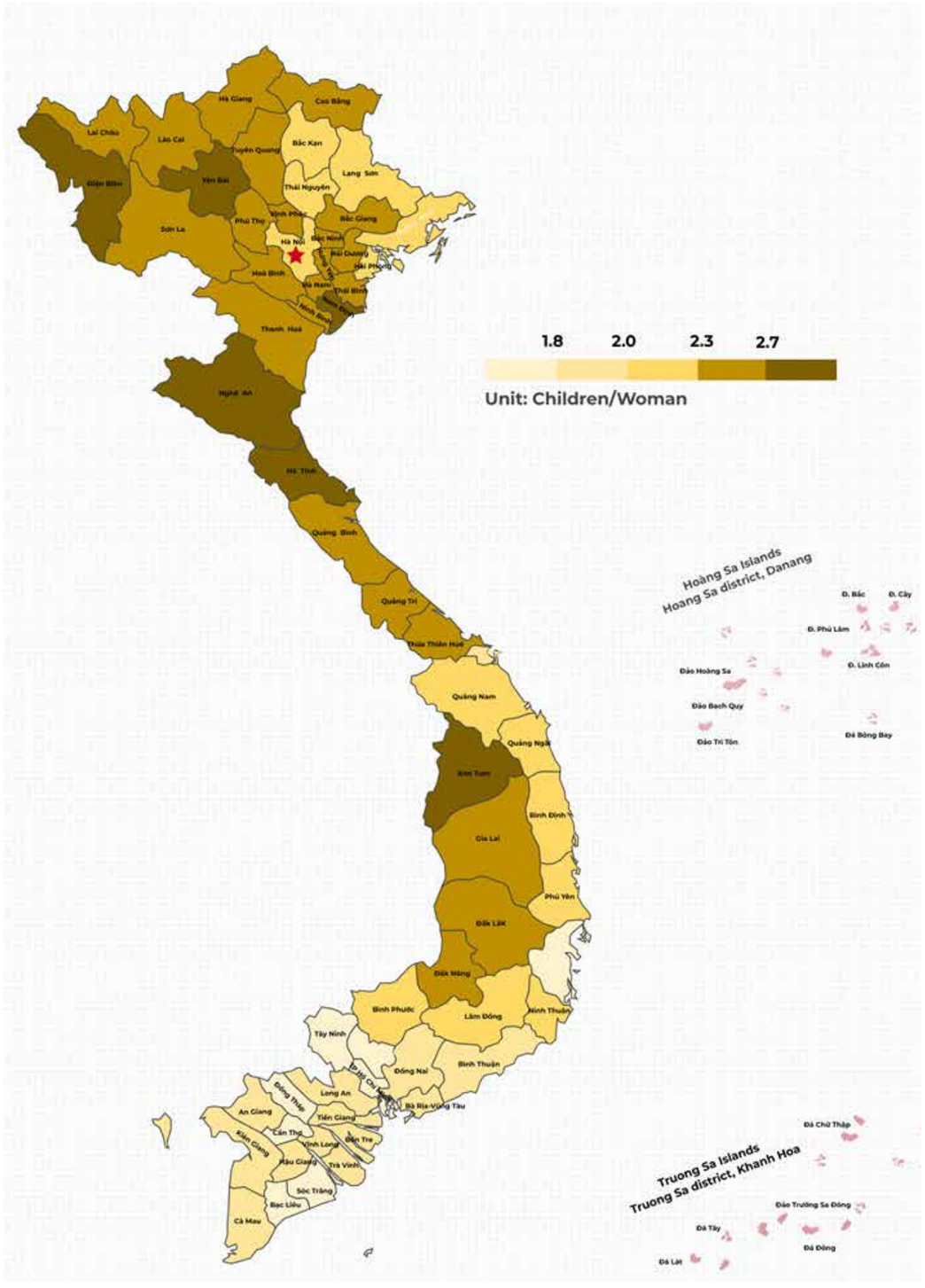
LIST OF TABLES

LIST OF TABULATED TABLES

LIST OF ABBREVIATIONS

ASFR	Age Specific Fertility Rate
ASFR10	Age Specific Fertility Rate of women aged 10-19
CBR	Crude Birth Rate
CEB	Children Ever Born
Census	Population and Housing Census
INMR	In-migration rate
NRR	Net Reproduction Rate
OMR	Out-migration rate
SDGs	Sustainable Development Goals
SRB	Sex Ratio at Birth
TFR	Total Fertility Rate
UN	United Nations
VSDGs	Viet Nam Sustainable Development Goals
WHO	World Health Organization

MAP OF TOTAL FERTILITY RATE IN 2019



SUMMARY

Fertility is one of the most important factors affecting population size and structure. Fertility influences and reflects a country's socio-economic development. For this reason, fertility-related indicators always attract the attention of policy makers, managers and researchers.

To provide comprehensive information and new evidence on changes in fertility, among regions, geographic areas, and population groups, and determinants of fertility in Viet Nam, the monograph has been built on the basis of data analysis of the Population and Housing Census (hereafter referred to as the Census) conducted in 2019 and in previous years, including 1989, 1999, and 2009. The results show that:

- In the past 30 years, Viet Nam's total fertility rate (TFR) nearly halved (from 3.80 children per woman in 1989 to 2.09 children per woman in 2019), a key contributor to the drop in population growth rate in recent years. This affirms that Viet Nam has successfully implemented the family planning program and achieved the goal of fertility reduction. Viet Nam's fertility decline occurs simultaneously to an increase in the age at childbearing. The age specific fertility rate was highest in the group aged 20-24 years old previously, but it is now highest in the group aged 25-29 years old. Currently, fertility at national level has been remaining close to replacement level over the last decade, but there still exist TFR differences among regions, localities and population groups.
- Currently, TFR in rural areas is higher than replacement-level fertility and higher than that found in urban areas (2.26 children per woman versus 1.83 children per woman, respectively). From 1989 to 2009, fertility in both urban and rural areas decreased. However, the TFR has slightly increased during 2009-2019, both in rural and urban areas.
- The Northern Midlands and Mountainous Areas and the Central Highlands are the regions with the highest total fertility rate (2.43 children per woman), of which the Central Highlands show the highest fertility decline within the past two decades. The South East and the Mekong River Delta are the two regions with the lowest TFR in the country, and lower than replacement-level fertility (1.56 and 1.80 children per woman, respectively).
- The results of the 2019 Census show that the TFR was highest in Ha Tinh province (2.83 children per woman), twice as high as Ho Chi Minh City, which has the lowest TFR (1.39 children per woman). In the past 10 years, TFR have declined in 29 provinces and increased in 33 provinces.
- Among ethnic groups with a population size of over 1 million people, the Mong records the highest TFR, although also the largest fertility decline in the past 30 years (from 9.30 children per woman in 1989 to 4.96 children per woman in 2009 and 3.59 children per woman in 2019). Furthermore, some ethnic groups with a population size of 1 million people or more have witnessed a decline in fertility in the past 30 years, such as: the Kinh, Tay, Thai, Khmer, and Muong. Currently, the fertility gap among ethnic groups is narrowing.

- The results of the 2019 Census indicate that women of different characteristics have different fertility rates:

    (i) Childbearing is rare outside marriage. Never-married women possess a low TFR (0.07 children per woman in 2019). This rate decreases in the past 10 years, specifically in areas with many ethnic minorities, such as the Northern Midlands and Mountainous Areas, and the North Central and Central Coastal Areas.

    (ii) The age specific fertility rate of women aged 10-19 (ASFR10) was 11 births per 1,000 women in 2019;

    (iii) Female migrants have a lower TFR than non-migrants (1.54 children per woman versus 2.13 children per woman, respectively);

    (iv) Women with high education have a lower fertility than women with no or lower education;

    (v) Women living in the poorest households have a TFR higher than replacement-level and record the highest TFR among the five income quintiles (2.40 children per woman). Women living in the richest households have the lowest total fertility rate (2.00 children per woman).

Moreover, results calculated from the 2019 Census data show that in the context of sex imbalance at birth, replacement-level fertility (reached when each generation of mothers is having exactly enough daughters to replace themselves) is obtained in Viet Nam with a TFR of 2.16 children per woman at national level, higher than replacement-level fertility of 2.1 children per woman in countries without sex imbalance at birth (with SRB of 105 -106 male births per 100 female births). At provincial level, 26 provinces have lower fertility than replacement-level fertility while 35 provinces have higher fertility than replacement-level fertility.

Below are some recommendations proposed in relation to analysis results, including:

(1) Continue to advance socio-economic development policies that promote gender equality in localities across the country to ensure women's access to opportunities and equality with men in education, training, sexual and reproductive health care, employment and income and that will enhance the role and position of women in the family and society. This is also a direct solution to address and reduce the sex imbalance at birth in Viet Nam.

(2) Strengthen the implementation of policies on education and sexual and reproductive health care for ethnic minorities in general and ethnic girls in particular to create motivation, and improve qualifications and the standard of living for women and girls in the mountainous areas and the Central Highlands, contributing to more effective prevention of child marriage and early childbirth. This is a dual goal to both ensure the quality of life of the ethnic population and realize social justice, and close the development gap among ethnic groups and regions.

(3) Migration and urbanization are one of the driving forces of economic development. The current trend shows that women of reproductive age are migrating to the developed economic areas in search of opportunities to improve their qualifications and income. To achieve this goal, there is a need to strengthen the implementation of policies to support migrants, including female migrants, in the form of providing better access to housing, education, sexual and reproductive health care to help them fulfill their reproductive choices, and child care and protection.

(4) Further invest in girls and women of reproductive age by building their knowledge and skills relating to sexual and reproductive health care; and promoting policies to ensure their increased access to education, sexual and reproductive health, and better equality in employment and income, as well as to introduce flexibility in reproductive choice in accordance with the principles of the Programme of Action of the International Conference on Population and Development.

(5) Further improve the quality of statistical information on population in general and on fertility in particular to serve evidence-based policy development. Information on fertility and other related information should be collected and aggregated with consistent, transparent, objective methods and statistical data should be widely shared for policy formulation and debate. Particularly, attention should be paid to coordination among government agencies in connecting survey data sources with administrative data to ensure fast, efficient and resource-saving compilation of statistical indicators. In addition, in-depth studies on the phenomenon of low fertility in some localities should be conducted to provide timely information for the development of appropriate policies.

CHAPTER I

GENERAL INFORMATION

1.1. INTRODUCTION

Fertility is an important determinant of population growth rate, population size and structure in a country. Fertility both influences and reflects a country's socio-economic development. When the fertility is significantly higher than the mortality, this leads to a rapid increase in population size, which in turn creates pressure on the social security system, infrastructure and ecological environment. If too low, fertility accelerates the aging of the population, causing a labour force shortage. Therefore, fertility indicators always attract the attention of policy makers, managers and researchers.

According to the "World Population Policy 2015" released by the United Nations (UN) in 2017, 83 of 201 countries around the world have either low fertility or fall below replacement-level fertility[1]; 96 countries have TFRs in the range of 2.1 to 5.0 children per woman; 22 countries have a high fertility of 5.0 children per woman or more. Among the countries with high fertility, 20 are in Africa and 2 in Asia. Typically, countries with a high or intermediate levels of fertility tend to apply policies to reduce the fertility. In 2015, 42% of countries in the world applied policies to reduce fertility. All countries with a high fertility and 64% of countries with intermediate level of fertility apply fertility reduction policies. In contrast, countries with low or below replacement-level fertility are likely to develop policies for fertility increase. In 2015, 28% of countries applied a fertility increase policy, of which 62% fell below replacement-level fertility[2].

Currently, the global level of fertility is on a downward trend; however, some countries still maintain a high fertility. Global level of fertility declined from 3.2 children per woman in 1990 to 2.5 children per woman in 2019. According to the UN medium-variant projection, the global level of fertility is expected to reach 2.2 children per woman in 2050 and 1.9 in 2100[3].

Over the past three decades, together with socio-economic development and the family planning policy, Viet Nam's level of fertility has been mostly decreasing and it has been close to replacement level over the past decade. The changes in the level of fertility, mortality, and migration have impacted on population change in Viet Nam. According to the results of the 2019 Census, Viet Nam's population is 96.2 million in 2019, ranking 3rd in the Southeast Asia and 15th in the world. Over the past 10 years, Viet Nam's population increased by 10.4 million people. The annual average population growth rate for 2009-2019 was 1.14% per year, with a TFR of 2.09 children per woman. Compared to the results of the 1989 Population and Housing Census, the current level of fertility in Viet Nam has declined significantly from 3.80 children per woman in 1989 to 2.09 children per woman in 2019. This is attributed to implementation of family planning policies in Viet Nam since 1961 based on the Government's Decision No. 216-CP dated 26 December 1961 on guided fertility to reduce level of fertility to control population growth in the North. Following the Decision No. 216-CP dated 26 December 1961, more comprehensive and systematic legal documents on population and family planning policies have been issued and implemented[4]. The Resolution No. 04-NQ/HNTW dated 14 January 1993 of the Central Committee of the Viet Nam Communist Party at the Congress IV of the Session VII on population and family planning policy concluded "the campaign for family planning has gradually mobilized social forces to participate in and take advantage of international financial assistance and experience. These practices have reduced the average number of children per woman of reproductive age[5] from over 6 children (in the 1960s) to about 4 children today", in compliance with the clearly stated goal of "Each family has only one child or two children so that each family (each couple) has 2 children by 2015 to stabilize the population size by the medium of the 21st century. It should concentrate all efforts to make a significant change in the 1990s".

Given the achievements in population and family planning, along with the requirements posed for population activities in the new situation, on 4 January 2016, the Central Committee of the Communist Party's Secretariat released Conclusion No. 119-KL/TW to promote implementation of the population and family planning policy, with emphasis on a clearly defined shift of population policy focus from population and family planning to population and development. This Conclusion is a turning point in the Party's population policy in the current context. Since 2017, the population policy of Viet Nam has altered its focus from population and family planning to population and development under Resolution No. 21-NQ/TW dated 25 October 2017 of the Central Committee of the Viet Nam Communist Party at the Congress VI of the Session XII on population activities in the new situation.

Although TFR in Viet Nam has stabilized at the replacement-level, there still exist very large disparities in fertility across regions, provinces and population groups. Changes in levels of fertility and emerging population issues, such as sex imbalance at birth and rapid aging of population, require adjustment of policies and specific and timely guidelines to ensure sustainable development from a population perspective.

1. *Replacement-level fertility is the level of fertility at which an average cohort of women has just enough girls to "replace" them in the population reproduction process. This usually corresponds to the total fertility rate (TFR) of 2.10 children per woman, though the figure is slightly higher in Viet Nam as a result of gender-biased sex selection.*
2. *United Nations (UN), 2018. World Population Policies 2015. Economic and Social Affairs, New York.*
3. *UN, 2020. World Fertility and Family Planning 2020. Economic and Social Affairs, New York.*
4. *The Resolution No. 04-NQ/HNTW of the Central Committee of the Viet Nam Communist Party at the Congress IV of the Session VII on 14 January 1993 on population and family planning policy;*
   The Prime Minister's Decision No. 147/2000/QD-TTg dated 22 December 2000 on approval of the Viet Nam Population Strategy for the period 2001-2010;
   The Politburo's Resolution No. 47-ND/TW dated 22 March 2005 on further promotion of the implementation of the population and family planning policy;
   The Politburo's Conclusion No. 44-KL/TW dated 1 April 2009 on the results of 3-year implementation of the Resolution 47-NQ/TW;
   The National Assembly Standing Committee's Ordinance No. 06/2003/PL-UBTVQH11 dated 9 January 2003 on population;
   The National Assembly Standing Committee's Ordinance No. 08/2008/PL-UBTVQH12 dated 27 December 2008 on amendment of the Article 10 of the Ordinance on Population;
   The Government's Resolution No. 31/NQ-CP dated 18 August 2010 on promulgation of the Government's action plans to implement the Politburo's Conclusion 44-KL/TW;
   The Secretariat's Conclusion No. 119-KL/TW dated 4 January 2016 on further promotion of the implementation of the population and family planning policy;
   The Resolution No. 21/NQ-TW of the XII Central Executive Committee dated 25 October 2017 on population activities in the new situation;
   The Prime Minister's Decision No. 588/QD-TTg dated 28 April 2020 on approval of the Program to adjust fertility levels suitable to regions and subjects by 2030;
   The Prime Minister's Decision No. 1679/QD-TTg dated 22 November 2019 on approval of the Viet Nam Population Strategy to 2030.
5. *Women of reproductive age are those in the age group 15-49 years old.*

The 2019 Census collected information on various dimensions of fertility in Viet Nam to provide comprehensive information and evidence of fertility change that would guide the formulation of population-related policies in general and fertility adjustment policy in particular, and to contribute to the National Socio-Economic Development Strategy and Plan for 2021-2030. Particularly, the 2019 Census extrapolates information related to reproduction in the age group 10-14, and other useful information to calculate several indicators of the Viet Nam Sustainable Development Goals (VSDGs).

The monograph "The current status and determinants of fertility in Viet Nam" mainly uses the results of the 2019 Census for cross-sectional analysis of the status of fertility in Viet Nam in the socio-economic regions and different population groups. At the same time, it uses the results of the Censuses conducted in the years 1989, 1999 and 2009 for comparison with the current level of fertility (in 2019).

1.2. OBJECTIVES, CONTENT AND DATA SOURCES

1.2.1. Objectives

- To assess the current (2019) level of fertility in Viet Nam and fertility trends in the period 1989-2019; to identify differences in the level of fertility among socio-economic regions and different population groups, and; to provide comprehensive and detailed information for assessment of population development and changes in population structure in relation to the overall socio-economic development and social security assurance. In addition, the monograph will analyze the fertility of the female population aged 10-19 years to provide information for monitoring and evaluation during implementation of the Viet Nam SDGs' goal to "Ensure healthy lives and promote well-being for all at all ages".
- Based on the results of the analysis on the level of fertility, the monograph proposes a number of recommendations related to population and development, and other related policies to improve people's lives and health, and improve the quality of human resources.

1.2.2. Research content

Based on the research objectives, this monograph focuses on the following main contents:

- Estimation of the national crude birth rate (CBR), the total fertility rate (TFR) and the age-specific fertility rate (ASFR) by socio-economic region, province, locality and population groups during 1989 -2019 based on the results of four censuses conducted in Viet Nam.
- Analysis of ASFR for the female population aged 10-19.
- Estimation of the TFR corresponding to the replacement-level fertility when net reproduction rate (NRR) is equal to 1.

1.2.3. Data sources

The monograph is developed based on a database of four Population and Housing Censuses conducted in 1989, 1999, 2009 and 2019.

1.3. METHODOLOGY

The monograph "The current status and determinants of fertility in Viet Nam" uses the following methodologies:

(1) Literature review: review of documents related to fertility policies and assessment of the current status of the level of fertility in Viet Nam.

(2) Descriptive statistics: estimation of trends in disaggregated fertility-related statistical indicators. This method is used to describe the current status and relationship between the level of fertility and demographic and other characteristics. Tables, maps, charts, graphs are used for data description.

Estimation of TFR is calculated by using the indirect estimation technique through Trussell's P/F model of P/F Brass Ratio technique (also known as P/F ratio method)[6] with the assumption that the number of children born 12 months prior to the survey time to women aged 15-49 may be under-reported. This assumption is made when studies show that the number of children born to women of reproductive age, i.e. 15-49 years old, (even with the large-scale sample of the Census) are often under-reported. This is especially common for cases where the baby has died or is no longer living with the mother.

1.4. SOME CONCEPTS USED IN THE REPORT

The fertility of women in this monograph refers to the fertility of women of reproductive age. Some fertility-related indicators include:

(1) Crude birth rate (CBR) shows the number of live births during the study period, usually 12 months prior to the survey, per 1,000 people as of the survey time. This is called "crude" because the denominator is the entire population (i.e. for those who can and cannot have children).

(2) Age-specific fertility rates (ASFR) shows how many live births per 1000 women in a given age (or age group)[7] during the study period, usually 12 months prior to the survey time.

ASFR are a suitable tool to study fertility patterns and compare fertility trends in the population of different ages and age groups, but is so detailed that it is difficult to compare the overall level of fertility of the entire population. To measure the overall fertility rate, demographers have connected age-specific fertility rates and age group- specific fertility rates into a composite index called TFR.

(3) The total fertility rate (TFR) is the average number of children born to a woman over her childbearing time (aged 15-49), if she were to pass through all her childbearing years conforming to the ASFR as observed in the study period, usually 12 months prior to the survey time.

Although the TFR is a composite indicator of fertility, it is not enough to determine the population's reproduction rate (replacement-level fertility) as TFR shows the average number of children (both sons and daughters) a woman may have, while only women's daughters will actually replace their mothers' duties in future childbirth. Therefore, the NRR indicator is used to evaluate the replacement-level fertility of the population[8].

(4) Net reproduction rate (NRR) is the average number of offspring (often specifically daughters) be born to a female if she passed through her lifetime conforming to the age-specific fertility and mortality rates of a given year (usually 12 months prior to the survey time). NRR measures reproduction of the population.

---

6. *UN, 1983. Manual X: Indirect techniques for demographic estimation. Vietnamese version translated and published by the Science and Technology Publishing House, Hanoi 1996*
7. *Children born alive or showing signs of life (at least one of the alive signs, such as: crying, breathing, heart beating, and navel-string vibrating, etc., excluded stillbirth (i.e. death in the womb)*
8. *Population Reference Bureau. Population handbook. 5th Edition, chapter 3, page 17*

$$NRR = \frac{\text{Number of daughters born}}{\text{Total number of children born}} \times \sum ASFRx \times {}_5L_x/l_0$$

In which: ${}_5L_x/l_0$ is the survival coefficient of women from birth to age x according to the life table.

If NRR = 1: each generation of mothers is having exactly enough daughters to replace themselves, which defines replacement-level fertility.

If NRR > 1: the number of daughters born by mothers exceeds the number needed to replace themselves in reproduction in the future.

If NRR < 1: the number of daughters born by mothers is not enough to replace themselves in reproduction in the future[9].

(5) Theoretically, when a set of population with an SRB is at normal level (about 105 to 106 boys per 100 girls) and NRR = 1, the replacement-level fertility of that population is 2.1 children per woman. However, in countries with high SRB like Viet Nam, the TFR corresponding to replacement-level fertility is higher than 2.1 children per woman. Therefore, for countries with an SRB exceeding 105 or 106, it is necessary to calculate the TFR corresponding to replacement-level fertility based on the adjustment of NRR = 1. Details of the steps of calculating the TFR corresponding to replacement-level fertility with NRR = 1 are presented in Appendix 1.

(6) The SRB is determined by the number of boys per 100 girls born during the study period, usually 12 months prior to the survey time.

(7) The number of children ever born (CEB) is the average number of live births by a woman in the specified age or a studied age group. For each woman, the number of CEB reflects their reproduction history during the survey time.

(8) Migrant: in this report, a person is considered a migrant if current place of permanent residence is different from his/her actual place of permanent residence 5 years prior to the census in terms of administrative unit at provincial level.

(9) Living standards quintiles

The 2019 Census collects information on the quality of housing, amenities and living equipment of each resident to evaluate the dwelling and living conditions of the population. This information is used in multivariate correlation analysis models to construct a composite index to assess the wealth level of households, also known as living standards by quintile or wealth index. Accordingly, the total number of households nationwide is divided into 5 groups with the same proportion of households for each group, accounting for about 20% of the total population of different levels of dwelling and living conditions, including: 20% the richest population quintile (having the best dwelling and living conditions); 20% of the rich population quintile (with relatively good dwelling and living conditions); 20% of the population with medium living standards (with medium dwelling and living conditions); 20% of the poor population (with poor dwelling and living conditions), and 20% of the poorest population (with the worst dwelling and living conditions). People living in the same household have the same rich or poor value. Thus, the five groups of living standards include: the poorest, poor, medium, rich and richest.

The variables used to develop the composite index to assess living standards by quintile in the 2019 Census include:

9. John R, Weeks, Population - An Introduction to Concepts and Issues, 7th edition, chapter 5, page 187

Households with or without dwelling;

Households sharing dwelling with other households;

Number of separate bedrooms of the household;

Housing area per capita;

Main materials for roof, wall, pillars of the house;

Duration of the house in use;

The main type of fuel (energy) that the household uses for lighting;

The main type of fuel (energy) that the household uses for cooking;

The main source of drinking water for the household;

Type of toilet used by households;

The types of household equipment that the household owns: TV, radio, computer, telephone, refrigerator, washing machine, electric water heater, air conditioner, motorcycle/motorbike/electric bike/electric motorcycle, bicycle, boat/wherry, and car.

1.5. SOME LIMITATIONS OF THE REPORT

Below are some of the report's limitations:

Firstly, since the fertility indicators are not calculated directly from the micro-data of the census long form (equivalent to 9% of total households) but are estimated indirectly from the demographic models, the sample errors and confidence intervals cannot be computed.

Secondly, indirect estimation techniques always require some assumptions, such as unchanged level of fertility, the adequacy of the data, etc. Therefore, the estimated results might be biased if assumptions are unsatisfactory. Furthermore, the indirect estimation technique used to calculate the level of fertility is based on the assumption that the number of children born 12 months prior to the survey time of the women aged 15-49 can be under-reported. The under-reporting is more likely to occur for children who have died or have left their parents, especially as their parents get older. Hence, if the above assumptions are not satisfied, fertility estimates may be biased. This is not the only limitation of this monograph but also refer to the indirect estimation methods for fertility and mortality indicators based on the sample survey results.

CHAPTER 2

FERTILITY SITUATION

2.1. CHARACTERISTICS OF WOMEN OF REPRODUCTIVE AGE

Over the past 10 years, the proportion of women of reproductive age (aged 15-49) in Viet Nam has decreased slightly, from 57.3% of the total number of women in 2009 to 51.6% in 2019. More specifically, the rates in urban and rural areas are 55.2% and 49.6%, respectively. The proportion of women of reproductive age in the Northern Midlands and Mountain Areas and the Mekong River Delta experienced the most significant drop during the period 2009-2019, by 7 percentage points in each region. In 2019, the proportion of women of reproductive age in the North Central and Central Coastal Area was the lowest (48.9%) while this rate in the South East, the highest (59.6%).

The results of the two most recent Censuses show that among 7 ethnic groups with the largest population size (population size of over 1 million people), the Muong records the largest reduction in the proportion of women of reproductive age (8.8 percentage points), followed by the Tay (7.9 percentage points), and the Kinh (6.1 percentage points). In 2019, among these 7 ethnic groups, the Thai had the highest proportion of women of reproductive age (54.7%), followed by the Khmer (53.2%). Notably, the Mong has the lowest proportion of women of reproductive age in 2019, but this has increased since 2009 (going up from 46.1% in 2009 to 47.6% in 2019).

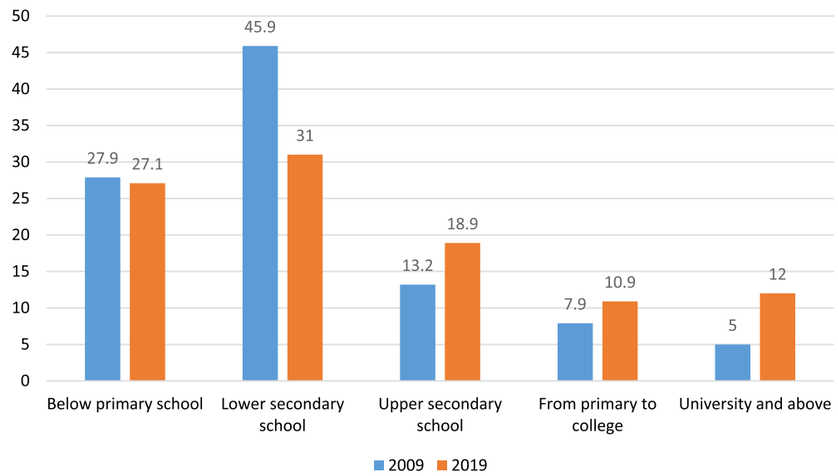
In 2019, 72.9% of women of reproductive age attained an education level of lower secondary and higher. The proportion of women of reproductive age with an education level of upper secondary school and higher was 41.9% (an increase of 16 percentage points over 2009). Increased education levels of women of reproductive age impact on reproductive knowledge and behaviors, thereby directly influencing child delivery decisions and fertility.

The results of the 2019 Census show that there were more than 1.2 million female migrants at reproductive age, accounting for 1.3% of the total national population and 5.0% of women of the same cohort. For more than half of migrant women (54.0%), migration is associated with employment, such as seeking a job or starting a new job. Other reasons include getting married (17.5%), and going to school (13.9%), etc.

As of April 1, 2019, the majority of women aged 15-49 were married (69.4%), 26.1% of women never-married, and the remainder were either widowed, divorced or separated.

Figure 2.1: Proportion of women aged 15-49 by education attainment level, 2009-2019

Unit: %



The results of the 2019 Census indicate that 38.5% of women of reproductive age live in the poor or poorest households, while 41.3% of women aged 15-49 live in the rich or richest households. Women aged 15-49 in the Northern Midlands and Mountain Areas mainly live in the poor or poorest households (61.1%), followed by the Mekong River Delta and the Central Highlands, with the corresponding figures of 60.6% and 57.3%. Meanwhile, the Red River Delta rate was the lowest in the country (15.0%). The two regions of Red River Delta and the South East show the highest proportion of women in households with the best living conditions. The proportion of women aged 15-49 in these two regions living in the "Rich" and "Richest" households were 69.4% and 49.8%, respectively.

2.2. TREND OF FERTILITY CHANGE

2.2.1. Crude birth rate (CBR)

CBR is a popular indicator in fertility research and also important in reflecting natural population growth. The results of the 2019 Census show that the CBR of Viet Nam in 2019 is 16.3 live births per 1000 population. The CBR in rural areas is 16.3 live births per 1000 population, which is 0.1 points per thousand higher than the CBR in urban areas (16.2 live births per 1000 population).

The CBR of the whole country and rural areas tended to decrease gradually from 1999 to 2019. However, in urban areas, the CBR in 2009 increased compared to that in 1999, but by 2019 had the same downward trend as the overall trend of rural areas. Over the past 20 years, the CBR in rural areas declined by 4.9 points per thousand, from 21.2‰ in 1999 to 16.3‰ in 2019.

One of the important reasons contributing to fertility reduction is found in the differences in regional socio-economic development. Over the past two decades, Viet Nam has made great strides in socio-economic development, raising national development in general and rural areas in particular; alongside is the reduction in CBR across the country.

Table 2.1: Crude birth rate by urban, rural areas, 1999-2019

Unit: Live births per 1000 population

	Nationwide	Urban	Rural
1999	19.9	15.9	21.2
2009	17.6	17.3	17.8
2019	16.3	16.2	16.3

The CBR is mainly used to calculate population growth rate rather than to evaluate fertility changes like TFR because CBR is not only affected by fertility but also by the age and sex structure of the population. For two population groups of the same age specific fertility rates, the population group with a higher share of women of reproductive age will have a larger CBR. Therefore, when comparing the CBRs of two or more different population groups, or the same population group but at different times, the effect of the age structure differences of the populations must be excluded by using the standardized method. The necessary and sufficient condition of this method is to have ASFR data of the compared population groups and to select an age structure of a certain population group as a standard (CBR will be standardized in accordance with age structure of this population cohort).

The basic content of the CBR standardized method is to multiply the ASFR of each age group by the number of women in the corresponding age group of the "standard population", and add up the results to achieve the total number of standardized live births (B*) of each age group and; then divide the total standardized births (B*) by the total standard population (P*) to get the standardized CBR (CBR*) of the study population.

The results of standardizing the 2009 CBR of the whole country by age structure of women in 2019 (using the population in 2019 as a standard) show that after eliminating the change in the age structure, the 2009 CBR (15.9 live births per 1000 population) is 0.4 points per thousand, lower than the 2019 CBR (16.3 live births per 1000 population). This proves that CBRs in 2009 and 2019 have standardized in accordance with the change in TFR in the past 10 years (TFR in 2009 was 2.03 children per woman, lower than the TFR in 2019 of 2.09 children per woman).

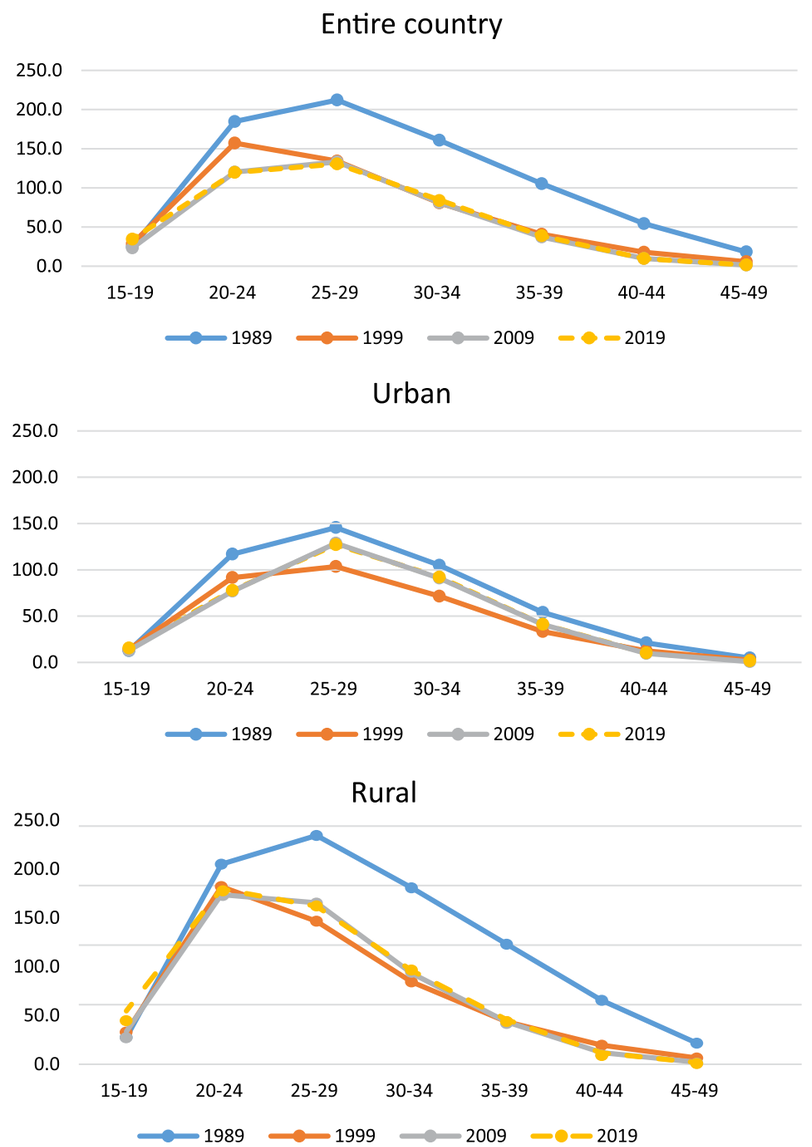
The CBR in urban and rural areas in 2019 and standardized according to the age structure of women aged 15-49 in the country, shows that after standardization CBR in rural areas was 2.7 points per thousand higher than in urban areas, corresponding to 17.3 live births per 1000 population and 14.6 live births per 1000 population. This confirms that the fertility in rural areas is always higher than in urban areas.

2.2.2. Age specific fertility rates (ASFR)

The results of the Census show that Viet Nam's ASFR witnessed a downward trend in the past three decades. This reduction process can be divided into 2 phases: between 1989-1999, the ASFR decreased in most age groups, especially in the 25-44 age group, suggesting that an increasing number of women stopped childbearing after reaching their desired parity; between 1999 - 2009, fertility continued to decline mostly as a result of fertility decline among younger women (20-24 age group), particularly in rural areas. However, in urban areas, fertility increased among women age 25 to 39, suggesting a behavioral change in the timing of childbearing, towards later childbearing. In period 2009-2019, no significant change in the level or age pattern of fertility was observed. However, the ASFR of the age group 15-19 is 35 children per 1000 women in 2019, higher as compared to 24 children per 1000 women in 2009. This increase is driven by the increase in this age group in the Northern Midlands and Mountain Areas.

Figure 2.2: Age specific fertility rate by urban, rural areas, 1989-2019

Unit: Births per 1000 women



The ASFR in socio-economic regions is also similar to the general trend of the whole country, i.e., decreased mainly in the 25-44 age group during the period 1989-1999 and declined mainly in the 20 -24 age group in the period 1999-2019. Consistently, the South East region shows the lowest ASFR in the country in almost all age groups.

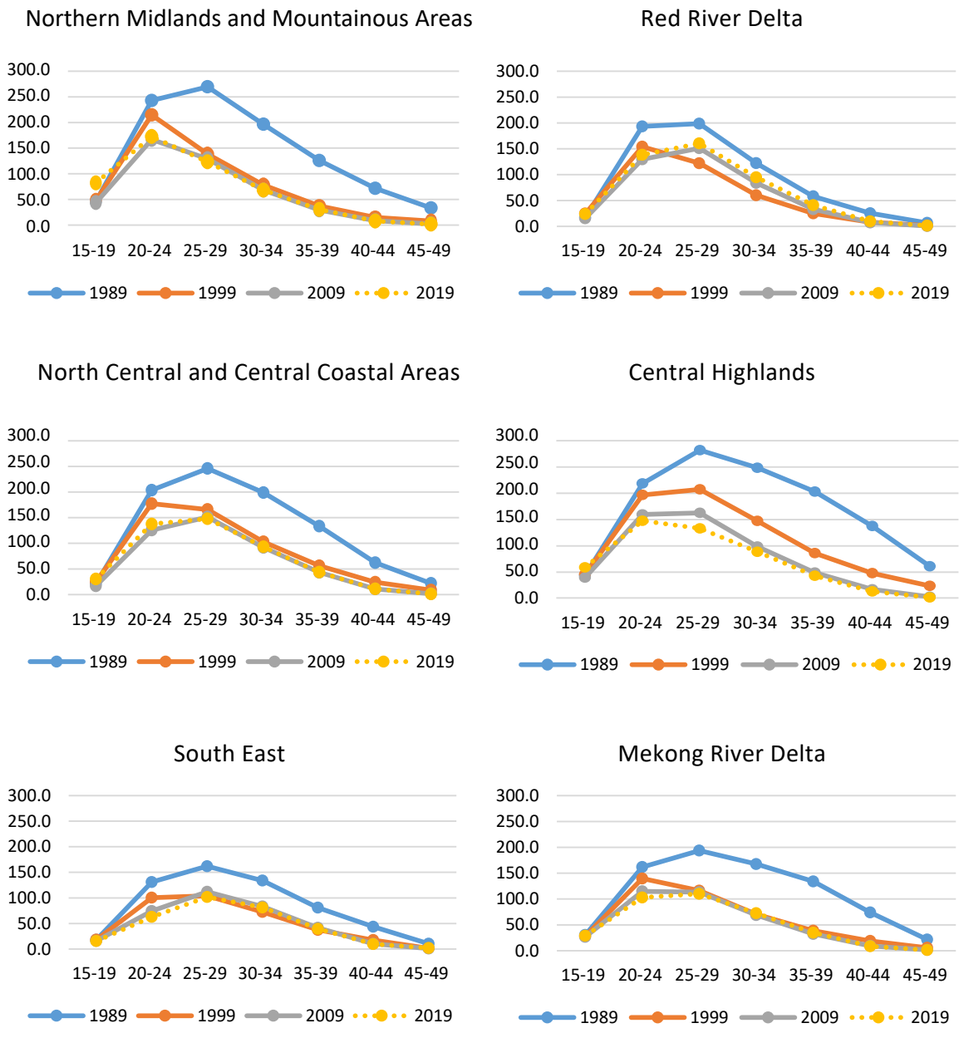
Viet Nam's fertility pattern has shifted from the highest ASFR in the 20-24 age group in 1999 to the highest ASFR in the 25-29 age group where it has remained since 2009.

The fertility pattern in urban areas has been peaking in the 25-29 age group since 1989; meanwhile, the highest ASFR in rural areas has changed from the 25-29 age group in 1989 to the 20-24 age group in 1999 and continued to maintain this pattern to date.

There are differences in fertility patterns among socio-economic regions. In 2019, the the highest ASFR is found among women aged 25-29 in the Red River Delta, North Central and Central Coastal Areas, South East, and Mekong River Delta regions while the highest ASFR is found among women aged 20-24 in the Northern Midlands and Mountain Areas, and the Central Highlands .

Figure 2.3: Age specific fertility rate by socio-economic regions, 1989-2019

Unit: Births per 1000 women



2.2.3. Total fertility rate

Viet Nam achieved replacement-level fertility in 2005[10] with fluctuations around that level in subsequent years. The results of the 2019 Census show that Viet Nam's TFR is lower than the average TFR of Southeast Asian countries, 2.09 children per woman and 2.2 children per woman, respectively. The TFR of Viet Nam is higher than only four countries in Southeast Asia, namely Brunei and Malaysia (1.9 children per woman), Thailand (1.5 children per woman) and Singapore (1.1 children per woman)[11].

2.2.3.1. Total fertility rate by nationwide and area

Over the past three decades, the TFR of Viet Nam has dropped significantly, from 3.80 children per woman in 1989 to 2.09 children per woman in 2019. The TFR declined from 4.26 children per woman to 2.26 children per woman in rural areas, while it reduced from 2.30 children per woman to 1.83 children per woman in urban areas.

However, the TFR tended to grow slightly, from 2.14 children per woman in 2009 to 2.26 children per woman in 2019 in rural areas. The TFR increased from 1.81 children per woman to 1.83 children per woman in urban area, over the past 10 years.

Table 2.2: Total fertility rate 1989-2019

Unit: Children per woman

	Nationwide	Urban	Rural
1989	3.80	2.30	4.26
1999	2.33	1.67	2.57
2009	2.03	1.81	2.14
2019	2.09	1.83	2.26

2.2.3.2. Total fertility rate by socio-economic region

According to the results of the 2019 Census, the Northern Midlands and Mountainous Areas and the Central Highlands show the highest TFR in the country with 2.43 children per woman in both regions. The South East witnessed the lowest TFR in the country, with 1.56 children per woman.

The findings of the censuses from 1989 to 2019 show that the TFR of most regions in the country tended to drop. The Central Highlands, the Northern Midlands and Mountainous Areas, and the Mekong River Delta recorded the most significant decrease in TFR. In particular, TFR in the Central Highlands has more than halved over the past thirty years, from 5.97 children per woman in 1989 to 2.43 children per woman in 2019. However, this remains one of the two regions with the highest fertility level in the country in 2019.

The South East and the Red River Delta enjoy the most developed socio-economic conditions in the country although their TFRs differ. The TFR of the South East has witnessed a steady decrease over the past 30 years, from 2.90 children per woman in 1989 to 1.76 children per woman in 1999, 1.69 children per woman in 2009 and only 1.56 children per woman in 2019. Meanwhile, the TFR of the Red River Delta only dropped during the period 1989-1999 (from 3.11 children per woman to 1.98 children per woman), and increased in the period 1999- 2019, (from 1.98 children per woman in 1999 to 2.11 children per woman in 2009 and 2.35 children per woman in 2019) which is driven mostly by fertility increases among women aged 25 to 39.

Over the past 10 years, the Northern Midlands and Mountainous Areas, the Red River Delta, and the North Central and Central Coastal Areas show a slightly increasing TFR. The Red River Delta recorded the highest expansion, from 2.11 children per woman in 2009 to 2.35 children per woman

10. General Statistics Office, Major findings of the 2005 Population Change and Family Planning Survey

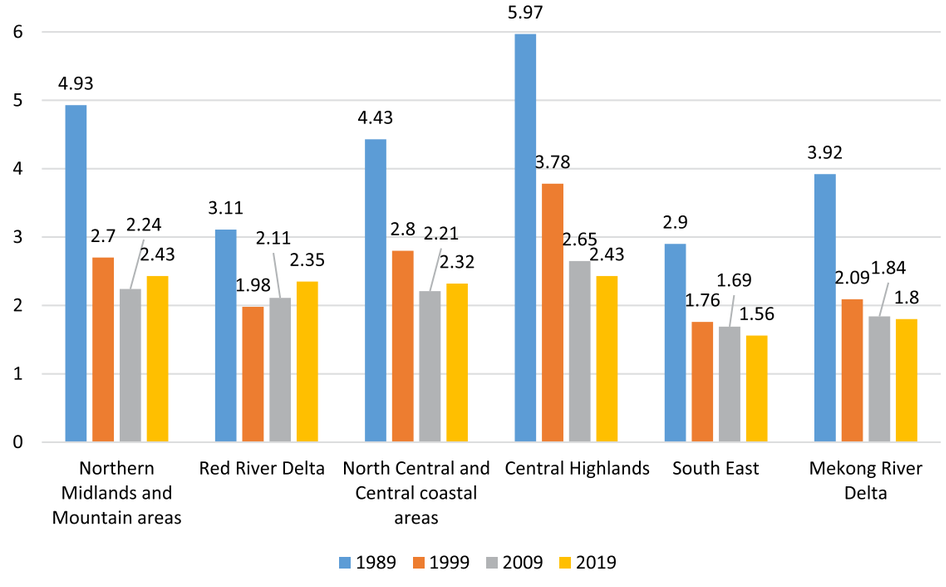
11. Data source: website: https://www.prb.org/international/geography/southeast-asia.

in 2019 (an increase of 0.24 children per woman). Conversely, the three regions with declining TFR compared to that in 2009 were the Central Highlands, the South East and the Mekong River Delta. The overall fertility decline in these regions is sustained by a decline at younger ages (20-24). The Central Highlands recorded the sharpest drop, from 2.65 children per woman in 2009 to 2.43 children per woman in 2019 (a decrease of 0.22 children per woman). Given the very high fertility level in 1989, this region may have started its fertility transition later than the others and is still going through it. Fertility in this region continues to decline in all age groups, except adolescents.

Fertility fluctuations in certain socio-economic regions are attributable to migration, cultural characteristics and economic development levels. The results of the 2019 Census show that migrants are mainly young people (61.8% of migrants are in the age group 20-39) and female (accounting for 55.5% of migrants). Most of the migrants are at the age of peak fertility, which partly explains the decline in fertility in some regions with high out-migration rates (OMR) such as the Mekong River Delta and the Central Highlands. In high OMR regions, such as the Northern Midlands and Mountainous Areas, the North Central and Central Coastal Areas, and the Central Highlands, fertility remains high due to such factors as cultural features, socio-economic development level and main location of ethnic minorities. The Northern Midlands and Mountainous Areas, the Central Highlands or ethnic minorities show an early birth pattern compared to the general population. However, this does not mean that every region with a high in-migration rate (INMR), also records an increase in fertility. For example, in the South East, which had the highest INMR in the country, although migrants are young and within the marriage and childbirth ages, their migration purpose is mainly for job seeking and to improve their standard of living (50.3% of migrants moved to this region because of job hunting or new job)[12] The South East region also shows the highest level of socio-economic development in the country. All these reasons slow down the marriage process, as well as the couple's decision of when/if to have children, thus leading to a lower fertility rate.

Figure 2.4: Total fertility rate by region, 1989-2019

Unit: Children per woman



12. *General Statistics Office, Results of the 2019 Population and Housing Census, December 2019.*

The fertility rate in regions in the North (the Northern Midlands and Mountainous Areas, the Red River Delta, and the North Central and Central Coastal Areas) have increased in the past decade (since 2009), with the clearest sign seen in the Red River Delta. Meanwhile, regions in the South (the Central Highlands, the South East, and Mekong River Delta) have witnessed clear signs of decreasing fertility in the past two decades.

2.2.3.3. Total fertility rate by province

Although Viet Nam has achieved and maintained stability around replacement-level fertility in recent years, there are still significant differences among provinces. According to the results of the 2019 Census, 12 provinces recorded a high fertility rate (over 2.50 children per woman), 29 provinces a fertility rate of 2.10 to less than 2.50 children per woman, and 22 provinces a fertility rate below 2.10 children per woman. Ha Tinh is the province with the highest TFR (2.83 children per woman) while the lowest TFR is recorded in Ho Chi Minh City (1.39 children per woman).

Table 2.3: Total fertility rate by province in 2019

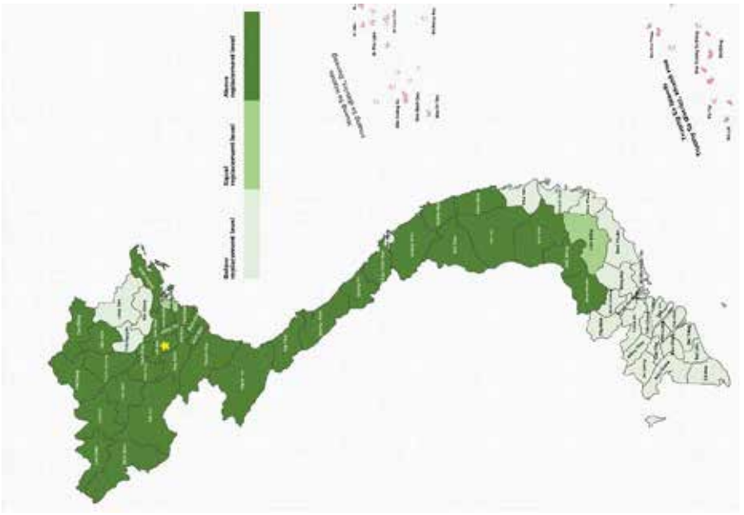
Unit: Children per woman

Less than 2.1		From 2.1 to less than 2.5		From 2.5 and over	
Ho Chi Minh city	1.39	Phu Yen	2.11	Tuyen Quang	2.51
Tay Ninh	1.53	Lang Son	2.13	Bac Ninh	2.53
Binh Duong	1.54	Quang Ngai	2.13	Thanh Hoa	2.54
Bac Lieu	1.61	Thai Nguyen	2.14	Phu Tho	2.57
Can Tho	1.66	Bac Kan	2.14	Lai Chau	2.68
Khanh Hoa	1.77	Binh Dinh	2.20	Dak Nong	2.68
Dong Thap	1.78	Lam Dong	2.20	Dien Bien	2.72
Soc Trang	1.79	Hai Phong	2.20	Kon Tum	2.74
Ca Mau	1.80	Quang Ninh	2.24	Nam Dinh	2.74
Long An	1.80	Ha Noi	2.24	Yen Bai	2.74
Vinh Long	1.81	Binh Phuoc	2.27	Nghe An	2.75
Tien Giang	1.82	Quang Nam	2.27	Ha Tinh	2.83
Hau Giang	1.83	Bac Giang	2.31		
Kien Giang	1.85	Thua Thien Hue	2.34		
An Giang	1.85	Hoa Binh	2.34		
Ben Tre	1.86	Dak Lak	2.37		
Ba Ria - Vung Tau	1.87	Vinh Phuc	2.39		
Da Nang	1.88	Hung Yen	2.40		
Dong Nai	1.90	Cao Bang	2.43		
Binh Thuan	1.91	Quang Binh	2.43		
Tra Vinh	1.96	Thai Binh	2.43		

Less than 2.1		From 2.1 to less than 2.5		From 2.5 and over	
Ninh Thuan	2.09	Son La	2.44		
		Lao Cai	2.44		
		Ha Nam	2.44		
		Quang Tri	2.45		
		Ninh Binh	2.46		
		Ha Giang	2.47		
		Hai Duong	2.48		
		Gia Lai	2.49		

Over the past 10 years, 29 provinces show a decrease in TFR from the fertility level recorded in 2009. Of these provinces, Kon Tum recorded the sharpest drop, from 3.45 children per woman in 2009 to 2.74 children per woman in 2019 (0.71 children per woman during 10 years). The 29 provinces including those with difficult socio-economic conditions uch as Ha Giang, Lai Chau, Son La, Gia Lai and Quang Tri recorded very high fertility in 2009 but decreased in 2019. Thirty-three provinces recorded a TFR up-turn of which Thanh Hoa recorded the highest growth rate, increasing by 0.65 children per woman (from 1.89 children per woman in 2009 to 2.54 children per woman in 2019). Most provinces in the Red River Delta recorded an increasing TFR. Soc Trang is the only province with an unchanged TFR recorded in the 2009 and 2019 Censuses, at 1.79 children per woman.

The map of the TFR increase/decrease in the two Censuses of 2009 and 2019 show that provinces with an increase in TFR were mainly in the Red River Delta, while provinces in the South East recorded a decrease in fertility rate.



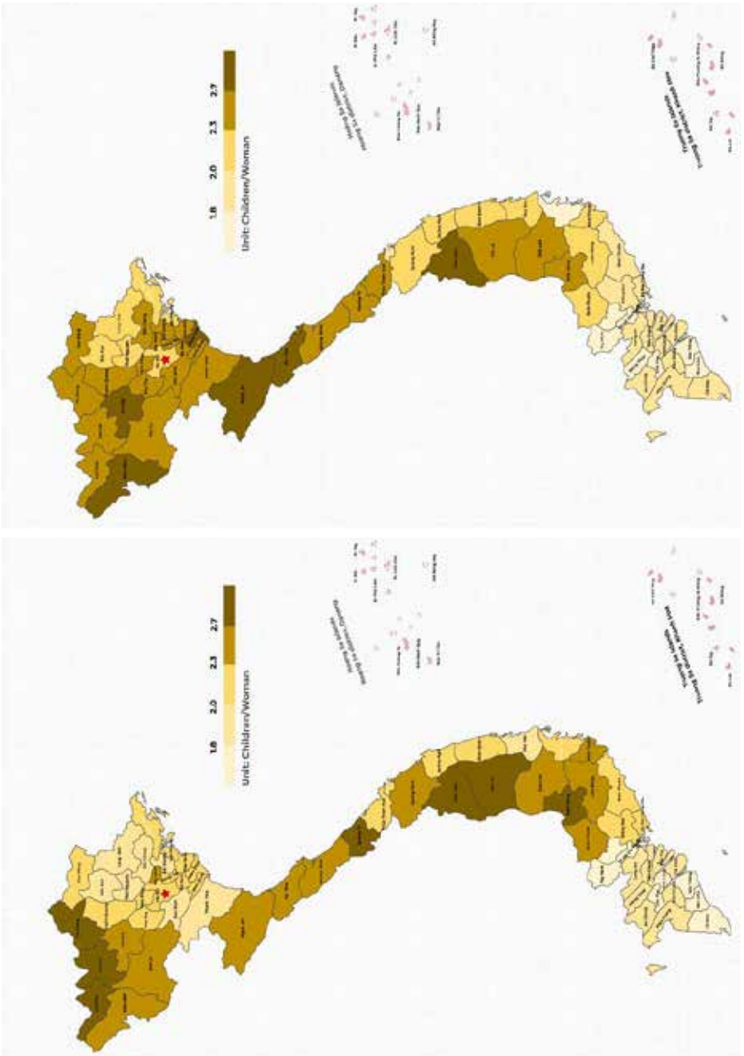


Figure 2.5: Total fertility rate by province

2.2.3.4. Total fertility rate by ethnicity

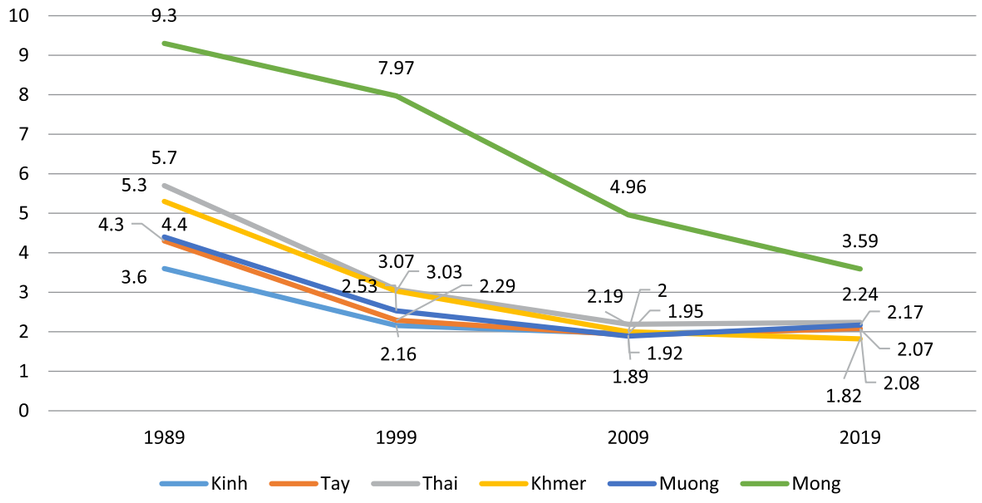
Among the 54 ethnic groups in Viet Nam, 7 ethnic groups record a population of over 1 million people, including Kinh, Tay, Thai, Muong, Mong, Khmer, and Nung (of which the Kinh accounts for the majority, i.e. 85.3% of the total population); 11 ethnic groups have a population size of less than 5.000 people, of which the O Du has the lowest population size (428 people).

According to the results of the 2019 Census, the Mong have a TFR of 3.59 children per woman, the highest TFR among the ethnic groups with the population size of over 1 million people; 3 ethnic groups with the lowest TFR and below replacement-level fertility are the Khmer, Kinh and Tay (of which the Khmer have the lowest TFR of 1.82 children per woman).

Over the past 30 years, fertility of some ethnic groups with population size of 1 million people and over, such as the Kinh, Tay, Thai, Khmer, Muong and Mong, have tended to decrease. The Mong shows the largest fertility decline, from 9.30 children per woman in 1989 to 4.96 children per woman in 2009 and 3.59 children per woman in 2019. The TFR of ethnic groups such as the Kinh, Tay, and Muong decreased in the period 1989-2009 but tended to increase in the period 2009-2019 (the TFR of the Kinh, Tay, and Muong ethnic groups were 1.95, 1.92, and 1.89 children per woman in 2009 and increased to 2.07, 2.08, and 2.17 children per woman in 2019, respectively).

Figure 2.6: Total fertility rates of some ethnic groups with the population size of over 1 million people, 1989-2019[13]

Unit: Children per woman



2.2.3.5. Total fertility rate by migration status

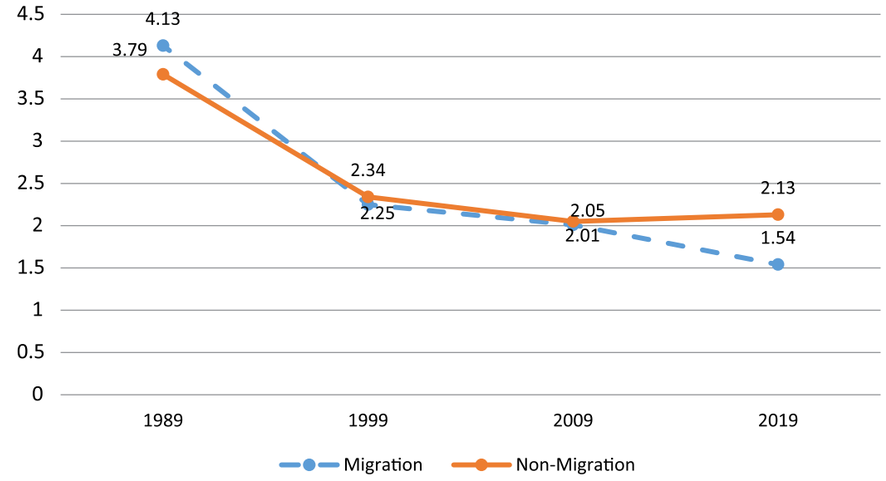
The results of the 2019 Census show that the TFR of migrants is lower than that of non-migrants, at 1.54 children per woman and 2.13 children per woman, respectively.

Over the past three decades, the variation in fertility among migrants and non-migrants has varied significantly. The TFR of migrants decreased continuously, from 4.13 children per woman in 1989 to 2.01 children per woman in 2009 and only 1.54 children per woman in 2019. Meanwhile, the TFR of non-migrants only decreased in the period 1989-2009 (from 3.79 children per woman in 1989 to 2.05 children per woman in 2009), but more recently has witnessed a tendency to increase, reaching 2.13 children per woman in 2019.

Comparing fertility between migrants and non-migrants shows that in 1989, the TFR of migrants was higher than that of non-migrants (4.13 children per woman versus 3,79 children per woman), but since 1999, the fertility of migrants has become significantly lower than that of non-migrants. In particular, the fertility gap between migrants and non-migrants has been widening, from 0.09 children per woman in 1999 to 0.59 children per woman in 2019. This is attributed to the change in migration patterns and characteristics, from family migration following new economic development policies/programs in some regions to free migration. The main force of young people migrating to industrial zones and urban areas is to pursue better job and learning opportunities. These factors encourage women to delay childbirth.

Figure 2.7: Total fertility rate by migration status, 1989-2019

Unit: Children per woman



The results of the 2019 Census show the South East as the region with the greatest attraction for migrants including women of reproductive age. The rate of women of reproductive age migrating to the South East is the highest in Viet Nam. The proportion of migrants among women of reproductive age in the South East is 11,9%. This region also has the lowest proportion of women in the age of emigration. The fact that 68.0% of women aged 15-49 migrate to the South East to seek employment or start businesses may be one of the reasons that region records the lowest fertility compared to the whole country. Job hunting and income generation are priorities for women migrants.

2.2.3.6. Total fertility rates of never-married women

In Viet Nam, like many other countries in the world, women usually give birth after getting married. Very few women give birth before marriage. Results from the Censuses show that the TFR of never-married women is at a very low level with tendency to decrease gradually, from 0.34 children per woman in 1989 to 0.11 children per woman in 2009 and 0.07 children per woman in 2019.

13. In the 1989, 1999 and 2009 Censuses, the population of the Nung ethnic group was less than 1 million people.

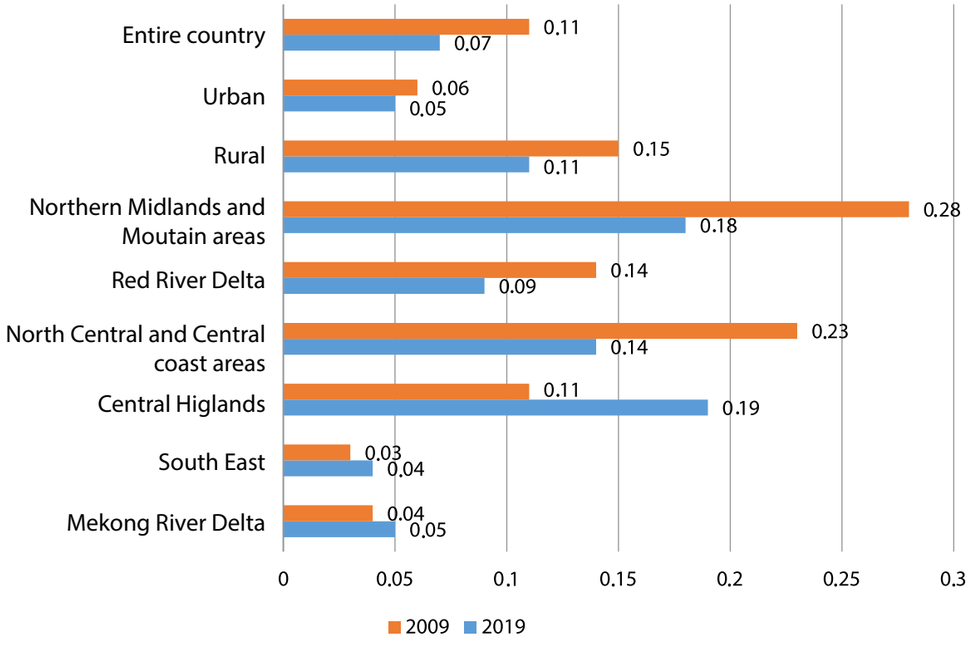
The results of the 2019 Census disclose that the TFR of never-married women in rural areas was twice as high as that in urban areas, with corresponding figures of 0.11 children per woman and 0.05 children per women. Compared to 10 years ago, the TFR of never-married women in both urban and rural areas decreased: the TFR of never-married women in urban areas declined from 0.06 children per woman in 2009 to 0.05 children per woman in 2019; in rural areas, the figure reduced from 0.15 children per woman in 2009 to 0.11 children per woman in 2019.

The TFR of never-married women in socio-economic regions in 2019 show marked differences: the Central Highlands has the highest TFR with 0.19 children per woman while the South East the lowest figure with 0.04 children per woman. In comparison with 2009, the TFR of never-married women in 2019 decreased in three regions: the Northern Midlands and Mountainous Areas, the Red River Delta, and the North Central and Central Coastal Areas (of which, the Northern Midland and Mountainous Areas presented the most significant fall, from 0.28 children per woman to 0.18 children per woman), but increased in three regions: the Central Highlands, the South East, and the Mekong River Delta (of which, the Central Highlands recorded the most significant increase, from 0.11 children per woman to 0.19 children per woman). This trend was in contrast to the overall TFR of women of reproductive age: the overall TFR of women aged 15-49 years in the Northern Midlands and Mountainous Areas, the Red River Delta, and the North Central and Central Coastal Areas increased during the past 10 years while the overall TFR of women aged 15-49 years in the Central Highlands, the South East, and the Mekong River Delta dropped during the same time period.

Thus, the TFR of never-married women has decreased during the last 10 years, mainly due to decline in populations with ethnic minorities, such as the Northern Midlands and Mountainous Areas, and the North Central and Central Coastal Areas. In order to better understand fertility fluctuations among never-married women, further studies with more detailed data are needed.

Figure 2.8: Total fertility rate of never-married women

Unit: Children per woman



The results of the 2019 Census also reveal that the Northern Midlands and Mountainous Areas, the Red River Delta, and the North Central and Central Coastal Areas have witnessed a growth in the TFR (of ever married and never married women aged 15-49 years) but show a shrinkage in the TFR of never-married women. While the TFR of the Central Highlands, the South East and the Mekong River Delta has decreased, the corresponding TFR of never-married women in these regions has increased.

2.2.3.7. Total fertility rates by education

In this monograph, the level of educational attainment of women aged 15-49 is divided into 5 groups as follows: (1) Lower Primary; (2) Primary; (3) Lower secondary; (4) Upper secondary; and (5) Higher.

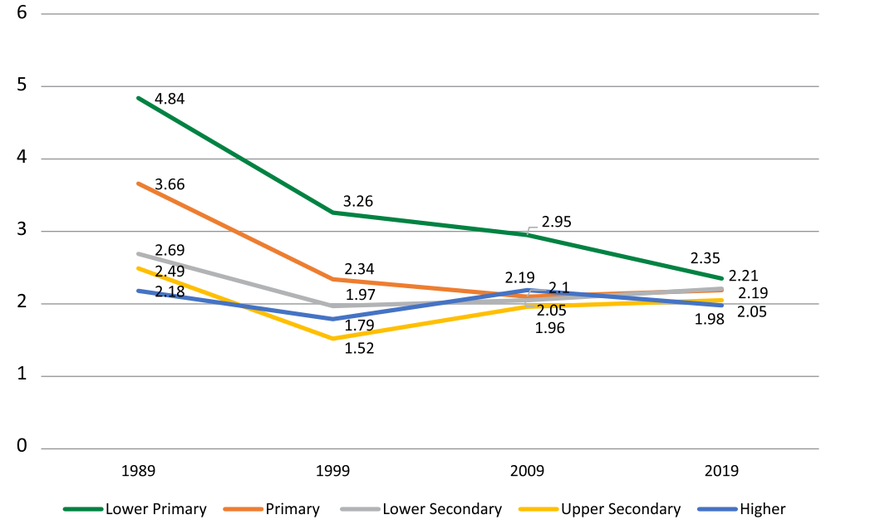
According to the results of the 2019 Census, the TFR of women aged 15-49 with "Lower Primary" education is the highest at 2.35 children per woman and the lowest figure is in the "Higher" education group, at 1.98 children per woman.

Over the past 30 years, the TFR of the groups with the lowest educational attainment, "Lower Primary" and "Primary", shows a remarkable drop. The "Lower Primary" group decreased the most from 4.84 children per woman in 1989 to 2.35 children per woman in 2019. This was also the only group in which TFR declined continuously over the past three decades. Although there are differences in TFR among mothers with different educational attainment, the gap among these groups has gradually narrowed. The difference between TFR of the group with the highest and lowest educational attainment level in 1989 was 2.66 children per woman but this gap narrowed to only 0.37 children per woman in 2019.

Over the past 10 years, the TFR of the groups with lowest and highest educational attainment, i.e. "Lower Primary" and "Higher", decreased while the corresponding figures of attainment among other educational groups slightly increased. Among the three groups with an increase in the TFR, the group with "Lower Secondary" recorded the highest growth, from 2.05 children per woman in 2009 to 2.21 children per woman in 2019.

Figure 2.9: Total fertility rate by women's level of educational attainment, 1989-2019

Unit: Children per woman



2.2.3.8. Total fertility rate by living standards

Living standards of households in general and of women of reproductive age in particular are evaluated through composite indicators disaggregated by 5 quintiles: Poorest; Poor; Medium; Rich and Richest.

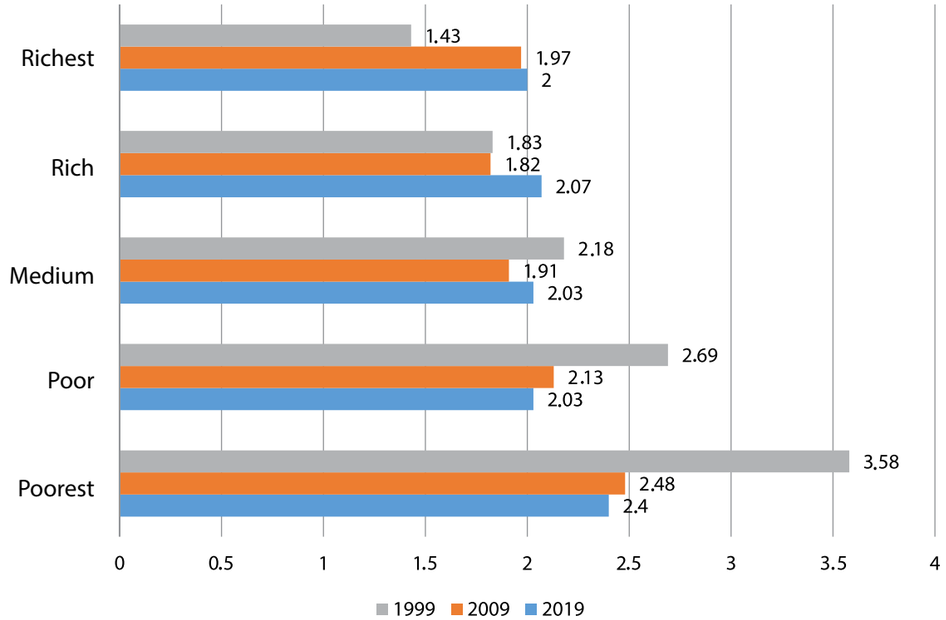
In 2019, women of reproductive age living in the poorest households show the highest TFR, higher than replacement-level fertility (TFR is 2.4 children per woman) while women of the remaining living standard groups show TFR lower than replacement-level fertility, of which the richest quintile has the lowest (2 children per woman).

Over the past 20 years, the TFR of women in the medium or lower income quintiles decreased, while TFR of women with higher living standards tended to increase. The poorest quintile witnessed the largest decrease (1.18 children per woman) from 3.58 children per woman in 1999 to 2.4 children per woman in 2019. The TFR of the richest quintile show the highest increase of 0.57 children per woman, from 1.43 children per woman in 1999 to 2 children per woman in 2019.

Compared to 2009, the TFR of the poor and poorest groups further declined, while the TFR of women aged 15-49 living in households of the medium, rich and richest quintiles, increased; the corresponding TFR in 2009 of these three quintiles were 1.91, 1.82, and 1.97 children per woman while these figures in 2019 were 2.03, 2.07, and 2.0 children per woman, respectively. Of the three quintiles with increased TFR compared to the previous 10 years, the rich quintile saw the highest growth of TFR, with 0.25 children per woman.

Figure 2.10: Total fertility rate by living standards, 1999-2019

Unit: Children per woman



2.3. NET REPRODUCTION RATE AND REPLACEMENT FERTILITY RATE

2.3.1. Net reproduction rate

The net reproduction rate (NRR), together with the sex ratio at birth (SRB), and the mortality rate, are used to calculate replacement-level fertility. Theoretically, if a cohort shows a SRB of about 105-106 boys per 100 girls and NRR is equal to 1, replacement-level fertility is 2.1 children per woman.

In demographic studies and reports, the TFR of 2.1 children per woman is often used to describe replacement-level fertility without considering relevant indicators such as SRB and mortality rate of that cohort.

When the SRB shows a serious imbalance as in the case of Viet Nam, the research and re-measurement of the replacement-level fertility are essential to recalculate the TFR corresponding to the replacement-level fertility when NRR is equal to 1, in order to serve policy making and take the advantage of the population's drive towards maintaining sustainable development goals.

Sex imbalance at birth has been occurring in Viet Nam for many years and reported on since 2004. In 2009 SRB was 110.5 boys per 100 girls and in 2019, 111.5 boys per 100 girls, significantly higher than the SRB of 105-106 boys per 100 girls which is often observed worldwide.

According to the results of the 2019 Census, Viet Nam's NRR reached 0.97 daughters per woman; the NRR of urban areas is 0.85 daughters per woman and that of rural areas, 1.02 daughters per woman. Thus, there exists a shortage of daughters in urban areas to replace their mothers in implementing future reproduction, while the number of daughters in rural areas remains sufficiently assured.

Of the 6 socio-economic regions, two recorded NRRs less than 1 (the South East and the Mekong River Delta with 0.73 and 0.86 daughters per woman, respectively). Thus the number of daughters born was insufficient to replace their mothers in future reproduction. The remaining 4 socio-economic regions recorded NRRs greater than 1 thus ensuring that women gave birth to a sufficient number of daughters to replace themselves in future reproduction. The common feature of the regions with NRRs less than 1 was that the TFR remained very low in contrast with the regions with NRRs greater than 1 having high TFR (over 2.30 children per woman).

Table 2.4: Total fertility rate and net reproduction rate by socio-economic region

	TFR *(Children per woman)*	**NRR** *(Daughters per woman)*
Country	**2.09**	**0.97**
Urban	1.83	0.85
Rural	2.26	1.02
Socio-economic region		
Northern Midlands and Mountainous Areas	2.43	1.10
Red River Delta	2.35	1.07
North Central and Central Coastal Areas	2.32	1.08
Central Highlands	2.43	1.12
South East	1.56	0.73
Mekong River Delta	1.80	0.86

2.3.2. Total fertility rate corresponding to replacement-level fertility when NRR is equal 1.0

Viet Nam's 2019 NRR was less than 1 (0.97 daughters per woman), SRB was 111.5 boys per 100 girls. In theory, the replacement-level fertility in Viet Nam would not be 2.1 children per woman, but rather at a level to ensure NRR=1.

The results calculated from the 2019 Census data show that Viet Nam's TFR corresponding to the replacement-level fertility whereby NRR=1 is 2.16 children per woman. The current fertility of Viet Nam (TFR = 2.09 children per woman) is thus lower than the replacement-level fertility. TFR in urban areas is 1.83 children per woman, much lower than the replacement-level fertility (2.16 children per woman) while TFR in rural areas is 2.26 children per woman, higher than replacement-level fertility.

Calculation of TFR results for socio-economic regions indicate that the South East and the Mekong River Delta have a much lower TFR than the replacement-level fertility. In contrast, for the remaining four regions, the current TFR are higher than replacement-level fertility.

Table 2.5: Total fertility rate corresponding to the replacement-level fertility when NRR is equal to 1.0 by urban and rural areas and socio-economic regions

	NRR *(Daughters per woman)*	**SRB** *(Boys per 100 girls*	**TFR** *(Children per woman)*	**TFR corresponding to replacement-level fertility when NRR=1** *(Children per woman)*	**Difference between TFR and TFR with NRR=1** *(Children per woman)*
Nationwide	**0.97**	**111.5**	**2.09**	**2.16**	**-0.07**
Urban	0.85	110.8	1.83	2.16	-0.33
Rural	1.02	111.8	2.26	2.16	0.10
Socio-economic region					
Northern Midlands and Mountainous Areas	1.10	114.2	2.43	2.23	0.20
Red River Delta	1.07	111.5	2.35	2.15	0.20
North Central and Central Coastal Areas	1.08	109.4	2.32	2.14	0.18
Central Highlands	1.12	108.6	2.43	2.17	0.26
South East	0.73	111.0	1.56	2.14	-0.58
Mekong River Delta	0.86	106.9	1.80	2.10	-0.30

Comparison of the actual TFR with the one corresponding to replacement-level fertility among 63 provinces shows that: Bac Giang province has the highest TFR corresponding to replacement-level fertility with NRR=1 (2.33 children per woman) and its current fertility is lower than the replacement-level (TFR is 2.31 children per woman). Therefore, the fertility calculation corresponding to the replacement-level fertility with NRR=1 of the provinces indicates that 26 provinces have lower fertility than the replacement-level fertility; 35 provinces have higher fertility than the replacement-level fertility; and 2 provinces have the fertility equal to the replacement-level fertility (Lam Dong and Hai Phong).

Table 2.6: Total fertility rate corresponding to the replacement-level fertility when NRR is equal to 1.0 by province

No.	**Province/City**	**NRR** *(Daughters per woman)*	**SRB** *(Boys per 100 girls)*	**TFR** *(Children per woman)*	**TFR corresponding to replacement-level fertility when NRR=1** *(Children per woman)*
1	Ho Chi Minh City	0.643	114.1	1.39	2.17
2	Tay Ninh	0.734	106.2	1.53	2.09
3	Binh Duong	0.734	106.7	1.54	2.11
4	Bac Lieu	0.757	109.1	1.61	2.14
5	Long An	0.810	119.8	1.80	2.21
6	Dong Thap	0.824	112.2	1.78	2.15
7	Khanh Hoa	0.824	111.0	1.77	2.14
8	Can Tho	0.825	99.7	1.66	2.02
9	Ba Ria – Vung Tau	0.836	121.1	1.87	2.20
10	Soc Trang	0.838	109.9	1.79	2.13
11	Vinh Long	0.840	112.7	1.81	2.18
12	An Giang	0.851	113.2	1.85	2.17
13	Ca Mau	0.876	102.5	1.80	2.06
14	Ben Tre	0.878	109.7	1.86	2.11
15	Binh Thuan	0.887	112.0	1.91	2.14
16	Hau Giang	0.891	102.6	1.83	2.04
17	Da Nang	0.895	107.9	1.88	2.10
18	Tien Giang	0.914	96.9	1.82	1.97
19	Dong Nai	0.919	105.4	1.90	2.08

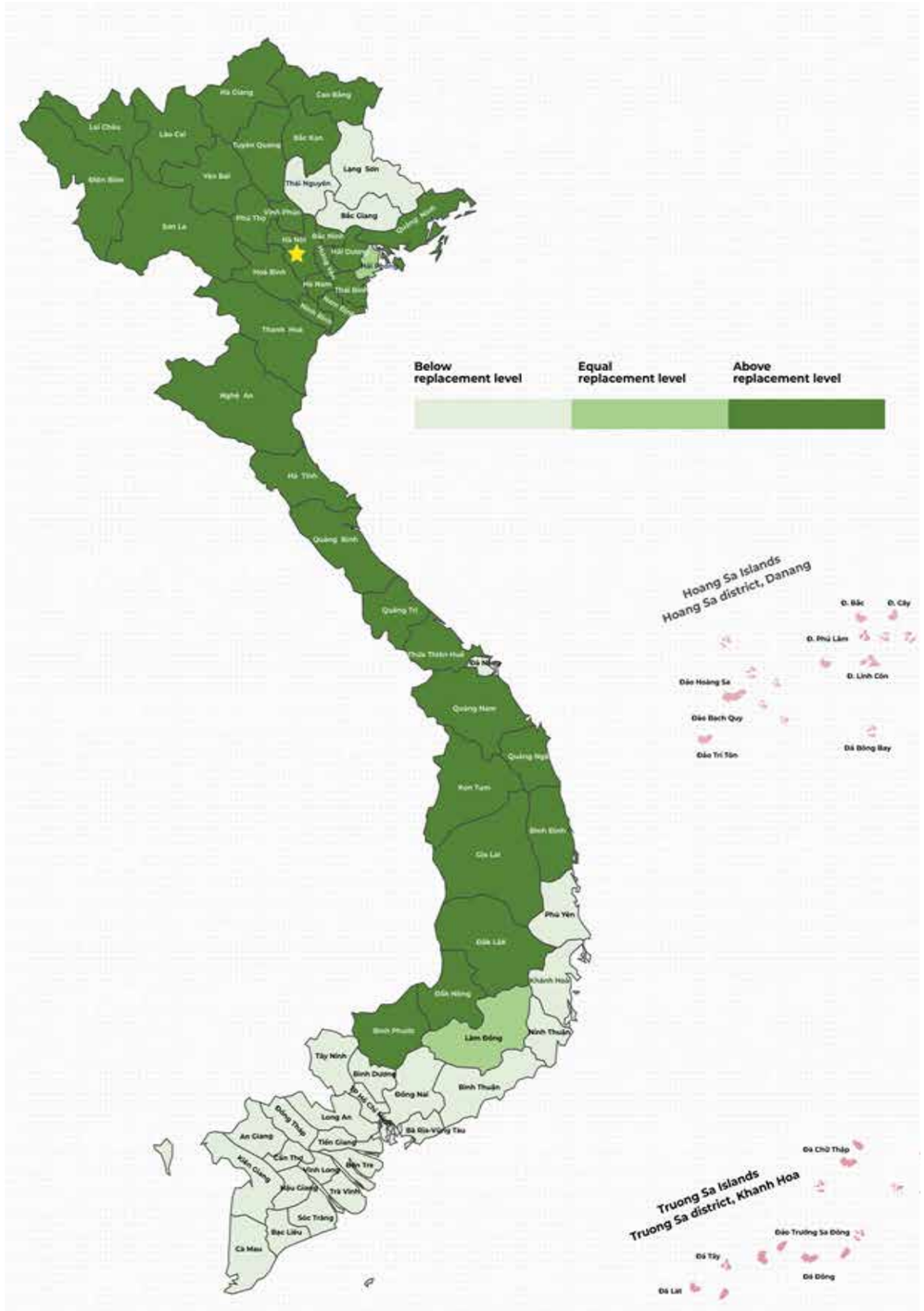
No.	Province/City	NRR *(Daughters per woman)*	SRB *(Boys per 100 girls)*	TFR *(Children per woman)*	TFR corresponding to replacement-level fertility when NRR=1 *(Children per woman)*
20	Kien Giang	0.919	97.7	1.85	2.01
21	Tra Vinh	0.935	105.8	1.96	2.07
22	Lang Son	0.949	118.7	2.13	2.28
23	Thai Nguyen	0.974	115.0	2.14	2.23
24	Phu Yen	0.978	111.0	2.11	2.18
25	Ninh Thuan	0.984	107.2	2.09	2.12
26	Lam Dong	0.996	115.8	2.20	2.20
27	Hai Phong	0.998	117.3	2.20	2.20
28	Bac Giang	0.999	126.3	2.31	2.33
29	Quang Ngai	1.007	106.2	2.13	2.11
30	Ha Noi	1.020	116.9	2.24	2.20
31	Bac Kan	1.024	104.5	2.14	2.10
32	Hoa Binh	1.032	121.8	2.34	2.30
33	Binh Dinh	1.032	108.5	2.20	2.12
34	Binh Phuoc	1.046	112.7	2.27	2.15
35	Hung Yen	1.055	123.6	2.40	2.30
36	Quang Ninh	1.062	106.1	2.24	2.12
37	Son La	1.066	121.8	2.44	2.30
38	Vinh Phuc	1.067	119.8	2.39	2.25
39	Ha Nam	1.068	125.3	2.44	2.30
40	Quang Nam	1.078	105.8	2.27	2.11
41	Lao Cai	1.085	116.1	2.44	2.26
42	Dak Lak	1.089	110.0	2.37	2.18
43	Cao Bang	1.101	113.1	2.43	2.20
44	Ha Giang	1.124	108.6	2.47	2.20
45	Ninh Binh	1.128	113.8	2.46	2.17
46	Thua Thien Hue	1.129	101.1	2.34	2.07
47	Hai Duong	1.133	115.2	2.48	2.19
48	Thai Binh	1.151	108.4	2.43	2.12
49	Quang Tri	1.156	101.5	2.45	2.11
50	Thanh Hoa	1.158	114.9	2.54	2.20
51	Gia Lai	1.163	106.2	2.49	2.15
52	Tuyen Quang	1.165	110.3	2.51	2.16
53	Bac Ninh	1.175	111.5	2.53	2.13
54	Quang Binh	1.175	101.1	2.43	2.07
55	Lai Chau	1.208	107.1	2.68	2.23
56	Phu Tho	1.209	108.6	2.57	2.16
57	Dak Nong	1.239	108.4	2.68	2.17
58	Nam Dinh	1.259	113.8	2.74	2.20
59	Dien Bien	1.259	104.3	2.72	2.17
60	Nghe An	1.275	110.5	2.75	2.15
61	Ha Tinh	1.283	115.2	2.83	2.20
62	Kon Tum	1.295	98.1	2.74	2.12
63	Yen Bai	1.308	101.3	2.74	2.10

Note: *The number of recent births (one year before census time) may be underestimated for small population provinces. This is an obstacle for estimating SRB since this indicator is highly vulnerable to sample size.*

The figures presented in the Figure 2.11 show that the fertility rate in the majority of provinces exceeds replacement-level fertility and that these provinces are mainly located in the North and Central regions. Localities with lower fertility than replacement-level fertility are mainly concentrated in the South East and the Mekong River Delta.

Figure 2.11: Total fertility rate in 2019 compared to the total fertility rate corresponding to the replacement-level fertility when NRR=1

Unit: Children per women



CHAPTER 3:

FERTILITY OF WOMEN AGED 10-19

The age-specific fertility rate of women and girls aged 10-19 (hereafter referred to as ASFR10) is one of the indicators measuring the reproductive health of this vulnerable population group. The 10–19 age group, defined by the World Health Organization (WHO) as adolescents and youth, represent an important stage for laying the foundations of good health[14]. Many studies have pointed out that teenage pregnancy and childbearing, especially in this age group, not only increase risks to the health of mothers and children, such as obstetric complications, even death, but also limits women's opportunities for education and career development. Consequently, reduction in ASFR10-19 is an important goal in healthcare policies not only of Viet Nam but also in the joint implementation of SDGs with other countries.

Viet Nam is one of the countries committed to implement the SDGs by 2030, including the target to reduce ASFR10. For this reason, information on the reproductive history of women aged 10-19 was collected for the first time in the 2019 Census.

3.1. FERTILITY RATE OF WOMEN AGED 10-19 BY URBAN AND RURAL AREAS

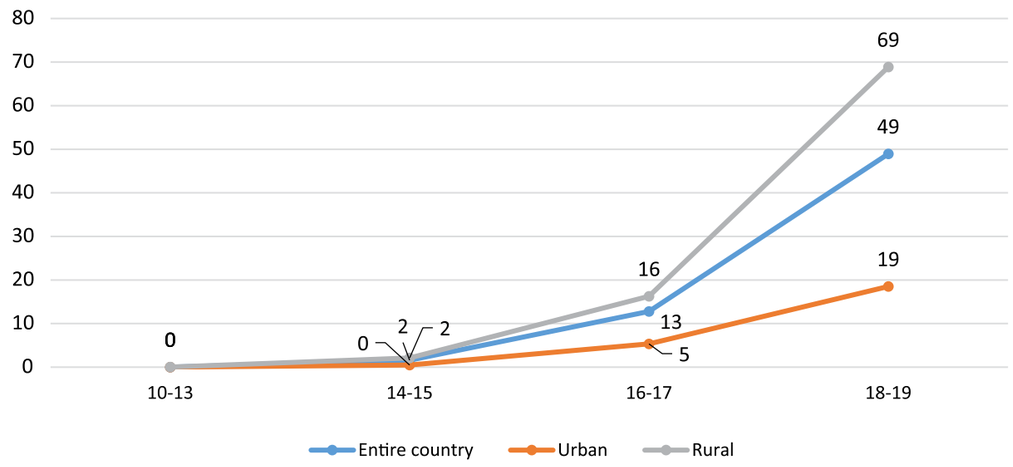
The total number of women and girls aged 10-49 in Viet Nam as of April 1, 2019 is 28.4 million, of which 6.6 million are aged between 10-19, accounting for 23.4%. Most women 10-19 years old live in rural areas, accounting for 66.3%. The results of the 2019 Census show that 6.2% of women aged 10-19 who gave birth in the 12 months prior to the Census were never married.

The results of the 2019 Census indicate that ASFR10 at national level accounts for 11 children per 1000 women; ASFR10 in rural areas is higher than in urban areas, with 15 children per 1000 women and 5 children per 1000 women, respectively.

If the age group 10-19 is divided into 4 subgroups (10-13; 14-15; 16-17 and 18-19), it was observed that there were no births reported in the age group 10-13. The ASFR started to increases from the age group 14-15, and reaching the highest rate of increase in the age group 18-19. Overall, ASFR of the age group 18-19 is 49 children per 1000 women, nearly four times as high as that of the age group 16-17. The ASFR of the age group 18-19 in rural areas is nearly four times as high as urban areas, with 69 children per 1000 women and 19 children per 1000 women, respectively.

Figure 3.1: ASFR of women aged 10-19 in 2019

Unit: Births per 1000 women



14. *Source: https://www.who.int/health-topics/adolescent-health#tab=tab_1*

3.2. ASFR OF WOMEN AGED 10-19 BY SOCIO-ECONOMIC REGION AND PROVINCE

Women aged 10-19 who have ever given birth account for a relatively low proportion (2.1%); the Northern Midlands and Mountainous Areas and the Central Highlands record the highest proportion of women aged 10-19 who gave birth (5.3% and 4.2%, respectively). The proportion of women aged 10-19 who gave birth in the Northern Midlands and Mountainous Areas is nearly 5 times as high as that in the Red River Delta which has the lowest proportion of women aged 10-19 in the country, at 1.1%.

The Northern Midlands and Mountainous Areas and the Central Highlands have the highest ASFR10, with 28 births per 1000 women and 21 births per 1000 women, respectively. The reason for higher ASFR10 in these two regions compared to other regions is partly due to difficult living conditions, limited communication activities to raise awareness about the health of mothers and children including reproductive health and, partly due to ethnic minority customs that promote early marriage and childbearing.

Figure 3.2: ASFR of women aged 10-19 by socio-economic region in 2019

Unit: Births per 1000 women

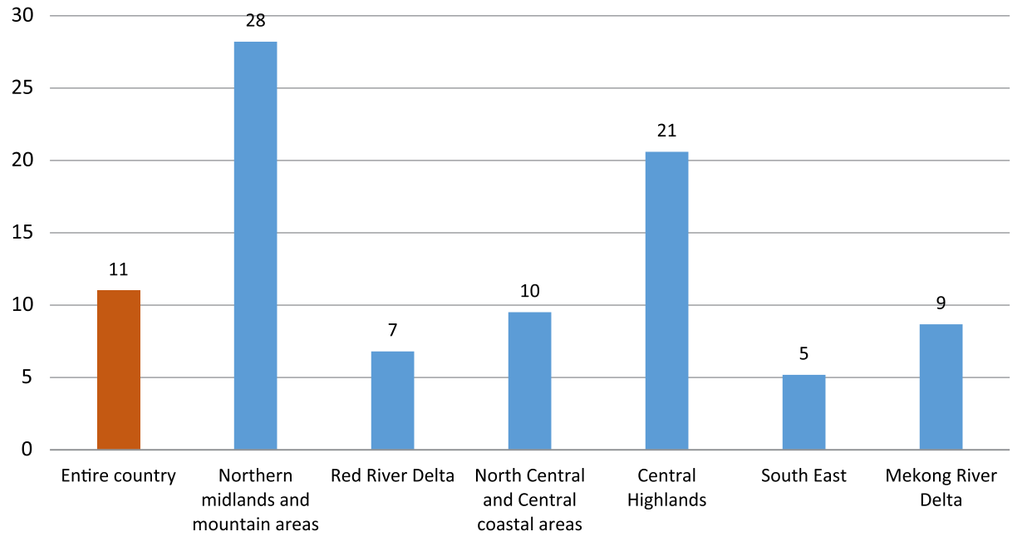
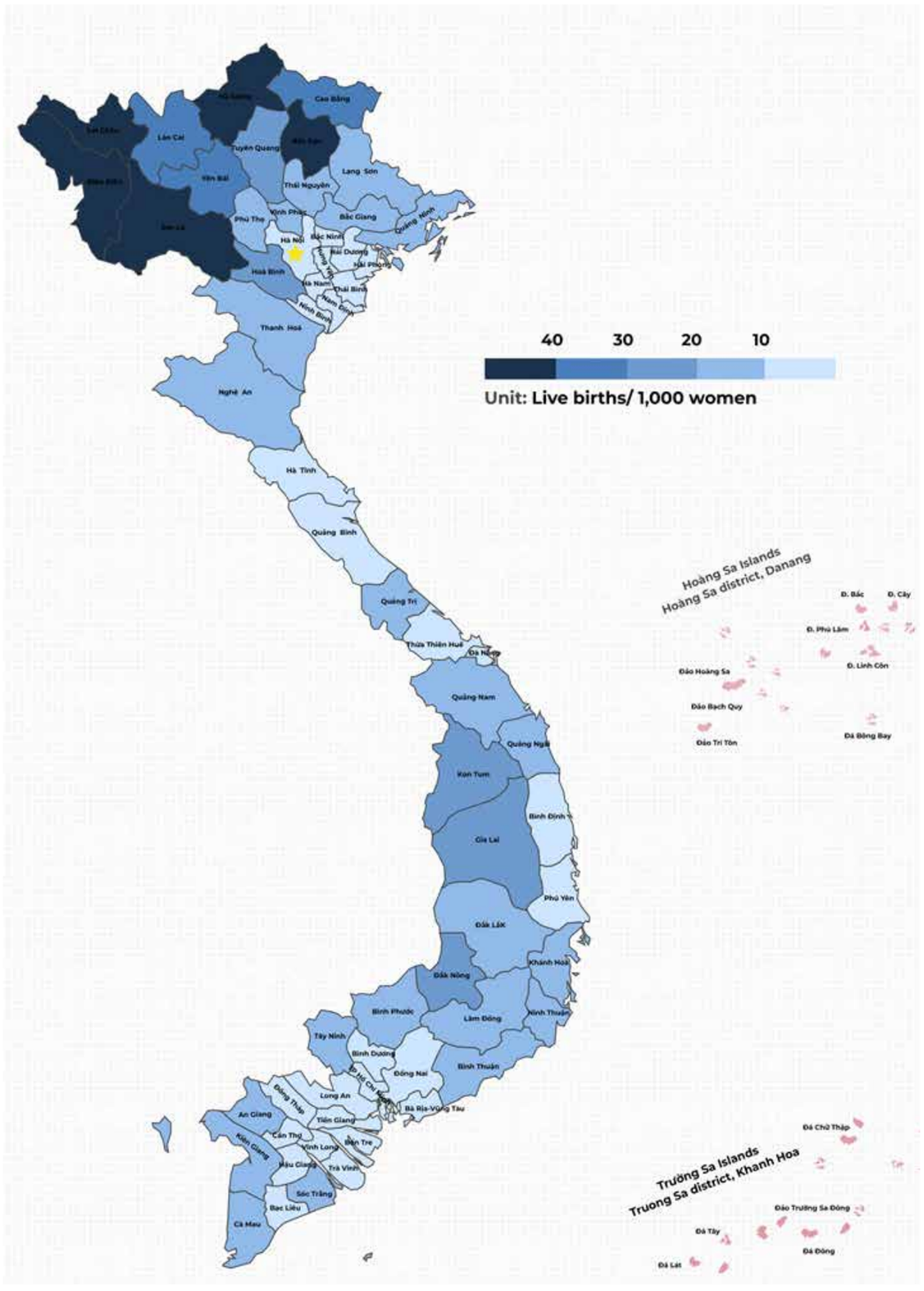


Figure 3.3: ASFR10 by province in 2019



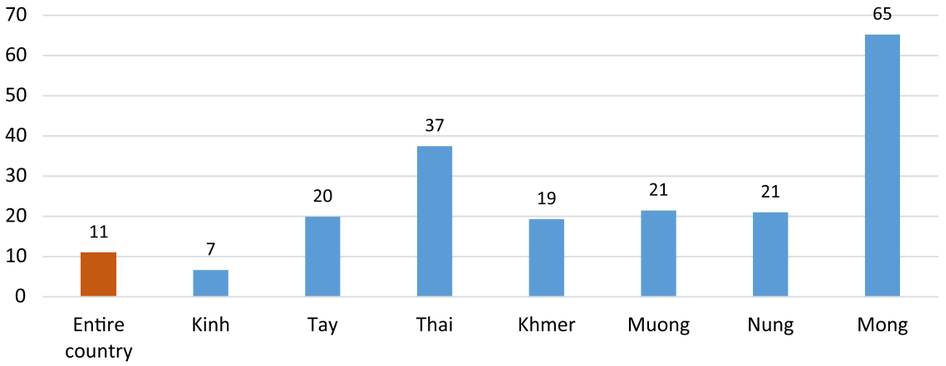
The provinces with the highest ASFR10 are Son La (48 births per 1000 women), Bac Kan (47 births per 1000 women), Dien Bien (46 births per 1000 women) and Ha Giang (43 births per 1000 women). Some provinces in the Central Highlands record higher ASFR10 than other provinces in the same region included Gia Lai (26 births per 1000 women), Kon Tum (22 births per 1000 women), and Dak Nong (20 births per 1000 women).

3.3. AGE SPECIFIC FERTILITY RATE OF WOMEN AGED 10-19 BY ETHNICITY

Among the ethnic groups with a population of more than one million, ASFR10 of the Mong is highest, with 65 births per 1000 women, about 9 times as high as the Kinh and 6 times as high as the average for the country. The ethnic group with the second highest ASFR10 is the Thai with 37 births per 1000 women.

Figure 3.4: ASFR10 by ethnic group with a population of over one million people in 2019

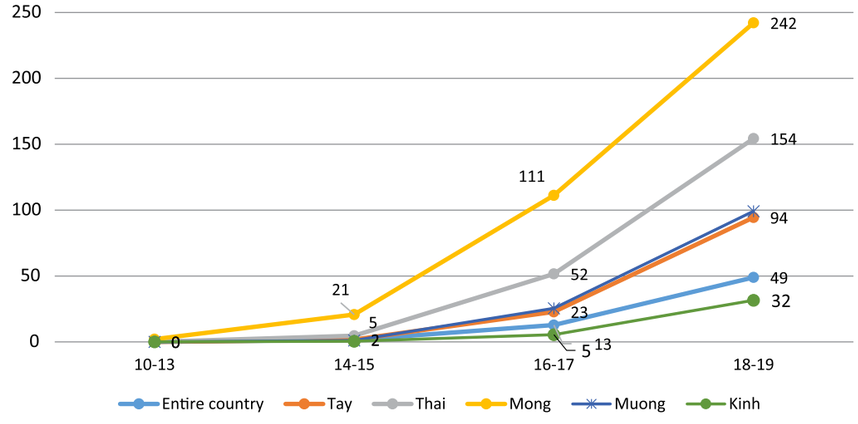
Unit: Births per 1000 women



The Khmer, Tay, Muong, and Nung ethnic groups have a relatively high ASFR10, ranging from 19 births per 1000 women to 21 births per 1000 women. The results of the 2019 Census indicate that the ASFR of the age group 16-17 of Mong and Thai were relatively high at 111 and 52 children per 1000 women respectively, suggesting that more effort would be needed to reduce early marriage and childbearing in these ethnic groups.

Figure 3.5: ASFR10 of 5 ethnic groups with the largest population by age group in 2019

Unit: Births per 1000 women

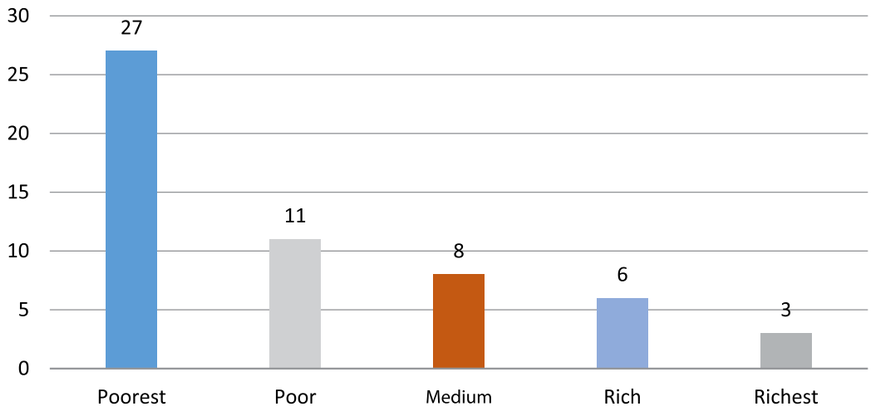


3.4. AGE SPECIFIC FERTILITY RATE OF WOMEN AGED 10-19 BY LIVING STANDARDS

The research on fertility of women aged 10-19 when divided into 5 living standards quintiles (Poorest; Poor; Medium; Rich and Richest) shows that ASFR10 of the poorest quintile is highest with 27 births per 1000 women, 9 times higher than the richest quintile. The ASFR10 drops gradually as living conditions improve. This suggests that women aged 10-19 with better living conditions are more likely to continue their schooling enabling improved education qualifications and employment opportunities. Further, this group tends to marry and give birth later compared with those confined to difficult living conditions and; as a result, the fertility of the group with higher living standards is lower than that of the group with poor living standards.

Figure 3.6: ASFR10 by living standards in 2019

Unit: Births per 1000 women



CHAPTER 4:
CONCLUSIONS AND RECOMMENDATIONS

4.1. CONCLUSION

For 20 years, fertility pattern in Viet Nam has been shifting from the highest ASFR at age group 20-24 years old to the age group 25-29. Currently, only the Northern Midlands and Mountainous Areas and the Central Highlands have the highest ASFR in the age group 20-24.

Over the past 30 years, Viet Nam has successfully implemented family planning policies and halved the number of births from nearly four children per woman in 1989 to about two children per woman in 2019. Viet Nam has been close to replacement-level fertility in 2005 and this fertility has been maintained in recent years. According to the results of the 2019 Census, Viet Nam's TFR was 2.09 children per woman, close to replacement-level fertility. However, there are still very large disparities in fertility among regions, provinces and population groups. Specifically:

- The TFR in rural areas is currently higher than replacement-level fertility and higher than that in urban areas (2.26 children per woman versus 1.83 children per woman, respectively). From 1989 to 2009, fertility in both urban and rural areas decreased. However, the TFR has slightly increased in period 2009-2019, both in rural and urban areas.
- The Northern Midlands and Mountainous Areas, the Red River Delta, and the North Central Coastal Areas record increasing fertility. The Central Highlands, the South East and the Mekong River Delta show fertility decline. The Central Highlands and the Northern Midlands and Mountainous Areas record the highest TFR, more 1.5 times as high as that of the South East - the region with the lowest TFR.
- The TFR is highest in Ha Tinh province (2.83 children per woman), twice as high as Ho Chi Minh City, which has the lowest TFR (1.39 children per woman). In the past 10 years, while fertility has declined in 29 provinces, it has increased in 33 provinces.
- Among the ethnic groups with a population size of over 1 million people, the Mong record the highest TFR, nearly two times as high as that of the Khmer. Although the fertility of the Mong has declined over the years, it is still higher than other ethnic groups. Currently, the fertility gap among ethnic groups is tending to narrow.
- During the past 30 years, the fertility of migrants has continuously decreased while that of non-migrants only decreased during the period 1989-2009. At present, the TFR of migrants is lower than that of non-migrants, a phenomenon that has completely reversed compared to 30 years ago when the 1989 fertility of migrants was recorded higher than that of non-migrants.
- The highest TFR is for women with an education level of "Lower Primary", at 2.35 children per woman while the lowest TFR is for women with "Higher" education levels, at 1.98 children per woman.
- Women living in the poorest households own the highest fertility while women living in the richest households have the lowest.
- ASFR10 in rural areas is three times as high as in urban areas, equivalent to 15 children per 1000 women and 5 children per 1000 women, respectively. The Northern Midlands and Mountainous Areas and the Central Highlands record the highest ASFR10 compared to other regions. The ASFR of the 15-19 age group is 35 children per 1000 women in 2019, higher as compared to 24 children per 1000 women in 2009.

In addition, the results from the 2019 Census show that the TFR corresponding to replacement-level fertility where NRR = 1 is 2.16 children per woman. Thus, the current total fertility rate of Viet Nam (TFR = 2.09 children per woman) is lower than replacement-level fertility (2.16 children per woman). The calculation of replacement-level fertility for 63 provinces shows that given the fertility rate corresponding to the replacement-level fertility with NRR=1; 26 provinces record lower fertility than replacement-level fertility and two provinces possess fertility rates equal to replacement-level fertility.

4.2. RECOMMENDATIONS

Below are some recommendations proposed on the basis of the analytical results:

(1) Although Viet Nam has achieved and overall, maintained fertility close to the replacement level, there still exist differences among regions, localities and population. In order to maintain the goal of replacement-level fertility in certain localities, in addition to having an appropriate population and development policy, it is necessary to promote socio-economic development policies that encourage gender equality to ensure women's access to opportunities and equality with men in education, training, sexual and reproductive health care, employment and income. These factors all enhance women's position and status within the family and society. This is also a direct solution to address and reduce the sex imbalance at birth in Viet Nam.

(2) The implementation of policies on education, and sexual and reproductive health care for ethnic minorities in general and ethnic girls in particular should be strengthened to create motivation, and improve qualifications and standards of living for women and girls in the mountainous areas and the Central Highlands, thus contributing to more effective prevention of child marriage and early childbirth. This is a dual goal firstly, to ensure the quality of life of the ethnic population and realize social justice and secondly, to close the economic development gap between ethnic groups and regions.

(3) Migration and urbanization represent one of the driving forces of economic development. The current trend sees more women of reproductive age migrating to the developed economic areas in search of opportunities to improve qualifications and income. There should be a strengthening of policy implementation that supports migrants, including female migrants, by providing better access to housing, education, sexual and reproductive health care to help them fulfill their reproductive choices, child care and protection.

(4) Over recent years, Viet Nam has successfully implemented a fertility reduction policy that has increased focus on population and development policies. In this regard and in addition to direct policies on maintaining replacement-level fertility and improving the quality of life of the population overall, investment in girls and women of reproductive age that includes sexual and reproductive health care knowledge and skills should be a priority. This will require strengthening policies to ensure increased access of women and girls to education, sexual and reproductive health, and better equality in employment and income, as well as to introduce flexibility in reproductive choice in accordance with the principles of the Programme of Action of the International Conference on Population and Development.

(5) It is necessary to further improve the quality of statistical information on fertility and other related information to serve evidence-based policy development. Information on fertility and other related information should be collected and aggregated using consistent,

transparent and objective methods and then statistical data should be widely shared for policy formulation and debate. Particularly, attention should be paid to coordination of survey and administrative data sources among relevant government agencies to facilitate efficient and resource-saving compilation of statistical indicators. In addition, in-depth studies on the phenomenon of low fertility in some localities should be conducted to provide timely information for the development of appropriate policies.

TABULATED TABLES

TABLE 1: CRUDE BIRTH RATE BY AREA, REGION AND PROVINCE, 2009-2019

Unit: Live births per 1000 population

Administrative unit	Crude birth rate										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nationwide	**17.6**	**17.1**	**16.6**	**16.9**	**17.0**	**17.2**	**16.2**	**16.0**	**14.9**	**14.6**	**16.3**
Area											
Urban	17.3	16.4	15.3	16.0	16.2	16.7	15.3	15.5	14.0	13.4	16.2
Rural	17.8	17.4	17.2	17.4	17.5	17.5	16.7	16.2	15.4	15.2	16.3
Socio-economic region											
Northern midlands and mountainous areas	19.6	19.3	19.1	19.5	18.0	21.1	20.9	20.1	18.6	17.6	17.5
Red River Delta	17.6	16.7	16.6	16.5	16.2	18.1	16.2	16.1	14.7	14.9	17.9
North Central and Central coastal areas	16.9	16.9	16.7	17.6	17.8	17.5	16.9	17.1	16.1	15.8	17.0
Central Highlands	21.9	20.9	20.4	19.5	19.7	18.4	17.3	18.2	17.0	16.9	18.8
South East	17.8	16.9	15.5	15.4	17.6	15.4	15.1	13.5	13.4	12.8	15.2
Mekong River Delta	16.0	15.2	14.7	15.7	15.3	14.6	12.9	13.2	11.9	11.6	12.7
Province											
Ha Noi	19.2	18.8	18.6	17.1	16.5	18.9	16.3	16.6	15.1	14.7	19.1
Ha Giang	26.3	27.0	22.8	23.8	22.6	20.7	23.7	19.5	19.3	20.3	18.3
Cao Bang	18.1	17.5	17.6	17.9	17.0	20.5	19.3	19.1	16.8	17.8	16.7
Bac Kan	16.0	16.0	16.1	18.5	17.0	17.0	18.7	18.0	16.3	15.0	13.7
Tuyen Quang	18.0	17.0	17.1	18.4	18.6	22.2	20.5	20.3	18.6	16.3	16.3
Lao Cai	23.8	24.4	22.6	21.2	21.9	20.0	18.6	22.5	18.2	19.0	18.8
Dien Bien	23.4	24.2	24.7	25.0	22.2	27.2	23.4	20.3	23.5	21.6	21.0
Lai Chau	26.2	26.0	26.2	23.2	21.6	26.8	25.3	24.1	22.3	20.0	21.2
Son La	24.9	24.7	23.4	23.3	20.7	23.3	23.7	23.9	22.2	18.3	18.4
Yen Bai	20.5	19.9	19.4	20.4	17.7	22.0	20.9	21.6	19.6	19.5	18.8
Hoa Binh	17.8	16.7	17.6	17.9	15.9	19.5	21.0	18.7	15.6	16.0	15.3
Thai Nguyen	16.8	16.7	17.2	18.0	17.1	20.0	19.0	18.7	16.0	14.0	17.6
Lang Son	16.0	15.8	15.9	17.8	15.3	18.7	18.8	18.1	16.6	15.8	14.1
Quang Ninh	18.3	15.9	16.2	18.4	17.2	18.8	15.4	14.4	15.5	15.2	16.2
Bac Giang	16.2	14.9	15.8	16.8	13.8	21.0	21.2	20.0	19.8	17.8	17.2
Phu Tho	17.3	17.5	17.4	16.8	17.4	19.1	19.1	17.9	16.8	17.0	17.2
Vinh Phuc	19.0	18.8	17.7	18.7	18.0	20.3	17.7	19.2	17.5	17.5	17.2
Bac Ninh	19.7	18.1	18.2	22.8	19.2	22.3	22.1	20.9	20.4	19.8	24.8
Hai Duong	16.2	15.2	15.5	16.2	15.3	16.0	14.5	16.1	13.1	16.9	17.4
Hai Phong	18.1	16.6	16.5	18.8	16.1	18.4	15.2	15.4	14.0	13.5	15.9
Hung Yen	16.9	16.1	16.2	15.7	17.7	17.2	16.8	16.5	13.9	15.0	17.1
Thai Binh	14.7	13.8	13.6	11.2	12.6	12.6	13.3	13.1	12.0	11.4	15.2
Ha Nam	14.9	14.8	14.9	12.8	13.4	15.0	15.2	14.3	12.2	14.5	16.1
Nam Dinh	16.3	15.6	15.5	12.5	16.4	18.9	16.6	13.7	13.7	14.0	16.5
Ninh Binh	15.4	13.4	13.1	17.9	15.5	20.5	17.7	18.7	13.4	14.5	16.9
Thanh Hoa	14.4	14.3	14.8	16.7	15.7	18.5	18.8	18.5	16.6	17.5	18.0
Nghe An	19.6	19.9	19.3	19.3	20.6	21.7	20.7	21.2	20.7	20.0	20.8
Ha Tinh	15.7	14.0	14.0	16.3	18.3	19.5	16.6	19.3	19.5	17.9	17.9
Quang Binh	17.8	17.5	18.3	19.1	16.0	17.9	17.5	16.4	15.9	16.0	17.5
Quang Tri	19.2	19.1	18.1	17.5	18.2	18.8	18.3	19.9	17.8	16.2	15.7
Thua Thien Hue	16.2	16.2	16.0	18.2	16.8	16.4	15.8	15.3	16.5	13.9	17.8
Da Nang	18.6	19.3	18.0	18.4	19.4	17.7	17.6	18.9	15.2	12.4	17.7
Quang Nam	16.7	17.8	16.8	19.1	20.5	16.7	15.7	15.6	15.2	15.7	16.2
Quang Ngai	15.8	17.1	17.3	17.0	19.2	15.6	13.5	13.8	12.0	13.6	15.0
Binh Dinh	16.7	16.3	16.7	15.9	17.6	16.3	13.9	13.0	12.8	13.9	14.5
Phu Yen	15.9	15.9	16.4	15.9	15.4	15.7	14.4	15.9	13.6	14.4	13.9
Khanh Hoa	17.1	16.7	15.3	16.4	16.2	12.8	13.6	13.3	12.7	10.6	13.6

Administrative unit	Crude birth rate										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Ninh Thuan	19.2	19.1	18.8	17.5	18.2	17.4	16.7	17.2	17.6	14.8	15.5
Binh Thuan	16.6	16.8	16.9	18.3	16.1	12.7	15.4	13.9	12.7	13.6	14.6
Kon Tum	28.5	27.4	25.8	25.6	21.3	25.2	19.6	19.1	19.4	16.0	21.9
Gia Lai	23.9	23.8	23.2	19.4	20.0	18.6	19.7	18.9	18.2	17.5	19.8
Dak Lak	19.7	19.0	18.4	18.5	21.5	17.9	16.8	18.6	16.1	17.0	18.1
Dak Nong	22.8	20.7	19.6	21.5	17.7	19.0	17.7	17.1	15.9	21.0	20.0
Lam Dong	20.3	18.3	18.5	18.0	17.2	16.2	14.4	16.9	16.6	14.6	16.7
Binh Phuoc	21.4	21.3	20.1	19.0	19.9	19.1	15.7	15.2	15.5	15.3	17.6
Tay Ninh	15.8	16.1	16.2	16.1	14.9	14.3	15.1	14.0	12.7	10.5	11.6
Binh Duong	23.0	20.7	19.7	21.5	22.2	18.5	18.6	18.3	20.2	15.2	17.6
Dong Nai	19.8	18.8	17.1	16.2	18.8	16.0	17.7	14.7	13.0	14.8	17.1
Ba Ria Vung Tau	17.7	15.6	15.2	14.9	16.2	16.5	12.5	12.1	10.5	11.0	14.8
Ho Chi Minh city	15.8	15.1	13.1	13.2	16.4	14.0	13.7	11.8	12.1	11.8	14.1
Long An	15.8	14.9	14.8	16.8	16.4	13.8	12.3	11.4	11.8	12.1	13.9
Tien Giang	15.6	14.7	14.2	14.3	13.6	13.1	11.8	14.4	13.6	11.3	12.6
Ben Tre	13.5	14.0	12.4	15.3	14.0	13.0	12.3	11.6	11.3	11.0	11.7
Tra Vinh	16.9	14.5	14.1	16.3	14.3	15.0	14.5	16.7	15.6	12.9	13.4
Vinh Long	13.7	12.9	12.4	16.3	15.0	14.5	11.3	13.7	10.9	11.0	11.6
Dong Thap	16.0	15.6	14.3	12.6	14.9	14.5	12.3	11.6	9.5	9.8	11.9
An Giang	17.6	17.3	16.4	17.5	16.3	16.7	12.5	12.5	11.6	11.4	11.9
Kien Giang	16.7	15.9	16.2	18.0	16.3	16.2	14.8	14.0	12.6	13.1	13.9
Can Tho	15.9	14.6	14.1	13.9	15.7	16.2	14.3	15.6	12.3	11.9	13.5
Hau Giang	17.0	14.7	14.9	14.9	14.4	13.1	12.1	11.0	10.8	11.0	12.4
Soc Trang	15.8	15.7	15.4	15.4	16.2	13.0	12.9	13.3	11.1	11.4	11.8
Bac Lieu	16.6	15.1	15.7	17.4	16.0	15.1	12.9	12.8	12.4	10.9	12.8
Ca Mau	16.4	14.8	15.0	14.8	14.6	13.8	13.7	13.9	11.9	12.3	12.9

TABLE 2: AGE-SPECIFIC FERTILITY RATE 12 MONTHS PRIOR TO 01/4/2019

Unit: Children per 1000 women

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Nationwide	15-19	35	16	45
	20-24	120	78	147
	25-29	130	127	133
	30-34	84	92	79
	35-39	39	41	37
	40-44	10	10	9
	45-49	1	2	1
	TFR	**2.09**	**1.83**	**2.26**
Northern midlands and mountain areas	15-19	82	27	93
	20-24	173	138	179
	25-29	123	149	117
	30-34	68	80	65
	35-39	30	35	29
	40-44	8	9	8
	45-49	2	1	2
	TFR	**2.43**	**2.20**	**2.47**
Red River Delta	15-19	24	13	30
	20-24	138	94	167
	25-29	160	170	155
	30-34	95	108	87
	35-39	41	43	39
	40-44	10	11	9
	45-49	1	2	1
	TFR	**2.35**	**2.20**	**2.44**
North Central and Central coastal areas	15-19	30	17	36
	20-24	138	104	152
	25-29	148	140	152
	30-34	93	97	91
	35-39	44	42	45
	40-44	11	11	11
	45-49	1	1	1
	TFR	**2.32**	**2.06**	**2.44**
Central Highlands	15-19	59	28	70
	20-24	148	110	161
	25-29	133	131	134
	30-34	89	99	84
	35-39	43	43	43
	40-44	13	11	14
	45-49	2	1	2
	TFR	**2.43**	**2.12**	**2.55**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
South East	15-19	16	10	25
	20-24	63	50	93
	25-29	102	99	107
	30-34	81	86	73
	35-39	39	41	36
	40-44	10	10	9
	45-49	2	2	2
	TFR	**1.56**	**1.49**	**1.73**
Mekong River Delta	15-19	29	23	31
	20-24	103	75	114
	25-29	110	111	110
	30-34	72	79	70
	35-39	35	38	34
	40-44	9	9	8
	45-49	1	1	1
	TFR	**1.80**	**1.69**	**1.84**
Ha Noi	15-19	16	6	27
	20-24	111	68	167
	25-29	165	173	156
	30-34	102	117	86
	35-39	42	47	35
	40-44	11	13	10
	45-49	2	2	1
	TFR	**2.24**	**2.13**	**2.41**
Ha Giang	15-19	119	41	132
	20-24	176	143	181
	25-29	101	131	95
	30-34	59	60	58
	35-39	24	16	26
	40-44	13	7	14
	45-49	3	0	3
	TFR	**2.47**	**1.99**	**2.54**
Cao Bang	15-19	96	32	111
	20-24	174	135	181
	25-29	111	138	102
	30-34	69	80	65
	35-39	28	34	26
	40-44	6	9	5
	45-49	1	1	1
	TFR	**2.43**	**2.15**	**2.45**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Bac Kan	15-19	112	32	132
	20-24	128	148	125
	25-29	100	127	93
	30-34	61	88	52
	35-39	23	45	16
	40-44	4	10	2
	45-49	0	0	0
	TFR	**2.14**	**2.25**	**2.10**
Tuyen Quang	15-19	78	30	85
	20-24	186	190	185
	25-29	133	149	130
	30-34	70	72	69
	35-39	28	35	26
	40-44	6	5	6
	45-49	2	0	3
	TFR	**2.51**	**2.40**	**2.53**
Lao Cai	15-19	101	28	120
	20-24	165	145	169
	25-29	117	144	110
	30-34	61	88	52
	35-39	28	34	26
	40-44	11	9	12
	45-49	3	3	4
	TFR	**2.44**	**2.25**	**2.47**
Dien Bien	15-19	141	28	155
	20-24	168	140	170
	25-29	118	149	113
	30-34	64	62	64
	35-39	36	33	37
	40-44	12	9	13
	45-49	3	2	4
	TFR	**2.72**	**2.11**	**2.78**
Lai Chau	15-19	133	49	145
	20-24	183	164	186
	25-29	112	126	108
	30-34	64	59	65
	35-39	33	25	35
	40-44	10	14	10
	45-49	1	3	1
	TFR	**2.68**	**2.20**	**2.75**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Son La	15-19	136	56	146
	20-24	168	143	171
	25-29	90	121	85
	30-34	53	74	50
	35-39	26	27	26
	40-44	9	13	8
	45-49	5	2	6
	TFR	**2.44**	**2.18**	**2.46**
Yen Bai	15-19	103	27	120
	20-24	204	207	204
	25-29	127	137	125
	30-34	71	62	73
	35-39	34	30	35
	40-44	8	8	8
	45-49	1	0	1
	TFR	**2.74**	**2.36**	**2.83**
Hoa Binh	15-19	66	16	75
	20-24	174	182	173
	25-29	128	171	121
	30-34	66	92	62
	35-39	26	57	20
	40-44	7	5	7
	45-49	1	0	1
	TFR	**2.34**	**2.62**	**2.29**
Thai Nguyen	15-19	30	12	39
	20-24	145	105	180
	25-29	140	173	118
	30-34	76	89	69
	35-39	30	35	27
	40-44	6	15	3
	45-49	1	1	1
	TFR	**2.14**	**2.15**	**2.18**
Lang Son	15-19	46	20	52
	20-24	160	130	167
	25-29	116	135	111
	30-34	70	87	65
	35-39	25	34	23
	40-44	7	6	7
	45-49	0	0	0
	TFR	**2.13**	**2.06**	**2.13**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Quang Ninh	15-19	33	24	46
	20-24	137	119	160
	25-29	141	153	122
	30-34	83	96	58
	35-39	41	47	28
	40-44	11	12	7
	45-49	1	1	2
	TFR	**2.24**	**2.26**	**2.12**
Bac Giang	15-19	32	25	33
	20-24	178	154	180
	25-29	136	135	136
	30-34	73	79	73
	35-39	35	36	35
	40-44	7	4	7
	45-49	1	0	1
	TFR	**2.31**	**2.17**	**2.32**
Phu Tho	15-19	49	22	54
	20-24	193	163	198
	25-29	148	168	144
	30-34	80	94	76
	35-39	36	49	33
	40-44	8	6	8
	45-49	0	1	0
	TFR	**2.57**	**2.52**	**2.57**
Vinh Phuc	15-19	37	25	41
	20-24	178	148	190
	25-29	148	171	140
	30-34	76	83	73
	35-39	32	33	32
	40-44	6	6	6
	45-49	0	1	0
	TFR	**2.39**	**2.34**	**2.41**
Bac Ninh	15-19	30	28	30
	20-24	157	190	149
	25-29	173	185	169
	30-34	98	102	96
	35-39	39	33	42
	40-44	7	10	6
	45-49	1	3	1
	TFR	**2.53**	**2.76**	**2.46**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Hai Duong	15-19	27	20	29
	20-24	158	129	169
	25-29	165	212	150
	30-34	92	121	81
	35-39	43	50	41
	40-44	9	10	8
	45-49	1	3	0
	TFR	**2.48**	**2.73**	**2.40**
Hai Phong	15-19	21	10	31
	20-24	121	101	139
	25-29	152	158	146
	30-34	96	107	87
	35-39	39	33	44
	40-44	10	8	12
	45-49	1	1	2
	TFR	**2.20**	**2.09**	**2.31**
Hung Yen	15-19	30	25	31
	20-24	169	163	170
	25-29	149	170	147
	30-34	86	89	85
	35-39	38	47	36
	40-44	7	1	8
	45-49	1	0	1
	TFR	**2.40**	**2.48**	**2.39**
Thai Binh	15-19	24	11	26
	20-24	156	114	161
	25-29	159	110	165
	30-34	92	79	93
	35-39	44	31	46
	40-44	10	8	10
	45-49	1	4	1
	TFR	**2.43**	**1.79**	**2.51**
Ha Nam	15-19	28	25	29
	20-24	173	181	172
	25-29	145	131	148
	30-34	91	87	92
	35-39	43	38	44
	40-44	7	10	7
	45-49	1	5	0
	TFR	**2.44**	**2.38**	**2.46**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Nam Dinh	15-19	32	28	32
	20-24	195	156	203
	25-29	173	169	173
	30-34	96	89	98
	35-39	43	41	44
	40-44	8	11	8
	45-49	0	0	0
	TFR	**2.74**	**2.47**	**2.80**
Ninh Binh	15-19	28	23	29
	20-24	168	161	170
	25-29	155	150	156
	30-34	88	80	91
	35-39	43	34	47
	40-44	9	4	11
	45-49	0	0	0
	TFR	**2.46**	**2.26**	**2.51**
Thanh Hoa	15-19	42	29	44
	20-24	175	159	177
	25-29	156	152	157
	30-34	89	92	88
	35-39	38	34	39
	40-44	7	4	8
	45-49	1	0	1
	TFR	**2.54**	**2.35**	**2.57**
Nghe An	15-19	34	22	36
	20-24	153	128	156
	25-29	172	152	175
	30-34	109	86	113
	35-39	65	60	66
	40-44	15	15	15
	45-49	2	1	2
	TFR	**2.75**	**2.32**	**2.82**
Ha Tinh	15-19	22	14	23
	20-24	169	165	170
	25-29	176	204	167
	30-34	119	126	118
	35-39	61	56	62
	40-44	18	22	17
	45-49	2	3	2
	TFR	**2.83**	**2.96**	**2.79**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Quang Binh	15-19	22	18	23
	20-24	147	124	153
	25-29	145	127	149
	30-34	106	124	101
	35-39	48	40	51
	40-44	16	22	15
	45-49	2	2	2
	TFR	**2.43**	**2.29**	**2.47**
Quang Tri	15-19	36	22	42
	20-24	158	137	167
	25-29	138	143	135
	30-34	98	94	99
	35-39	46	44	47
	40-44	12	11	12
	45-49	3	3	3
	TFR	**2.45**	**2.27**	**2.53**
Thua Thien Hue	15-19	17	13	20
	20-24	108	86	138
	25-29	158	167	149
	30-34	118	133	101
	35-39	52	51	54
	40-44	13	10	16
	45-49	1	1	2
	TFR	**2.34**	**2.31**	**2.40**
Da Nang	15-19	11	10	21
	20-24	75	74	82
	25-29	128	132	93
	30-34	102	112	30
	35-39	48	50	33
	40-44	12	10	21
	45-49	1	0	3
	TFR	**1.88**	**1.94**	**1.41**
Quảng Nam	15-19	33	24	36
	20-24	136	115	143
	25-29	139	119	146
	30-34	89	80	93
	35-39	46	50	45
	40-44	11	15	10
	45-49	1	2	1
	TFR	**2.27**	**2.02**	**2.37**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Quang Ngai	15-19	33	14	36
	20-24	121	99	125
	25-29	144	148	143
	30-34	86	95	83
	35-39	33	33	33
	40-44	9	9	9
	45-49	1	2	0
	TFR	**2.13**	**2.00**	**2.15**
Binh Đinh	15-19	26	9	34
	20-24	142	121	154
	25-29	154	165	148
	30-34	77	94	68
	35-39	33	35	31
	40-44	7	8	7
	45-49	0	0	1
	TFR	**2.20**	**2.17**	**2.21**
Phu Yen	15-19	30	19	35
	20-24	148	141	151
	25-29	137	142	135
	30-34	70	87	64
	35-39	26	32	23
	40-44	9	6	10
	45-49	1	1	1
	TFR	**2.11**	**2.14**	**2.09**
Khanh Hoa	15-19	29	17	38
	20-24	105	89	116
	25-29	112	107	116
	30-34	71	76	67
	35-39	29	31	28
	40-44	8	5	10
	45-49	1	1	1
	TFR	**1.77**	**1.62**	**1.87**
Ninh Thuan	15-19	45	22	56
	20-24	127	127	127
	25-29	119	102	128
	30-34	75	83	71
	35-39	37	33	40
	40-44	13	15	12
	45-49	0	1	0
	TFR	**2.09**	**1.92**	**2.17**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Binh Thuan	15-19	31	24	35
	20-24	118	95	131
	25-29	119	111	124
	30-34	73	69	75
	35-39	30	25	33
	40-44	10	10	11
	45-49	1	2	1
	TFR	**1.91**	**1.68**	**2.06**
Kon Tum	15-19	65	34	78
	20-24	159	124	171
	25-29	150	144	152
	30-34	100	105	98
	35-39	45	35	51
	40-44	23	13	29
	45-49	5	2	7
	TFR	**2.74**	**2.29**	**2.93**
Gia Lai	15-19	74	37	87
	20-24	148	119	157
	25-29	131	126	133
	30-34	86	82	88
	35-39	44	41	46
	40-44	13	8	16
	45-49	2	1	2
	TFR	**2.49**	**2.07**	**2.64**
Dak Lak	15-19	56	30	63
	20-24	146	104	159
	25-29	126	128	126
	30-34	90	115	81
	35-39	40	42	40
	40-44	14	15	14
	45-49	1	2	1
	TFR	**2.37**	**2.18**	**2.42**
Dak Nong	15-19	61	25	66
	20-24	180	138	186
	25-29	140	135	141
	30-34	101	114	98
	35-39	41	41	42
	40-44	13	12	13
	45-49	1	0	1
	TFR	**2.68**	**2.32**	**2.73**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Lam Dong	15-19	40	16	56
	20-24	130	99	150
	25-29	135	133	137
	30-34	79	95	68
	35-39	46	50	42
	40-44	9	8	9
	45-49	2	1	3
	TFR	**2.20**	**2.02**	**2.32**
Binh Phuoc	15-19	45	19	52
	20-24	137	126	140
	25-29	131	130	131
	30-34	88	84	90
	35-39	43	41	44
	40-44	10	8	11
	45-49	1	0	1
	TFR	**2.27**	**2.04**	**2.34**
Tay Ninh	15-19	30	26	31
	20-24	103	88	106
	25-29	88	103	85
	30-34	55	59	54
	35-39	24	23	24
	40-44	5	2	6
	45-49	1	0	1
	TFR	**1.53**	**1.50**	**1.54**
Binh Duong	15-19	23	21	31
	20-24	66	62	89
	25-29	91	90	94
	30-34	77	80	61
	35-39	37	39	29
	40-44	11	13	5
	45-49	4	4	2
	TFR	**1.54**	**1.55**	**1.55**
Dong Nai	15-19	17	9	21
	20-24	87	75	93
	25-29	125	134	120
	30-34	93	99	89
	35-39	46	51	43
	40-44	12	14	11
	45-49	2	3	1
	TFR	**1.90**	**1.93**	**1.89**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Ba Ria-Vung Tau	15-19	19	16	22
	20-24	97	86	114
	25-29	123	123	123
	30-34	82	85	76
	35-39	41	40	42
	40-44	10	12	8
	45-49	1	1	1
	TFR	**1.87**	**1.82**	**1.93**
Ho Chi Minh City	15-19	7	6	14
	20-24	44	39	67
	25-29	95	95	95
	30-34	81	87	62
	35-39	39	41	33
	40-44	9	9	10
	45-49	2	2	2
	TFR	**1.39**	**1.39**	**1.42**
Long An	15-19	21	12	23
	20-24	104	91	106
	25-29	114	179	102
	30-34	73	113	66
	35-39	39	62	35
	40-44	8	16	6
	45-49	1	4	0
	TFR	**1.80**	**2.38**	**1.69**
Tien Giang	15-19	22	22	22
	20-24	103	79	107
	25-29	117	125	116
	30-34	74	60	76
	35-39	38	35	39
	40-44	7	9	7
	45-49	1	0	1
	TFR	**1.82**	**1.65**	**1.85**
Ben Tre	15-19	28	20	28
	20-24	106	86	109
	25-29	120	103	122
	30-34	77	84	77
	35-39	33	27	34
	40-44	6	2	6
	45-49	2	2	2
	TFR	**1.86**	**1.62**	**1.89**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Tra Vinh	15-19	29	8	34
	20-24	118	88	127
	25-29	115	133	111
	30-34	84	85	84
	35-39	35	35	35
	40-44	9	9	9
	45-49	0	2	0
	TFR	**1.96**	**1.80**	**2.00**
Vinh Long	15-19	22	18	23
	20-24	99	56	110
	25-29	123	86	132
	30-34	73	66	74
	35-39	36	35	36
	40-44	9	6	10
	45-49	1	1	1
	TFR	**1.81**	**1.34**	**1.93**
Dong Thap	15-19	27	24	28
	20-24	108	64	121
	25-29	104	99	105
	30-34	72	83	70
	35-39	32	33	32
	40-44	9	8	9
	45-49	2	1	2
	TFR	**1.78**	**1.56**	**1.84**
An Giang	15-19	35	31	37
	20-24	112	90	124
	25-29	109	105	111
	30-34	74	80	72
	35-39	31	32	31
	40-44	7	13	5
	45-49	1	1	2
	TFR	**1.85**	**1.76**	**1.90**
Kien Giang	15-19	37	31	39
	20-24	113	91	122
	25-29	109	98	113
	30-34	67	75	63
	35-39	32	35	30
	40-44	10	9	11
	45-49	2	0	3
	TFR	**1.85**	**1.70**	**1.91**

Administrative unit	Age group	Age-specific fertility rate		
		Total	Urban	Rural
Can Tho	15-19	18	16	24
	20-24	65	51	125
	25-29	119	118	120
	30-34	81	84	73
	35-39	41	43	38
	40-44	7	6	9
	45-49	1	2	0
	TFR	**1.66**	**1.60**	**1.94**
Hau Giang	15-19	28	28	29
	20-24	103	115	98
	25-29	106	96	110
	30-34	78	67	82
	35-39	40	38	41
	40-44	9	9	9
	45-49	2	1	3
	TFR	**1.83**	**1.77**	**1.86**
Soc Trang	15-19	33	32	33
	20-24	110	97	116
	25-29	96	93	97
	30-34	69	61	73
	35-39	38	34	41
	40-44	11	9	12
	45-49	1	1	1
	TFR	**1.79**	**1.63**	**1.87**
Bac Lieu	15-19	32	24	35
	20-24	92	60	105
	25-29	95	90	97
	30-34	57	62	55
	35-39	34	39	31
	40-44	10	10	10
	45-49	2	2	1
	TFR	**1.61**	**1.44**	**1.67**
Ca Mau	15-19	42	28	46
	20-24	114	92	121
	25-29	100	110	97
	30-34	65	101	54
	35-39	26	35	23
	40-44	10	14	10
	45-49	2	2	2
	TFR	**1.80**	**1.91**	**1.77**

TABLE 3: AGE-SPECIFIC FERTILITY RATES BY AREA AND REGION, 1989-2019

Unit: Children per 1000 women

Administrative unit	Year	Age group						
		15-19	20-24	25-29	30-34	35-39	40-44	45-49
Nationwide	1989	25	185	212	161	105	54	18
	1999	29	157	134	81	41	18	6
	2009	23	120	133	81	37	10	1
	2019	35	120	130	84	39	10	1
Area								
Urban	1989	13	117	146	105	54	21	5
	1999	14	92	104	72	33	13	2
	2009	13	77	129	91	41	10	1
	2019	16	78	127	92	41	10	2
Rural	1989	28	203	232	179	122	65	22
	1999	33	180	145	84	44	20	7
	2009	28	142	136	76	36	10	2
	2019	45	147	133	79	37	9	1
Socio-economic region								
Northern midlands and mountainous areas	1989	46	243	270	196	126	72	33
	1999	48	215	138	78	37	15	8
	2009	44	167	129	68	29	9	2
	2019	82	173	123	68	30	8	2
Red River Delta	1989	17	193	199	122	58	25	7
	1999	25	154	122	60	25	8	2
	2009	16	130	151	84	33	8	1
	2019	24	138	160	95	41	10	1
North Central and Central coastal areas	1989	21	204	246	199	133	62	22
	1999	25	177	166	103	56	24	9
	2009	17	126	151	92	43	11	2
	2019	30	138	148	93	44	11	1
Central Highlands	1989	44	219	282	249	203	138	61
	1999	46	197	207	147	86	48	24
	2009	40	160	163	99	49	17	3
	2019	59	148	133	89	43	13	2

Administrative unit	Year	Age group						
		15-19	20-24	25-29	30-34	35-39	40-44	45-49
South East	1989	18	131	162	134	81	44	10
	1999	18	100	104	73	38	18	1
	2009	16	74	112	83	42	10	1
	2019	16	63	102	81	39	10	2
Mekong River Delta	1989	31	162	194	168	134	74	22
	1999	28	140	116	71	39	19	6
	2009	27	115	113	69	33	9	2
	2019	29	103	110	72	35	9	1

TABLE 4: TOTAL FERTILITY RATE BY AREA, REGION AND PROVINCE, 2009-2019

Unit: Children per woman

Administrative unit	Total fertility rate										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nationwide	**2.03**	**2.00**	**1.99**	**2.05**	**2.10**	**2.09**	**2.10**	**2.09**	**2.04**	**2.05**	**2.09**
Area											
Urban	1.81	1.77	1.70	1.80	1.86	1.85	1.82	1.86	1.77	1.75	1.83
Rural	2.14	2.11	2.12	2.17	2.21	2.21	2.25	2.21	2.19	2.22	2.26
Socio-economic region											
Northern midlands and mountainous areas	2.24	2.22	2.21	2.31	2.18	2.56	2.69	2.63	2.53	2.48	2.43
Red River Delta	2.11	2.04	2.06	2.11	2.11	2.30	2.23	2.23	2.16	2.29	2.35
North Central and Central coastal areas	2.21	2.21	2.21	2.32	2.37	2.31	2.34	2.37	2.31	2.30	2.32
Central Highlands	2.65	2.63	2.58	2.43	2.49	2.30	2.26	2.37	2.29	2.32	2.43
South East	1.69	1.68	1.59	1.57	1.83	1.56	1.63	1.46	1.55	1.50	1.56
Mekong River Delta	1.84	1.80	1.80	1.92	1.92	1.84	1.76	1.84	1.74	1.74	1.80
Province											
Ha Noi	2.08	2.00	2.02	2.06	2.03	2.18	2.04	2.06	2.00	2.07	2.24
Ha Giang	3.08	3.05	2.57	2.78	2.70	2.51	2.93	2.42	2.49	2.74	2.47
Cao Bang	2.18	2.09	2.15	2.13	2.05	2.53	2.52	2.46	2.34	2.48	2.43
Bac Kan	1.84	1.85	1.91	2.30	2.11	2.07	2.42	2.40	2.37	2.23	2.14
Tuyen Quang	2.10	2.07	2.10	2.18	2.35	2.73	2.74	2.72	2.68	2.62	2.51
Lao Cai	2.70	2.73	2.57	2.43	2.52	2.36	2.26	2.73	2.24	2.43	2.44
Dien Bien	2.55	2.57	2.67	2.76	2.48	3.11	2.81	2.43	2.84	2.78	2.72
Lai Chau	2.96	2.91	2.93	2.60	2.45	3.20	3.11	2.91	2.86	2.60	2.68

Administrative unit	Total fertility rate										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Son La	2.61	2.58	2.43	2.52	2.25	2.57	2.82	2.90	2.77	2.36	2.44
Yen Bai	2.38	2.32	2.26	2.38	2.13	2.77	2.76	2.89	2.77	2.96	2.74
Hoa Binh	1.98	1.98	2.03	2.08	1.90	2.30	2.84	2.56	2.30	2.42	2.34
Thai Nguyen	1.89	1.90	1.96	2.13	2.06	2.45	2.52	2.45	2.09	2.05	2.14
Lang Son	1.86	1.84	1.88	2.11	1.86	2.26	2.38	2.34	2.25	2.22	2.13
Quang Ninh	2.20	1.99	2.07	2.27	2.18	2.49	2.20	2.02	2.25	2.22	2.24
Bac Giang	1.94	1.86	1.94	2.09	1.77	2.57	2.77	2.64	2.73	2.38	2.31
Phu Tho	2.10	2.08	2.22	2.18	2.22	2.51	2.61	2.56	2.51	2.66	2.57
Vinh Phuc	2.13	2.06	2.02	2.07	2.11	2.44	2.25	2.48	2.34	2.48	2.39
Bac Ninh	2.32	2.26	2.23	2.71	2.29	2.72	2.72	2.63	2.67	2.66	2.53
Hai Duong	1.99	1.98	2.01	2.07	1.99	2.06	2.00	2.30	1.95	2.59	2.48
Hai Phong	2.16	1.98	2.00	2.37	2.03	2.35	2.02	2.11	1.99	1.92	2.20
Hung Yen	2.11	2.13	2.19	2.10	2.46	2.29	2.40	2.37	2.10	2.39	2.40
Thai Binh	2.08	2.10	2.15	1.78	2.07	1.87	2.39	2.25	2.21	2.51	2.43
Ha Nam	2.07	2.09	2.16	1.83	1.87	1.99	2.22	2.11	1.97	2.39	2.44
Nam Dinh	2.25	2.20	2.24	1.76	2.32	2.73	2.81	2.46	2.58	2.82	2.74
Ninh Binh	2.04	1.88	1.86	2.66	2.28	2.87	2.76	2.94	2.39	2.53	2.46
Thanh Hoa	1.89	1.89	2.01	2.22	2.11	2.43	2.75	2.70	2.45	2.69	2.54
Nghe An	2.55	2.56	2.49	2.59	2.68	2.70	2.69	2.76	2.87	2.82	2.75
Ha Tinh	2.46	2.46	2.50	2.75	2.95	3.12	2.65	3.21	3.24	2.90	2.83
Quang Binh	2.37	2.39	2.41	2.61	2.22	2.49	2.52	2.38	2.34	2.41	2.43
Quang Tri	2.85	2.84	2.67	2.65	2.75	2.75	2.94	3.19	2.83	2.61	2.45

Administrative unit	Total fertility rate										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Thua Thien Hue	2.26	2.28	2.22	2.38	2.21	2.33	2.26	2.20	2.33	2.03	2.34
Da Nang	2.14	2.16	1.99	2.18	2.32	2.03	2.13	2.24	1.81	1.49	1.88
Quang Nam	2.30	2.27	2.16	2.35	2.65	2.27	2.17	2.16	2.26	2.28	2.27
Quang Ngai	2.09	2.11	2.21	2.13	2.45	2.01	1.93	1.98	1.79	2.06	2.13
Binh Dinh	2.22	2.17	2.28	2.26	2.55	2.29	2.14	2.00	2.09	2.30	2.20
Phu Yen	1.96	1.98	2.11	2.07	2.04	2.15	2.05	2.26	2.04	2.16	2.11
Khanh Hoa	2.04	2.06	1.93	2.04	2.04	1.65	1.75	1.75	1.64	1.40	1.77
Ninh Thuan	2.40	2.42	2.38	2.25	2.37	2.18	2.23	2.28	2.34	2.05	2.09
Binh Thuan	2.07	2.09	2.14	2.39	2.15	1.57	2.04	1.81	1.75	1.82	1.91
Kon Tum	3.45	3.46	3.25	3.16	2.70	3.04	2.49	2.34	2.48	2.12	2.74
Gia Lai	2.88	2.90	2.85	2.36	2.48	2.27	2.45	2.38	2.36	2.27	2.49
Dak Lak	2.45	2.47	2.42	2.31	2.70	2.25	2.22	2.43	2.19	2.41	2.37
Dak Nong	2.72	2.68	2.57	2.65	2.31	2.46	2.36	2.28	2.21	3.05	2.68
Lam Dong	2.43	2.28	2.32	2.36	2.24	2.09	1.98	2.34	2.29	1.99	2.20
Binh Phuoc	2.45	2.43	2.31	2.22	2.43	2.30	2.05	1.92	2.02	1.99	2.27
Tay Ninh	1.79	1.77	1.80	1.93	1.78	1.76	1.88	1.76	1.66	1.46	1.53
Binh Duong	1.70	1.72	1.76	1.70	1.78	1.44	1.59	1.61	1.90	1.53	1.54
Dong Nai	2.07	2.09	1.99	1.80	2.09	1.75	2.02	1.67	1.61	1.80	1.90
Ba Ria Vung Tau	2.01	1.88	1.82	1.70	1.92	1.97	1.56	1.52	1.37	1.51	1.87
Ho Chi Minh city	1.45	1.45	1.30	1.33	1.68	1.39	1.45	1.24	1.36	1.33	1.39
Long An	1.85	1.87	1.83	2.02	2.03	1.66	1.61	1.56	1.62	1.83	1.80
Tien Giang	1.94	1.93	1.92	1.79	1.78	1.75	1.62	2.00	1.99	1.68	1.82

Administrative unit	Total fertility rate										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Ben Tre	1.81	1.79	1.71	2.20	1.98	1.89	1.97	1.90	1.88	1.88	1.86
Tra Vinh	1.86	1.80	1.80	2.06	1.89	1.94	2.04	2.36	2.25	1.94	1.96
Vinh Long	1.63	1.65	1.63	2.14	2.02	1.98	1.61	2.03	1.67	1.83	1.81
Dong Thap	1.87	1.89	1.83	1.57	1.89	1.84	1.61	1.59	1.34	1.43	1.78
An Giang	1.97	1.97	1.92	2.17	2.07	2.10	1.73	1.84	1.77	1.78	1.85
Kien Giang	1.84	1.80	1.86	2.16	1.98	1.96	2.05	1.94	1.87	1.96	1.85
Can Tho	1.72	1.62	1.62	1.58	1.81	1.89	1.88	2.01	1.64	1.66	1.66
Hau Giang	1.96	1.75	1.77	1.78	1.78	1.61	1.64	1.48	1.53	1.64	1.83
Soc Trang	1.79	1.81	1.83	1.85	2.08	1.65	1.72	1.83	1.69	1.75	1.79
Bac Lieu	1.75	1.59	1.69	1.97	1.82	1.82	1.67	1.63	1.77	1.54	1.61
Ca Mau	1.75	1.64	1.73	1.62	1.70	1.65	1.80	1.85	1.65	1.75	1.80

TABLE 5: TOTAL FERTILITY RATES BY REGION, ETHNIC GROUP, EDUCATION LEVEL, MIGRATION STATUS AND LIVING STANDARDS, 1989-2019

Unit: Chidren per woman

	1989	1999	2009	2019
Nationwide	**3.80**	**2.33**	**2.03**	**2.09**
Socio-economic region				
Northern midlands and mountainous areas	4.93	2.7	2.24	2.43
Red River Delta	3.11	1.98	2.11	2.35
North Central and Central coastal areas	4.43	2.8	2.21	2.32
Central Highlands	5.97	3.78	2.65	2.43
South East	2.9	1.76	1.69	1.56
Mekong River Delta	3.92	2.09	1.84	1.80
Ethnic group				
Kinh	3.6	2.16	1.95	2.07
Tay	4.3	2.29	1.92	2.08
Thai	5.7	3.07	2.19	2.24
Khmer	5.3	3.03	2	1.82
Muong	4.4	2.53	1.89	2.17
Mong	9.3	7.97	4.96	3.59
Other ethnic groups	5.37	4.1	2.52	2.43
Education level				
Preschool	4.84	3.26	2.95	2.35
Primary	3.66	2.34	2.10	2.19
Lower secondary	2.69	1.97	2.05	2.21
Upper secondary	2.49	1.52	1.96	2.05
Higher	2.18	1.79	2.19	1.98
Migration status				
Migrant	4.13	2.25	2.01	1.54
Non-migrant	3.79	2.34	2.05	2.13
Living standards				
Poorest	-	3.58	2.48	2.40
Poor	-	2.69	2.13	2.03
Medium	-	2.18	1.91	2.03
Rich	-	1.83	1.82	2.07
Richest	-	1.43	1.97	2.00

TABLE 6: NET REPRODUCTION RATE AND THE REPLACEMENT-LEVEL FERTILITY CORRESPONDING TO NRR =1

	NRR *(Daughters per woman*	TFR corresponds to NRR=1 *(Children per woman)*
Nationwide	**0.97**	**2.16**
Area		
Urban	0.85	2.16
Rural	1.05	2.16
Socio-economic region		
Northern midlands and mountainous areas	1.10	2.23
Red River Delta	1.07	2.15
North Central and Central coastal areas	1.08	2.14
Central Highlands	1.12	2.17
South East	0.73	2.14
Mekong River Delta	0.86	2.10
Province		
Ha Noi	1.02	2.20
Ha Giang	1.12	2.20
Cao Bang	1.10	2.20
Bac Kan	1.02	2.10
Tuyen Quang	1.17	2.16
Lao Cai	1.08	2.26
Dien Bien	1.26	2.17
Lai Chau	1.21	2.23
Son La	1.07	2.30
Yen Bai	1.31	2.10
Hoa Binh	1.03	2.30
Thai Nguyen	0.97	2.23
Lang Son	0.95	2.28
Quang Ninh	1.06	2.12
Bac Giang	1.00	2.33
Phu Tho	1.21	2.16
Vinh Phuc	1.07	2.25
Bac Ninh	1.18	2.13
Hai Duong	1.13	2.19
Hai Phong	1.00	2.20
Hung Yen	1.06	2.30
Thai Binh	1.15	2.12
Ha Nam	1.07	2.30
Nam Dinh	1.26	2.20
Ninh Binh	1.13	2.17
Thanh Hoa	1.16	2.20
Nghe An	1.28	2.15
Ha Tinh	1.28	2.20
Quang Binh	1.18	2.07
Quang Tri	1.16	2.11
Thua Thien Hue	1.13	2.07
Da Nang	0.89	2.10
Quang Nam	1.08	2.11
Quang Ngai	1.01	2.11
Binh Dinh	1.03	2.12
Phu Yen	0.98	2.18
Khanh Hoa	0.82	2.14
Ninh Thuan	0.98	2.12
Binh Thuan	0.89	2.14
Kon Tum	1.29	2.12
Gia Lai	1.16	2.15
Dak Lak	1.09	2.18
Dak Nong	1.24	2.17
Lam Dong	1.00	2.20
Binh Phuoc	1.05	2.15
Tay Ninh	0.73	2.09
Binh Duong	0.73	2.11
Dong Nai	0.92	2.08
Ba Ria Vung Tau	0.84	2.20
Ho Chi Minh city	0.64	2.17
Long An	0.81	2.21
Tien Giang	0.91	1.97
Ben Tre	0.88	2.11
Tra Vinh	0.93	2.07
Vinh Long	0.84	2.18
Dong Thap	0.82	2.15
An Giang	0.85	2.17
Kien Giang	0.92	2.01
Can Tho	0.82	2.02
Hau Giang	0.89	2.04
Soc Trang	0.84	2.13
Bac Lieu	0.76	2.14
Ca Mau	0.88	2.06

TABLE 7: AVERAGE NUMBER OF YEARS LIVED BY AGE GROUP, AREA, REGION AND PROVINCE, 2019

Unit: Year

Administrative unit	Age group						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Nationwide	**4.9202**	**4.9123**	**4.9015**	**4.8878**	**4.8688**	**4.8402**	**4.7923**
Area							
Urban	4.9202	4.9123	4.9015	4.8878	4.8688	4.8402	4.7923
Rural	4.9202	4.9123	4.9015	4.8878	4.8688	4.8402	4.7923
Socio-economic region							
Northern midlands and mountainous areas	4.8735	4.8605	4.8433	4.8217	4.7932	4.7526	4.6905
Red River Delta	4.9394	4.9335	4.9255	4.9150	4.9001	4.8768	4.8365
North Central and Central coastal areas	4.9104	4.9014	4.8893	4.8739	4.8528	4.8215	4.7708
Central Highlands	4.8551	4.8401	4.8203	4.7956	4.7636	4.7187	4.6514
South East	4.9508	4.9461	4.9396	4.9311	4.9189	4.8992	4.8641
Mekong River Delta	4.9418	4.9362	4.9285	4.9184	4.9040	4.8813	4.8419
Province							
Ha Noi	4.9480	4.9431	4.9363	4.9273	4.9144	4.8938	4.8574
Ha Giang	4.7924	4.7700	4.7409	4.7057	4.6619	4.6039	4.5216
Cao Bang	4.8611	4.8467	4.8278	4.8041	4.7732	4.7297	4.6641
Bac Kan	4.9028	4.8931	4.8799	4.8632	4.8405	4.8071	4.7537
Tuyen Quang	4.8963	4.8859	4.8717	4.8539	4.8299	4.7946	4.7388
Lao Cai	4.8278	4.8096	4.7860	4.7567	4.7194	4.6685	4.5941
Dien Bien	4.7911	4.7686	4.7392	4.7038	4.6598	4.6015	4.5190
Lai Chau	4.7281	4.6985	4.6605	4.6157	4.5614	4.4924	4.3989
Son La	4.8679	4.8543	4.8363	4.8138	4.7842	4.7423	4.6786
Yen Bai	4.8404	4.8237	4.8020	4.7749	4.7399	4.6917	4.6203
Hoa Binh	4.9036	4.8939	4.8808	4.8642	4.8417	4.8085	4.7553
Thai Nguyen	4.9206	4.9128	4.9021	4.8884	4.8695	4.8410	4.7940
Lang Son	4.8981	4.8878	4.8739	4.8564	4.8327	4.7980	4.7428
Quang Ninh	4.9182	4.9101	4.8991	4.8851	4.8657	4.8365	4.7886
Bac Giang	4.9167	4.9085	4.8972	4.8829	4.8632	4.8336	4.7852
Phu Tho	4.9184	4.9104	4.8994	4.8853	4.8660	4.8369	4.7891
Vinh Phuc	4.9316	4.9250	4.9158	4.9040	4.8875	4.8620	4.8190
Bac Ninh	4.9321	4.9254	4.9164	4.9046	4.8882	4.8628	4.8199
Hai Duong	4.9391	4.9333	4.9252	4.9147	4.8997	4.8763	4.8360
Hai Phong	4.9373	4.9312	4.9229	4.9120	4.8967	4.8727	4.8317
Hung Yen	4.9359	4.9297	4.9212	4.9101	4.8945	4.8702	4.8287
Thai Binh	4.9476	4.9426	4.9357	4.9266	4.9136	4.8928	4.8563
Ha Nam	4.9370	4.9310	4.9226	4.9117	4.8963	4.8723	4.8313
Nam Dinh	4.9340	4.9276	4.9188	4.9074	4.8914	4.8665	4.8244
Ninh Binh	4.9229	4.9153	4.9049	4.8916	4.8732	4.8453	4.7991
Thanh Hoa	4.9158	4.9075	4.8961	4.8816	4.8617	4.8319	4.7832
Nghe An	4.9075	4.8982	4.8857	4.8698	4.8481	4.8159	4.7642

Administrative unit	Age group						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Ha Tinh	4.9055	4.8961	4.8833	4.8670	4.8449	4.8123	4.7598
Quang Binh	4.8937	4.8829	4.8685	4.8502	4.8256	4.7898	4.7332
Quang Tri	4.8046	4.7838	4.7565	4.7234	4.6819	4.6263	4.5467
Thua Thien Hue	4.8871	4.8756	4.8602	4.8409	4.8150	4.7776	4.7192
Da Nang	4.9585	4.9547	4.9493	4.9422	4.9318	4.9146	4.8833
Quang Nam	4.9086	4.8994	4.8870	4.8713	4.8499	4.8180	4.7666
Quang Ngai	4.9009	4.8910	4.8775	4.8605	4.8375	4.8035	4.7494
Binh Dinh	4.9181	4.9100	4.8990	4.8849	4.8655	4.8363	4.7884
Phu Yen	4.9178	4.9096	4.8985	4.8844	4.8649	4.8356	4.7875
Khanh Hoa	4.9248	4.9174	4.9073	4.8944	4.8764	4.8490	4.8035
Ninh Thuan	4.9099	4.9009	4.8887	4.8732	4.8520	4.8205	4.7696
Binh Thuan	4.9341	4.9277	4.9190	4.9076	4.8916	4.8668	4.8247
Kon Tum	4.7586	4.7324	4.6982	4.6576	4.6079	4.5435	4.4543
Gia Lai	4.8448	4.8286	4.8075	4.7811	4.7470	4.6998	4.6296
Dak Lak	4.8601	4.8457	4.8266	4.8028	4.7717	4.7280	4.6621
Dak Nong	4.8485	4.8327	4.8121	4.7863	4.7530	4.7066	4.6374
Lam Dong	4.9104	4.9015	4.8894	4.8740	4.8529	4.8216	4.7709
Binh Phuoc	4.9247	4.9173	4.9072	4.8942	4.8762	4.8488	4.8032
Tay Ninh	4.9388	4.9329	4.9248	4.9142	4.8992	4.8757	4.8353
Binh Duong	4.9428	4.9373	4.9298	4.9198	4.9057	4.8834	4.8445
Dong Nai	4.9648	4.9617	4.9571	4.9511	4.9422	4.9271	4.8988

Administrative unit	Age group						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Ba Ria Vung Tau	4.9622	4.9588	4.9539	4.9474	4.9378	4.9219	4.8924
Ho Chi Minh city	4.9644	4.9612	4.9566	4.9505	4.9415	4.9263	4.8978
Long An	4.9517	4.9472	4.9409	4.9325	4.9205	4.9011	4.8665
Tien Giang	4.9570	4.9530	4.9474	4.9400	4.9292	4.9115	4.8795
Ben Tre	4.9504	4.9457	4.9392	4.9307	4.9183	4.8985	4.8633
Tra Vinh	4.9358	4.9296	4.9210	4.9099	4.8943	4.8699	4.8284
Vinh Long	4.9481	4.9432	4.9364	4.9274	4.9146	4.8940	4.8577
Dong Thap	4.9380	4.9320	4.9238	4.9130	4.8979	4.8741	4.8334
An Giang	4.9226	4.9150	4.9046	4.8913	4.8728	4.8449	4.7986
Kien Giang	4.9340	4.9275	4.9187	4.9073	4.8913	4.8665	4.8243
Can Tho	4.9562	4.9522	4.9465	4.9389	4.9280	4.9100	4.8777
Hau Giang	4.9486	4.9438	4.9370	4.9281	4.9154	4.8949	4.8589
Soc Trang	4.9304	4.9236	4.9143	4.9022	4.8854	4.8596	4.8161
Bac Lieu	4.9364	4.9302	4.9218	4.9108	4.8953	4.8711	4.8298
Ca Mau	4.9419	4.9363	4.9286	4.9186	4.9042	4.8816	4.8423

TABLE 8: WOMEN AGED 15-49, CHILDREN EVER BORN (CEB), 01/4/2019

Unit: Person

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Nationwide	15-19	3,089,324	1,083,374	2,005,949	164,142	23,126	141,016
	20-24	3,207,384	1,267,175	1,940,209	1,540,018	304,489	1,235,529
	25-29	4,197,724	1,610,264	2,587,460	4,699,639	1,280,442	3,419,198
	30-34	4,079,912	1,546,755	2,533,157	6,809,281	2,158,008	4,651,273
	35-39	3,837,735	1,458,909	2,378,826	7,410,302	2,469,411	4,940,891
	40-44	3,308,202	1,191,132	2,117,071	6,729,534	2,125,581	4,603,953
	45-49	3,134,867	1,095,798	2,039,068	6,485,936	1,966,500	4,519,436
	Total	**24,855,148**	**9,253,408**	**15,601,740**	**33,838,852**	**10,327,557**	**23,511,295**
Northern midlands and mountainous areas	15-19	396,297	65,199	331,098	58,363	2,871	55,492
	20-24	388,866	63,249	325,617	373,582	32,149	341,433
	25-29	531,488	98,361	433,127	841,807	115,330	726,477
	30-34	526,426	102,915	423,511	1,047,695	176,741	870,955
	35-39	468,447	98,455	369,992	1,015,956	189,538	826,418
	40-44	414,626	81,462	333,165	912,969	154,860	758,110
	45-49	370,867	73,387	297,480	832,757	138,502	694,254
	Total	**3,097,018**	**583,027**	**2,513,991**	**5,083,129**	**809,991**	**4,273,138**
Red River Delta	15-19	666,299	240,551	425,748	18,334	3,377	14,957
	20-24	722,600	282,212	440,388	328,135	71,548	256,587
	25-29	966,342	356,649	609,693	1,241,054	359,945	881,109
	30-34	937,480	357,196	580,284	1,764,828	592,489	1,172,340
	35-39	862,360	334,585	527,775	1,809,787	641,002	1,168,786
	40-44	719,407	267,496	451,911	1,513,124	516,195	996,930
	45-49	684,994	234,430	450,564	1,401,701	434,565	967,136
	Total	**5,559,482**	**2,073,119**	**3,486,363**	**8,076,964**	**2,619,120**	**5,457,844**
North Central and Central coastal areas	15-19	638,812	184,872	453,940	28,452	4,085	24,367
	20-24	648,785	194,991	453,794	328,871	61,311	267,560
	25-29	853,964	260,366	593,598	1,021,091	245,489	775,602
	30-34	751,944	232,038	519,906	1,376,750	374,938	1,001,813
	35-39	708,763	225,262	483,501	1,527,372	438,387	1,088,985
	40-44	658,182	194,806	463,376	1,516,322	402,728	1,113,594
	45-49	689,186	198,168	491,017	1,629,102	420,734	1,208,368
	Total	**4,949,636**	**1,490,503**	**3,459,134**	**7,427,961**	**1,947,672**	**5,480,288**
Central Highlands	15-19	225,748	59,916	165,832	23,451	2,664	20,788
	20-24	205,003	52,933	152,069	152,666	21,915	130,751
	25-29	246,930	73,022	173,909	347,735	75,625	272,110
	30-34	235,278	72,942	162,336	468,018	119,743	348,275
	35-39	222,434	70,372	152,061	523,671	142,151	381,520
	40-44	190,908	58,377	132,532	483,685	126,033	357,653
	45-49	176,427	57,529	118,898	460,028	127,895	332,134
	Total	**1,502,729**	**445,092**	**1,057,637**	**2,459,255**	**616,025**	**1,843,230**
South East	15-19	602,854	385,123	217,731	13,734	5,585	8,149
	20-24	762,151	533,742	228,409	165,625	80,687	84,937
	25-29	964,252	652,866	311,386	639,843	355,461	284,382
	30-34	922,116	597,544	324,572	1,139,052	661,854	477,197
	35-39	838,103	537,287	300,816	1,294,421	767,730	526,692
	40-44	668,406	422,297	246,109	1,132,954	657,529	475,425
	45-49	588,231	368,886	219,345	1,013,970	576,509	437,461
	Total	**5,346,114**	**3,497,746**	**1,848,368**	**5,399,599**	**3,105,355**	**2,294,244**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Mekong River Delta	15-19	559,314	147,714	411,600	21,807	4,544	17,263
	20-24	479,979	140,048	339,931	191,138	36,878	154,260
	25-29	634,748	169,001	465,747	608,110	128,591	479,519
	30-34	706,668	184,120	522,548	1,012,938	232,244	780,694
	35-39	737,628	192,947	544,680	1,239,094	290,604	948,491
	40-44	656,672	166,693	489,979	1,170,479	268,237	902,241
	45-49	625,162	163,399	461,763	1,148,378	268,295	880,083
	Total	**4,400,170**	**1,163,922**	**3,236,248**	**5,391,945**	**1,229,393**	**4,162,551**
Ha Noi	15-19	255,135	131,279	123,856	4,541	782	3,759
	20-24	304,201	173,327	130,875	95,746	26,567	69,179
	25-29	373,539	195,711	177,827	422,588	165,118	257,470
	30-34	363,103	186,452	176,651	645,188	287,757	357,431
	35-39	329,217	170,555	158,662	665,843	315,123	350,720
	40-44	257,661	132,985	124,675	525,739	249,860	275,879
	45-49	227,883	109,607	118,277	447,893	194,674	253,218
	Total	**2,110,739**	**1,099,916**	**1,010,823**	**2,807,538**	**1,239,882**	**1,567,656**
Ha Giang	15-19	30,847	4,465	26,383	6,890	434	6,457
	20-24	29,867	3,311	26,557	37,696	2,729	34,967
	25-29	36,342	5,648	30,693	66,524	7,446	59,078
	30-34	34,917	6,601	28,316	76,517	11,426	65,091
	35-39	27,556	6,013	21,543	66,764	11,692	55,071
	40-44	26,186	5,024	21,162	65,042	10,191	54,851
	45-49	23,319	4,359	18,960	58,450	8,492	49,958
	Total	**209,034**	**35,421**	**173,614**	**377,883**	**52,411**	**325,473**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Cao Bang	15-19	16,694	3,154	13,540	3,220	215	3,005
	20-24	14,946	2,372	12,574	16,003	1,220	14,783
	25-29	22,392	5,686	16,706	32,615	5,829	26,785
	30-34	21,388	5,893	15,495	39,528	9,112	30,416
	35-39	19,100	5,228	13,872	38,722	9,268	29,454
	40-44	18,119	4,295	13,824	38,415	7,955	30,460
	45-49	16,059	4,293	11,766	34,900	7,657	27,243
	Total	**128,698**	**30,921**	**97,777**	**203,403**	**41,256**	**162,146**
Bac Kan	15-19	8,505	1,694	6,811	1,865	52	1,813
	20-24	8,044	1,190	6,854	8,210	705	7,505
	25-29	11,950	2,441	9,509	16,571	2,791	13,780
	30-34	13,169	3,378	9,791	23,249	5,403	17,846
	35-39	11,641	2,750	8,891	22,925	5,006	17,919
	40-44	11,283	2,535	8,748	22,750	4,711	18,039
	45-49	10,874	2,167	8,707	22,612	4,223	18,389
	Total	**75,466**	**16,155**	**59,311**	**118,182**	**22,892**	**95,290**
Tuyen Quang	15-19	23,234	2,993	20,240	3,030	106	2,924
	20-24	19,752	1,897	17,856	19,513	1,320	18,193
	25-29	30,792	3,868	26,923	47,863	4,768	43,095
	30-34	30,905	4,292	26,614	59,198	7,417	51,781
	35-39	29,849	4,785	25,063	62,232	9,392	52,840
	40-44	27,707	3,760	23,947	58,180	6,935	51,245
	45-49	25,855	3,793	22,062	55,437	6,953	48,483
	Total	**188,094**	**25,388**	**162,705**	**305,452**	**36,892**	**268,560**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Lao Cai	15-19	27,729	5,660	22,069	5,055	246	4,810
	20-24	25,549	4,340	21,209	29,570	2,991	26,579
	25-29	32,336	7,173	25,163	56,824	9,027	47,797
	30-34	30,332	8,103	22,229	64,740	14,674	50,065
	35-39	26,552	7,679	18,873	64,536	15,400	49,136
	40-44	22,450	6,358	16,092	57,034	12,556	44,478
	45-49	19,149	5,545	13,604	49,460	10,816	38,643
	Total	**184,096**	**44,857**	**139,239**	**327,218**	**65,711**	**261,507**
Dien Bien	15-19	22,287	2,425	19,862	6,771	128	6,643
	20-24	21,879	1,701	20,179	28,909	913	27,995
	25-29	26,670	3,609	23,060	51,242	4,326	46,916
	30-34	25,601	4,241	21,360	59,948	7,570	52,377
	35-39	20,355	3,728	16,627	53,766	7,353	46,413
	40-44	16,638	2,970	13,668	46,433	5,699	40,734
	45-49	14,445	2,843	11,602	41,201	5,320	35,880
	Total	**147,875**	**21,517**	**126,358**	**288,268**	**31,310**	**256,958**
Lai Chau	15-19	18,462	2,325	16,137	5,023	212	4,811
	20-24	16,750	1,715	15,035	22,582	1,523	21,059
	25-29	20,557	3,963	16,594	39,964	5,526	34,438
	30-34	19,864	4,562	15,302	46,965	8,395	38,569
	35-39	16,435	4,285	12,150	44,585	8,756	35,828
	40-44	12,341	2,335	10,006	37,039	5,144	31,895
	45-49	10,268	2,047	8,221	31,940	4,755	27,185
	Total	**114,677**	**21,232**	**93,445**	**228,097**	**34,312**	**193,786**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Son La	15-19	44,081	4,937	39,145	11,838	507	11,331
	20-24	43,416	4,248	39,168	59,045	3,363	55,682
	25-29	56,160	7,087	49,073	103,371	9,249	94,123
	30-34	55,446	7,755	47,692	119,912	13,905	106,007
	35-39	46,150	7,654	38,495	108,812	15,491	93,321
	40-44	37,738	6,233	31,505	90,259	12,032	78,227
	45-49	33,681	5,775	27,906	86,234	11,007	75,227
	Total	**316,673**	**43,689**	**272,984**	**579,471**	**65,555**	**513,917**
Yen Bai	15-19	26,064	4,673	21,391	4,420	163	4,257
	20-24	23,660	3,018	20,643	26,657	2,175	24,482
	25-29	33,653	5,426	28,226	56,257	6,663	49,594
	30-34	33,472	6,394	27,078	66,952	10,845	56,107
	35-39	30,232	7,094	23,138	65,065	13,325	51,740
	40-44	27,647	6,368	21,279	60,994	11,780	49,214
	45-49	24,971	5,545	19,426	56,508	10,223	46,286
	Total	**199,699**	**38,518**	**161,181**	**336,853**	**55,173**	**281,680**
Hoa Binh	15-19	23,436	3,559	19,878	2,332	103	2,229
	20-24	21,085	2,717	18,368	17,570	1,637	15,933
	25-29	32,642	4,714	27,928	47,310	5,391	41,919
	30-34	38,151	5,889	32,262	68,457	9,627	58,829
	35-39	33,391	5,558	27,833	65,395	10,283	55,111
	40-44	30,312	4,854	25,459	59,148	8,789	50,359
	45-49	28,658	4,788	23,870	57,542	8,660	48,882
	Total	**207,676**	**32,079**	**175,597**	**317,753**	**44,490**	**273,263**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Thai Nguyen	15-19	38,663	12,905	25,758	1,730	278	1,452
	20-24	47,725	22,124	25,601	25,273	6,186	19,087
	25-29	61,278	24,149	37,129	80,979	25,163	55,816
	30-34	55,829	18,886	36,943	101,620	31,572	70,048
	35-39	51,074	16,385	34,689	99,754	30,577	69,177
	40-44	44,738	13,454	31,284	87,186	24,902	62,283
	45-49	38,847	11,840	27,007	76,942	21,837	55,106
	Total	**338,154**	**119,743**	**218,411**	**473,485**	**140,516**	**332,969**
Lang Son	15-19	22,629	4,173	18,456	1,785	115	1,669
	20-24	20,296	3,806	16,490	15,904	1,869	14,035
	25-29	30,315	6,689	23,626	41,318	7,234	34,084
	30-34	32,006	7,222	24,784	57,786	11,873	45,913
	35-39	29,759	6,654	23,105	59,447	12,398	47,049
	40-44	28,216	6,089	22,127	57,547	11,283	46,264
	45-49	25,044	5,724	19,320	53,846	10,693	43,153
	Total	**188,266**	**40,357**	**147,908**	**287,633**	**55,465**	**232,168**
Quang Ninh	15-19	37,885	22,181	15,704	1,907	619	1,288
	20-24	36,148	20,660	15,488	21,276	9,203	12,073
	25-29	55,009	34,466	20,543	72,110	40,815	31,294
	30-34	57,167	37,768	19,399	103,976	65,009	38,966
	35-39	51,389	34,869	16,520	104,925	67,652	37,272
	40-44	43,640	28,969	14,671	89,567	55,131	34,436
	45-49	42,657	28,875	13,782	86,720	54,252	32,468
	Total	**323,895**	**207,788**	**116,107**	**480,480**	**292,683**	**187,797**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Bac Giang	15-19	53,960	5,462	48,498	1,932	171	1,761
	20-24	56,920	5,068	51,852	36,697	2,630	34,067
	25-29	79,189	8,379	70,810	115,968	10,296	105,672
	30-34	75,094	8,299	66,795	147,734	14,665	133,068
	35-39	69,356	9,222	60,134	147,098	18,296	128,802
	40-44	62,751	7,702	55,050	132,895	14,676	118,218
	45-49	54,920	6,403	48,516	117,059	12,549	104,510
	Total	**452,190**	**50,535**	**401,655**	**699,383**	**73,285**	**626,099**
Phu Tho	15-19	39,706	6,774	32,932	2,472	140	2,332
	20-24	38,976	5,743	33,233	29,954	2,886	27,068
	25-29	57,213	9,528	47,685	85,000	11,620	73,380
	30-34	60,251	11,401	48,850	115,091	20,255	94,836
	35-39	56,998	11,419	45,579	116,856	22,300	94,556
	40-44	48,499	9,485	39,014	100,049	18,206	81,843
	45-49	44,778	8,265	36,513	90,625	15,316	75,308
	Total	**346,421**	**62,615**	**283,806**	**540,047**	**90,724**	**449,322**
Vinh Phuc	15-19	32,865	8,675	24,190	1,447	220	1,228
	20-24	33,040	9,374	23,666	22,860	4,381	18,478
	25-29	49,377	12,379	36,998	78,556	17,580	60,976
	30-34	48,834	13,380	35,454	100,798	25,840	74,959
	35-39	45,710	12,781	32,929	100,370	27,265	73,105
	40-44	37,379	10,289	27,090	81,053	21,662	59,390
	45-49	32,645	8,106	24,539	69,921	16,571	53,350
	Total	**279,850**	**74,984**	**204,866**	**455,004**	**113,518**	**341,486**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Bac Ninh	15-19	45,144	11,776	33,367	1,505	457	1,048
	20-24	69,230	14,677	54,553	35,312	8,422	26,890
	25-29	78,453	19,769	58,684	106,489	25,854	80,634
	30-34	59,488	16,770	42,718	119,819	32,320	87,500
	35-39	48,920	15,744	33,176	109,319	33,829	75,490
	40-44	41,978	12,245	29,733	95,476	26,904	68,572
	45-49	35,829	9,858	25,971	82,932	21,704	61,227
	Total	**379,042**	**100,839**	**278,202**	**550,852**	**149,491**	**401,361**
Hai Duong	15-19	51,910	13,989	37,921	1,424	257	1,167
	20-24	51,798	14,152	37,646	26,123	4,829	21,294
	25-29	76,367	18,375	57,992	105,617	22,975	82,642
	30-34	76,529	20,832	55,697	149,611	37,845	111,766
	35-39	69,943	19,879	50,064	148,486	39,947	108,538
	40-44	59,600	16,104	43,496	124,943	32,121	92,822
	45-49	61,134	15,017	46,117	123,637	29,207	94,429
	Total	**447,281**	**118,348**	**328,933**	**679,841**	**167,182**	**512,659**
Hai Phong	15-19	53,904	25,247	28,658	1,508	342	1,166
	20-24	56,902	26,626	30,276	22,998	6,721	16,276
	25-29	80,446	36,870	43,576	97,609	37,620	59,990
	30-34	84,980	39,743	45,237	150,811	65,005	85,807
	35-39	80,140	39,516	40,624	158,769	72,506	86,263
	40-44	64,403	31,113	33,289	127,412	57,901	69,510
	45-49	64,595	30,095	34,501	123,447	53,560	69,887
	Total	**485,370**	**229,210**	**256,161**	**682,554**	**293,655**	**388,899**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Hung Yen	15-19	35,880	4,411	31,469	1,186	134	1,051
	20-24	36,723	3,928	32,795	21,918	1,940	19,978
	25-29	53,212	6,305	46,907	77,160	8,848	68,312
	30-34	49,084	6,767	42,317	99,129	13,579	85,550
	35-39	44,272	5,935	38,337	96,435	12,485	83,950
	40-44	37,845	5,204	32,641	81,871	10,987	70,884
	45-49	40,842	5,027	35,815	85,586	10,156	75,430
	Total	**297,858**	**37,577**	**260,281**	**463,284**	**58,129**	**405,155**
Thai Binh	15-19	52,103	5,354	46,750	1,430	65	1,366
	20-24	47,277	4,953	42,324	23,230	1,594	21,636
	25-29	63,772	7,570	56,202	80,296	8,209	72,087
	30-34	63,166	7,752	55,414	118,285	13,288	104,997
	35-39	66,099	7,854	58,245	140,185	15,112	125,072
	40-44	62,881	7,146	55,736	132,415	13,635	118,780
	45-49	65,847	6,613	59,233	132,134	12,304	119,830
	Total	**421,145**	**47,242**	**373,904**	**627,976**	**64,207**	**563,769**
Ha Nam	15-19	24,330	4,262	20,068	801	66	734
	20-24	21,596	3,489	18,106	14,262	2,119	12,143
	25-29	33,704	5,731	27,974	49,438	7,506	41,931
	30-34	32,065	6,012	26,053	64,864	11,434	53,430
	35-39	29,517	6,078	23,439	66,239	12,799	53,440
	40-44	26,842	5,200	21,642	59,968	10,617	49,351
	45-49	26,253	3,881	22,372	57,572	7,850	49,722
	Total	**194,307**	**34,653**	**159,654**	**313,144**	**52,392**	**260,752**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Nam Dinh	15-19	51,505	8,864	42,641	1,712	290	1,422
	20-24	40,930	7,347	33,583	28,387	3,786	24,601
	25-29	60,716	10,907	49,809	92,159	14,308	77,851
	30-34	63,387	12,316	51,071	132,939	22,712	110,227
	35-39	62,425	12,776	49,649	142,375	26,432	115,943
	40-44	58,029	11,349	46,680	130,568	23,122	107,446
	45-49	58,190	11,094	47,096	128,233	21,705	106,528
	Total	**395,182**	**74,653**	**320,529**	**656,373**	**112,355**	**544,019**
Ninh Binh	15-19	25,637	4,512	21,124	873	145	729
	20-24	24,756	3,678	21,077	16,023	1,985	14,038
	25-29	41,746	8,567	33,180	59,031	11,110	47,920
	30-34	39,678	9,404	30,274	79,408	17,701	61,707
	35-39	34,727	8,598	26,129	76,842	17,850	58,992
	40-44	29,148	6,892	22,256	64,114	14,255	49,859
	45-49	29,120	6,257	22,863	63,626	12,581	51,045
	Total	**224,812**	**47,908**	**176,903**	**359,918**	**75,627**	**284,291**
Thanh Hoa	15-19	102,106	14,468	87,638	5,260	414	4,846
	20-24	106,632	12,493	94,139	67,889	6,356	61,534
	25-29	157,082	23,626	133,456	211,825	28,525	183,300
	30-34	140,089	22,782	117,307	263,578	40,893	222,685
	35-39	126,456	23,179	103,277	267,188	46,772	220,417
	40-44	110,854	17,792	93,061	236,152	34,915	201,237
	45-49	117,481	17,507	99,974	254,152	34,391	219,761
	Total	**860,700**	**131,847**	**728,852**	**1,306,045**	**192,266**	**1,113,779**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Nghe An	15-19	100,382	13,238	87,144	4,842	311	4,531
	20-24	117,207	14,612	102,595	63,492	5,652	57,840
	25-29	146,800	22,612	124,188	194,321	25,730	168,592
	30-34	125,585	20,282	105,303	248,613	35,288	213,325
	35-39	110,678	19,466	91,212	258,585	40,509	218,076
	40-44	103,537	16,968	86,570	252,707	36,040	216,667
	45-49	103,145	14,337	88,807	252,258	30,281	221,978
	Total	**807,333**	**121,515**	**685,818**	**1,274,818**	**173,810**	**1,101,008**
Ha Tinh	15-19	37,236	6,456	30,780	919	125	794
	20-24	32,593	5,487	27,106	18,497	2,967	15,531
	25-29	47,167	10,713	36,454	64,243	13,017	51,225
	30-34	43,438	9,976	33,463	89,756	19,266	70,490
	35-39	41,444	9,648	31,795	100,824	21,386	79,438
	40-44	40,228	8,404	31,825	105,685	19,707	85,978
	45-49	41,984	7,868	34,115	110,999	18,842	92,157
	Total	**284,090**	**58,552**	**225,538**	**490,923**	**95,310**	**395,614**
Quang Binh	15-19	29,485	5,703	23,782	1,030	128	902
	20-24	29,419	5,852	23,567	16,311	2,287	14,024
	25-29	36,669	8,154	28,515	45,227	8,106	37,122
	30-34	32,382	7,513	24,869	63,777	13,501	50,276
	35-39	29,594	7,787	21,807	69,697	16,506	53,191
	40-44	29,746	6,444	23,303	74,639	14,027	60,612
	45-49	29,530	6,199	23,330	74,976	13,658	61,318
	Total	**216,825**	**47,652**	**169,173**	**345,658**	**68,214**	**277,444**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Quang Tri	15-19	21,342	6,233	15,110	1,487	202	1,285
	20-24	16,653	5,110	11,543	11,774	2,493	9,281
	25-29	22,775	7,835	14,940	28,719	8,753	19,966
	30-34	21,857	8,084	13,773	42,999	14,107	28,892
	35-39	20,760	7,727	13,033	50,794	16,564	34,230
	40-44	22,141	7,074	15,068	60,269	17,215	43,054
	45-49	21,566	6,666	14,899	60,626	16,582	44,044
	Total	**147,094**	**48,729**	**98,366**	**256,669**	**75,917**	**180,752**
Thua Thien Hue	15-19	42,695	22,156	20,539	916	311	604
	20-24	46,675	27,304	19,371	14,599	5,916	8,683
	25-29	46,360	24,454	21,906	48,084	22,470	25,614
	30-34	39,218	20,785	18,433	69,636	34,044	35,592
	35-39	35,805	18,477	17,328	78,763	36,666	42,097
	40-44	34,006	16,699	17,307	87,325	38,457	48,868
	45-49	38,167	18,751	19,416	106,544	46,963	59,581
	Total	**282,926**	**148,625**	**134,300**	**405,867**	**184,827**	**221,040**
Da Nang	15-19	40,821	36,066	4,755	635	489	146
	20-24	54,858	49,271	5,587	11,090	9,128	1,962
	25-29	61,939	55,002	6,937	48,837	41,058	7,778
	30-34	49,775	43,901	5,874	74,983	64,260	10,723
	35-39	43,538	38,294	5,244	82,864	71,616	11,248
	40-44	33,851	29,514	4,337	68,503	58,706	9,797
	45-49	34,723	30,027	4,696	72,642	61,229	11,413
	Total	**319,505**	**282,075**	**37,430**	**359,554**	**306,486**	**53,068**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Quang Nam	15-19	46,069	11,599	34,470	2,404	396	2,007
	20-24	47,423	12,065	35,358	23,822	4,644	19,179
	25-29	62,860	17,471	45,389	71,918	16,914	55,004
	30-34	53,412	15,948	37,464	95,143	26,254	68,889
	35-39	48,142	13,756	34,386	103,456	27,348	76,108
	40-44	45,738	12,019	33,719	105,831	25,330	80,501
	45-49	53,123	13,062	40,061	125,789	28,016	97,773
	Total	**356,767**	**95,920**	**260,847**	**528,362**	**128,901**	**399,461**
Quang Ngai	15-19	37,042	5,629	31,413	2,347	168	2,179
	20-24	36,640	5,356	31,284	19,074	1,545	17,529
	25-29	49,667	8,008	41,659	57,922	7,455	50,467
	30-34	43,988	8,263	35,725	78,823	13,418	65,406
	35-39	44,788	8,186	36,602	93,071	15,788	77,283
	40-44	40,065	7,324	32,741	89,804	14,774	75,031
	45-49	43,686	7,177	36,509	100,951	14,885	86,066
	Total	**295,876**	**49,943**	**245,933**	**441,993**	**68,033**	**373,960**
Binh Dinh	15-19	47,319	15,440	31,879	1,689	255	1,434
	20-24	39,774	14,810	24,964	18,663	4,671	13,991
	25-29	56,569	19,589	36,980	67,316	18,330	48,987
	30-34	49,278	17,791	31,487	88,317	28,224	60,093
	35-39	54,961	18,682	36,279	115,769	34,927	80,842
	40-44	55,777	17,453	38,324	124,192	34,772	89,420
	45-49	61,376	20,389	40,987	140,509	41,404	99,105
	Total	**365,054**	**124,154**	**240,900**	**556,455**	**162,583**	**393,872**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Phu Yen	15-19	28,750	8,428	20,321	1,418	169	1,249
	20-24	21,676	6,024	15,652	13,919	2,653	11,265
	25-29	33,083	9,742	23,341	41,985	9,863	32,122
	30-34	32,784	9,289	23,495	59,426	15,109	44,317
	35-39	34,325	10,735	23,590	69,637	20,745	48,892
	40-44	32,999	9,866	23,134	69,983	19,555	50,428
	45-49	34,077	10,161	23,915	75,587	20,718	54,869
	Total	**217,694**	**64,245**	**153,448**	**331,955**	**88,812**	**243,143**
Khanh Hoa	15-19	42,003	17,022	24,981	1,925	424	1,501
	20-24	39,371	15,837	23,534	17,451	4,915	12,536
	25-29	54,646	23,846	30,800	53,481	18,761	34,720
	30-34	48,931	20,651	28,280	75,311	28,038	47,272
	35-39	48,975	21,902	27,073	92,458	38,076	54,382
	40-44	45,284	19,816	25,468	92,981	37,158	55,822
	45-49	46,230	20,397	25,833	98,280	39,085	59,195
	Total	**325,440**	**139,471**	**185,969**	**431,887**	**166,458**	**265,428**
Ninh Thuan	15-19	20,704	6,557	14,147	1,629	173	1,456
	20-24	18,220	5,388	12,832	10,956	2,282	8,675
	25-29	25,845	9,314	16,531	30,828	9,162	21,666
	30-34	23,398	8,493	14,905	43,447	14,380	29,067
	35-39	21,787	8,483	13,304	47,201	16,590	30,610
	40-44	20,209	7,852	12,357	49,140	16,379	32,762
	45-49	20,711	8,164	12,547	53,705	17,945	35,760
	Total	**150,874**	**54,251**	**96,623**	**236,906**	**76,911**	**159,995**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Binh Thuan	15-19	42,857	15,877	26,980	1,951	518	1,433
	20-24	41,645	15,383	26,262	21,334	5,802	15,531
	25-29	52,502	19,999	32,503	56,384	17,345	39,039
	30-34	47,807	18,278	29,529	82,941	28,156	54,785
	35-39	47,512	18,942	28,570	97,064	34,895	62,170
	40-44	43,745	17,583	26,162	99,110	35,693	63,417
	45-49	43,390	17,461	25,929	102,085	36,737	65,348
	Total	**319,458**	**123,523**	**195,935**	**460,869**	**159,146**	**301,724**
Kon Tum	15-19	22,654	6,693	15,960	2,620	361	2,259
	20-24	20,161	5,057	15,104	17,296	2,680	14,617
	25-29	23,617	7,542	16,075	36,697	8,758	27,939
	30-34	22,997	8,049	14,948	50,442	14,422	36,019
	35-39	19,693	7,021	12,672	51,175	15,355	35,820
	40-44	15,686	6,246	9,441	42,397	14,080	28,317
	45-49	13,148	5,618	7,529	38,236	13,730	24,507
	Total	**137,956**	**46,226**	**91,729**	**238,863**	**69,387**	**169,477**
Gia Lai	15-19	63,083	16,080	47,003	9,324	992	8,332
	20-24	56,153	12,624	43,530	47,195	6,332	40,863
	25-29	63,274	19,026	44,248	93,832	20,827	73,004
	30-34	62,404	19,639	42,765	129,306	34,254	95,052
	35-39	57,740	18,541	39,199	142,184	38,359	103,825
	40-44	48,538	15,158	33,381	130,358	33,768	96,590
	45-49	41,310	15,111	26,200	113,551	34,919	78,632
	Total	**392,503**	**116,178**	**276,325**	**665,749**	**169,450**	**496,299**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Dak Lak	15-19	69,904	15,869	54,034	6,495	890	5,605
	20-24	66,262	15,972	50,290	45,966	6,178	39,788
	25-29	79,624	20,599	59,025	107,674	20,880	86,794
	30-34	71,961	19,431	52,530	138,799	31,456	107,343
	35-39	70,335	19,377	50,958	161,590	39,519	122,070
	40-44	62,582	15,881	46,701	158,050	35,478	122,572
	45-49	59,631	15,276	44,355	156,677	35,280	121,398
	Total	**480,299**	**122,405**	**357,894**	**775,251**	**169,682**	**605,569**
Dak Nong	15-19	23,420	3,112	20,308	2,268	84	2,184
	20-24	19,972	2,483	17,488	18,274	1,348	16,925
	25-29	25,565	4,453	21,113	41,613	5,355	36,258
	30-34	25,458	4,628	20,830	56,767	8,304	48,464
	35-39	25,219	4,741	20,478	64,258	9,964	54,294
	40-44	19,527	3,107	16,420	52,766	7,160	45,606
	45-49	18,360	2,731	15,629	50,374	6,497	43,878
	Total	**157,521**	**25,255**	**132,266**	**286,319**	**38,711**	**247,608**
Lam Dong	15-19	46,688	18,162	28,526	2,745	337	2,408
	20-24	42,454	16,797	25,657	23,935	5,376	18,559
	25-29	54,850	21,402	33,448	67,919	19,804	48,115
	30-34	52,459	21,195	31,264	92,703	31,307	61,396
	35-39	49,446	20,693	28,753	104,465	38,954	65,511
	40-44	44,575	17,985	26,589	100,116	35,547	64,569
	45-49	43,978	18,794	25,185	101,189	37,470	63,720
	Total	**334,450**	**135,028**	**199,422**	**493,073**	**168,796**	**324,277**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Binh Phuoc	15-19	35,563	8,143	27,420	2,526	237	2,289
	20-24	30,610	6,934	23,676	19,083	2,784	16,299
	25-29	43,066	11,190	31,876	54,682	11,517	43,165
	30-34	43,750	11,503	32,247	80,378	18,479	61,899
	35-39	42,466	10,997	31,469	89,726	20,683	69,044
	40-44	35,145	8,617	26,528	80,296	17,841	62,455
	45-49	31,119	7,376	23,743	72,695	15,997	56,698
	Total	**261,719**	**64,760**	**196,960**	**399,387**	**87,539**	**311,847**
Tay Ninh	15-19	37,195	6,563	30,632	1,610	243	1,366
	20-24	35,905	5,597	30,308	15,419	1,905	13,513
	25-29	49,762	8,061	41,701	45,573	6,681	38,892
	30-34	53,796	9,620	44,176	73,129	12,007	61,122
	35-39	48,498	8,417	40,081	77,995	12,393	65,602
	40-44	44,384	8,013	36,371	77,145	12,729	64,415
	45-49	42,800	8,053	34,746	73,959	12,560	61,399
	Total	**312,339**	**54,324**	**258,015**	**364,829**	**58,520**	**306,309**
Binh Duong	15-19	84,213	68,521	15,692	2,978	2,198	780
	20-24	128,860	110,527	18,333	31,729	23,934	7,795
	25-29	163,834	138,908	24,926	111,837	88,332	23,504
	30-34	152,593	126,216	26,377	181,336	142,961	38,374
	35-39	124,732	101,811	22,921	180,582	141,559	39,023
	40-44	86,402	68,654	17,748	136,241	103,495	32,746
	45-49	65,151	49,989	15,162	108,231	79,047	29,185
	Total	**805,785**	**664,626**	**141,159**	**752,934**	**581,527**	**171,407**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Đong Nai	15-19	101,712	34,153	67,559	2,102	347	1,755
	20-24	116,001	40,733	75,268	33,235	9,070	24,165
	25-29	156,830	53,088	103,742	133,333	39,857	93,476
	30-34	150,658	51,211	99,447	223,275	69,691	153,584
	35-39	137,186	48,247	88,938	248,537	83,130	165,407
	40-44	109,338	38,079	71,259	221,979	71,040	150,940
	45-49	98,785	33,091	65,694	206,876	61,394	145,482
	Total	**870,508**	**298,602**	**571,906**	**1,069,337**	**334,529**	**734,808**
Ba Ria-Vung Tau	15-19	35,202	19,342	15,860	955	390	566
	20-24	32,616	19,369	13,246	10,935	4,914	6,020
	25-29	49,329	30,592	18,738	45,099	24,837	20,262
	30-34	55,150	34,939	20,212	83,776	49,652	34,124
	35-39	50,111	31,050	19,060	92,037	53,244	38,793
	40-44	42,894	25,008	17,886	85,253	46,426	38,827
	45-49	40,163	23,827	16,336	81,305	43,219	38,086
	Total	**305,465**	**184,127**	**121,338**	**399,360**	**222,681**	**176,678**
Ho Chi Minh City	15-19	308,969	248,401	60,568	3,564	2,170	1,393
	20-24	418,160	350,582	67,578	55,224	38,080	17,144
	25-29	501,431	411,027	90,404	249,319	184,236	65,084
	30-34	466,169	364,056	102,113	497,158	369,064	128,095
	35-39	435,111	336,764	98,347	605,544	456,720	148,824
	40-44	350,242	273,926	76,316	532,041	405,998	126,043
	45-49	310,214	246,550	63,664	470,904	364,291	106,612
	Total	**2,790,296**	**2,231,306**	**558,990**	**2,413,754**	**1,820,559**	**593,195**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Long An	15-19	55,054	8,598	46,457	1,615	77	1,537
	20-24	51,647	7,508	44,140	18,482	1,920	16,562
	25-29	69,934	11,056	58,878	63,713	8,322	55,391
	30-34	74,211	11,407	62,805	102,301	13,823	88,479
	35-39	74,738	12,024	62,714	124,494	17,687	106,806
	40-44	63,961	10,628	53,332	111,556	15,949	95,607
	45-49	60,264	11,135	49,130	108,651	17,111	91,540
	Total	**449,810**	**72,356**	**377,455**	**530,811**	**74,889**	**455,922**
Tien Giang	15-19	56,095	8,148	47,947	1,739	244	1,496
	20-24	48,486	6,783	41,703	18,543	1,914	16,629
	25-29	62,674	8,762	53,912	59,890	6,438	53,452
	30-34	69,346	10,038	59,308	100,092	12,805	87,287
	35-39	74,442	9,803	64,639	125,797	14,562	111,235
	40-44	66,519	8,922	57,598	119,830	13,654	106,176
	45-49	68,731	11,083	57,647	126,427	17,594	108,833
	Total	**446,293**	**63,539**	**382,754**	**552,318**	**67,210**	**485,108**
Ben Tre	15-19	37,440	3,334	34,107	1,175	61	1,114
	20-24	29,538	3,130	26,408	12,228	986	11,243
	25-29	41,016	4,419	36,597	39,099	3,133	35,965
	30-34	49,534	4,914	44,620	68,815	5,632	63,183
	35-39	54,379	5,654	48,724	88,484	8,059	80,426
	40-44	49,770	4,984	44,786	84,076	7,071	77,005
	45-49	51,101	5,234	45,867	90,458	7,640	82,818
	Total	**312,778**	**31,669**	**281,109**	**384,335**	**32,582**	**351,753**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Tra Vinh	15-19	30,150	5,635	24,515	1,359	145	1,214
	20-24	25,743	5,847	19,896	12,055	1,477	10,578
	25-29	37,152	6,834	30,318	37,614	4,659	32,955
	30-34	40,754	7,134	33,620	59,031	7,958	51,073
	35-39	44,111	7,991	36,120	73,293	11,280	62,013
	40-44	38,876	6,688	32,187	69,672	10,207	59,466
	45-49	33,058	6,166	26,893	60,605	10,065	50,540
	Total	**249,844**	**46,296**	**203,549**	**313,628**	**45,790**	**267,838**
Vinh Long	15-19	30,205	5,610	24,594	717	117	600
	20-24	23,406	4,814	18,593	8,079	815	7,264
	25-29	32,893	6,365	26,527	29,439	4,239	25,201
	30-34	40,073	6,787	33,286	54,790	8,022	46,769
	35-39	43,176	7,467	35,709	67,796	10,188	57,608
	40-44	39,960	6,308	33,652	65,307	9,249	56,058
	45-49	38,953	6,843	32,110	64,653	10,090	54,563
	Total	**248,666**	**44,194**	**204,471**	**290,783**	**42,720**	**248,063**
Dong Thap	15-19	49,833	10,241	39,592	1,621	308	1,313
	20-24	42,172	9,387	32,785	16,880	2,314	14,566
	25-29	55,438	11,525	43,913	53,986	8,985	45,002
	30-34	63,032	12,248	50,784	93,174	16,057	77,117
	35-39	67,436	13,677	53,758	113,920	20,950	92,970
	40-44	61,218	11,816	49,402	109,854	19,176	90,678
	45-49	62,534	12,079	50,455	114,971	20,271	94,700
	Total	**401,663**	**80,974**	**320,689**	**504,405**	**88,060**	**416,346**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
An Giang	15-19	55,670	18,250	37,419	2,719	711	2,007
	20-24	45,496	15,880	29,616	23,008	6,038	16,970
	25-29	63,964	21,085	42,879	68,599	18,318	50,281
	30-34	75,361	25,180	50,181	114,339	33,665	80,673
	35-39	79,474	26,742	52,732	135,081	40,715	94,367
	40-44	74,414	23,743	50,671	131,833	39,418	92,415
	45-49	75,583	24,878	50,705	137,725	40,880	96,846
	Total	**469,962**	**155,758**	**314,203**	**613,304**	**179,745**	**433,558**
Kien Giang	15-19	60,300	17,102	43,198	2,991	736	2,255
	20-24	54,200	15,640	38,560	22,687	4,863	17,824
	25-29	69,137	20,037	49,100	67,482	15,546	51,936
	30-34	73,782	22,065	51,717	111,287	28,499	82,788
	35-39	74,393	22,357	52,036	133,114	35,001	98,113
	40-44	63,313	18,943	44,370	121,984	32,901	89,083
	45-49	58,138	17,769	40,370	116,731	31,383	85,348
	Total	**453,264**	**133,913**	**319,351**	**576,276**	**148,929**	**427,347**
Can Tho	15-19	46,149	33,682	12,468	1,073	564	509
	20-24	49,430	40,109	9,320	10,355	5,949	4,406
	25-29	50,338	37,434	12,905	39,313	25,058	14,255
	30-34	50,467	36,420	14,047	63,475	42,703	20,772
	35-39	52,430	36,919	15,511	80,118	52,594	27,524
	40-44	47,726	32,531	15,195	77,250	48,889	28,361
	45-49	42,667	29,657	13,010	70,790	45,615	25,175
	Total	**339,207**	**246,751**	**92,456**	**342,376**	**221,373**	**121,003**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Hau Giang	15-19	23,530	5,912	17,618	861	189	672
	20-24	18,494	4,456	14,037	7,383	1,693	5,690
	25-29	25,440	6,509	18,932	24,719	5,740	18,979
	30-34	29,294	7,985	21,309	41,730	10,841	30,890
	35-39	31,326	8,591	22,736	52,205	13,958	38,248
	40-44	27,778	7,348	20,429	48,058	12,004	36,055
	45-49	25,667	6,707	18,961	45,763	11,736	34,027
	Total	**181,530**	**47,508**	**134,022**	**220,720**	**56,160**	**164,560**
Soc Trang	15-19	38,985	12,981	26,004	2,022	669	1,353
	20-24	29,709	10,229	19,480	13,776	4,283	9,493
	25-29	41,265	13,873	27,392	40,255	12,190	28,065
	30-34	47,236	16,244	30,992	69,400	22,668	46,732
	35-39	48,289	16,294	31,995	84,981	26,815	58,167
	40-44	45,121	14,840	30,282	83,306	25,553	57,753
	45-49	41,367	13,566	27,800	78,599	23,837	54,762
	Total	**291,972**	**98,027**	**193,945**	**372,339**	**116,015**	**256,325**
Bac Lieu	15-19	33,039	8,514	24,525	1,490	360	1,130
	20-24	29,761	8,282	21,479	11,348	1,952	9,395
	25-29	39,180	10,318	28,862	34,963	6,788	28,176
	30-34	41,166	11,237	29,929	55,927	12,597	43,329
	35-39	40,541	11,915	28,626	67,585	17,290	50,295
	40-44	33,379	9,580	23,798	61,099	15,699	45,401
	45-49	29,162	8,895	20,268	55,684	14,393	41,290
	Total	**246,228**	**68,741**	**177,487**	**288,095**	**69,079**	**219,016**

Administrative unit	Age group	Women aged 15-49			Children ever born (CEB)		
		Total	Urban	Rural	Total	Urban	Rural
Ca Mau	15-19	42,865	9,708	33,157	2,425	363	2,062
	20-24	31,896	7,982	23,914	16,315	2,675	13,640
	25-29	46,316	10,784	35,532	49,039	9,176	39,862
	30-34	52,410	12,461	39,950	78,577	16,974	61,603
	35-39	52,894	13,512	39,381	92,225	21,506	70,719
	40-44	44,639	10,363	34,276	86,653	18,468	68,185
	45-49	37,935	9,387	28,548	77,321	17,681	59,640
	Total	**308,955**	**74,197**	**234,758**	**402,554**	**86,843**	**315,711**

TABLE 9: AGE-SPECIFIC FERTILITY RATES OF WOMEN AGED 10-19 BY AREA, REGION AND PROVINCE, 01/4/2019

Unit: Children per thousand women

Administrative unit	ASFR of women aged 10-19
NATIONWIDE	**11**
Area	
Urban	5
Rural	15
Socio-economic region	
Northern midlands and mountainous areas	28
Red River Delta	7
North Central and Central coastal areas	10
Central Highlands	21
South East	5
Mekong River Delta	9
Province	
Ha Noi	4
Ha Giang	43
Cao Bang	34
Bac Kan	47
Tuyen Quang	26
Lao Cai	35
Dien Bien	46
Lai Chau	42
Son La	48
Yen Bai	32
Hoa Binh	21
Thai Nguyen	10
Lang Son	17
Quang Ninh	11
Bac Giang	10
Phu Tho	14
Vinh Phuc	11
Bac Ninh	9
Hai Duong	7
Hai Phong	6
Hung Yen	9
Thai Binh	7
Ha Nam	8
Nam Dinh	9
Ninh Binh	9
Thanh Hoa	12
Nghe An	10
Ha Tinh	6
Quang Binh	7
Quang Tri	13
Thua Thien Hue	5
Da Nang	4
Quang Nam	11
Quang Ngai	11
Binh Dinh	7
Phu Yen	9
Khanh Hoa	10
Ninh Thuan	15
Binh Thuan	11
Kon Tum	22
Gia Lai	26
Dak Lak	19
Dak Nong	20
Lam Dong	14
Binh Phuoc	14
Tay Ninh	10
Binh Duong	8
Dong Nai	5
Ba Ria Vung Tau	5
Ho Chi Minh city	2
Long An	6
Tien Giang	7
Ben Tre	8
Tra Vinh	9
Vinh Long	7
Dong Thap	7
An Giang	10
Kien Giang	11
Can Tho	6
Hau Giang	8
Soc Trang	10
Bac Lieu	9
Ca Mau	14

ANNEX

APPENDIX 1: CALCULATION METHOD OF THE TOTAL FERTILITY RATE WITH NRR = 1

The net reproduction rate (NRR) is calculated using the following formula :

$$NRR = \frac{BF}{B} \times \sum ASFR_x * {}_5L_x / l_0$$

Where:

BF: number of daughters

B: Total births

Step 1: To adjust BF/B rate corresponding to NRR = 1

It is assumed that the estimate is made with the constant mortality rate and the unchanged sex ratio at birth. When the level of fertility reaches the replacement-level fertility, equivalent to NRR = 1, meaning that the number of daughters in the total births needs to be increased, or the BF/B rate needs to rise even more.

$$1 = \frac{BF}{B} \times \sum ASFR_x * {}_5L_x / l_0$$

$$\frac{1}{\sum ASFR_x * {}_5L_x / l_0} = \frac{BF}{B}$$

To replace the calculated value of $\sum ASFRx * 5L_x / l_0$ then obtain a new BF/B, denoted as BF_1/B_1.

Step 2: To calculate the estimated ratio of daughters when NRR = 1

After obtaining BF1/B1, it is necessary to calculate the rate used to compute the number of daughters needed, corresponding to NRR = 1.

$$Adj.\ Rate = (BF_1/B_1) / (BF/B)$$

Step 3: To estimate the number of daughters

From Adj.Rate, using the following formula to calculate the number of daughters needed, corresponding to NRR = 1:

$$BF_{x1} = BF_x * Adj.Rate$$

Where: BFx1: Daughters corresponding to NRR = 1 of age x

BFx: Daughters at the census time of age x

Adj.Rate: Adjusted estimated rate

Step 4: To estimate total births

$$B_{x1} = BM_{x1} + BF_{x1}$$

Where: B_{x1}: Total births corresponding to NRR = 1 of age x

BM_{x1}: Sons corresponding to NRR = 1 of age x

BF_{x1}: Daughters corresponding to NRR = 1 of age x

Otherwise:

$$BM_x = BF_x * (SRB/100)$$

Where: SRB: Sex ratio at birth at the census time

Step 5: To estimate TFR corresponding to NRR = 1

After estimating the total births corresponding to NRR = 1, using the following formula to recalculate the TFR:

$$TFR = 5 * \sum ASFR_x = 5 * \sum \frac{B_{x1}}{W_x}$$

Publication registration: 1123-2021/CXBIPH/25-39/TN - ISBN: 978-604-326-611-5
Design and Printed by T.E.A.M DP Co., Ltd

MINISTRY OF PLANNING AND INVESTMENT
GENERAL STATISTICS OFFICE

UNITED NATIONS POPULATION FUND
IN VIET NAM

ISBN: 978-604-326-611-5

NOT FOR SALE