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POPULATION AND DEVELOPMENT

Trends in adolescent motherhood and fertility and related inequalities in the Caribbean

1990-2010

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This document has been prepared by Valerie E. Nam, consultant at the Latin American and Caribbean Demographic Centre (CELADE)-Population Division of the Economic Commission for Latin America and the Caribbean (ECLAC). This research was conducted under the supervision of Paulo Saad, Chief of the Population and Development Area of CELADE-Population Division of ECLAC, and Jorge Rodriguez Vignoli, research assistant of the same Area. The research was carried out within the activities of the joint work plan of ECLAC and the United Nations Population Fund (UNFPA) for the period 2015-2017.

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Abstract

Reviews of progress in implementing the Programme of Action on the International Conference on Population and Development (ICPD) have found that notwithstanding the declines that have been observed worldwide, adolescent fertility remains high in many developing countries. Recent research finds that Latin America and the Caribbean has the second highest adolescent fertility rate in the world behind Sub-Saharan Africa, with rates that are much higher than might be expected, based on the total fertility rate.

Successful policy formulation and implementation require accurate statistics not only on trends but also about adolescents' knowledge, attitude and access to relevant information on family planning and family life. Such statistics are however very sparse in some settings. This report aims to use the limited data available not only to add to the literature on the subject of recent trends in adolescent fertility in Latin America and the Caribbean, but more specifically to fill a gap in knowledge and technical analysis of the subject for the Caribbean in particular.

The study is a purely descriptive analysis of the trends in adolescent fertility and an assessment of reproductive inequalities in a defined area of the Caribbean region, over the twenty year period 1990-2010 The main data sources used are the decennial censuses of population and housing, the system of vital registration and relevant specialised surveys. The core data for the analysis are stored in the MATERNILAC database maintained by CELADE, the Population Division of ECLAC.

The analysis shows that the area has experienced declines in the adolescent birth rate, to varying degrees over the period. Occurring simultaneously with these reductions there were also declines in motherhood among adolescents. The limited data indicating inequalities show overall an association between the declining reductions and education, residence and socio-economic status.

Keywords: Caribbean, adolescent birth rate, teen age, motherhood, education, reproductive health.

Summary

This study is a descriptive comparison between the countries of the Caribbean as defined in the study area with regard to the levels and trends in adolescent motherhood and fertility and links to social inequality as far as data allow, covering the period 1990-2010. The main sources of data for this study are the decennial censuses of population and housing, the system of vital registration and other administrative registers and relevant specialised surveys. The core data for the analysis of adolescent fertility gathered from these sources are stored in the MATERNILAC database maintained by CELADE, the Population Division of ECLAC and recent estimates provided by the 2015 Revision of United Nations World Population Prospects. Three main indicators of adolescent fertility are examined: the adolescent birth rate, the proportion of adolescents as mothers and as childless women.

The period under review coincides with ongoing assessments of progress in implementing the Programme of Action on the International Conference on Population and Development which drew attention to the needs and rights of adolescents as related to reproductive rights and reproductive health. A key Action as mandated by the ICPD Programme of Action was that "countries, with the support of the international community, should protect and promote the rights of adolescents to reproductive health education, information and care and greatly reduce the number of adolescent pregnancies". Reviews of ICPD progress have found that notwithstanding the declines that have been observed[2] worldwide, adolescent fertility remains high in many developing countries including countries of Latin America and the Caribbean.

Despite data constraints, this study aims not only to add to the literature on the subject of adolescent fertility in Latin America and the Caribbean but also to fill a gap in knowledge and technical analysis of the subject for the Caribbean in particular.

The study area comprises 32 countries, 28 islands and 4 mainland territories, former colonies of the British, French and Dutch. A prominent feature of the area is the considerable variation in the population size of the countries ranging from 2.7 million to under 2,000. The estimate of the total population of the area around 2010 was 8.5 million with the female population of ages 15-19 years numbering an estimated 0.4 million.

The main indicator of adolescent fertility is the adolescent birth rate (ABR) derived as the births to women 15-19 years divided by the total women in the same age group (usually multiplied by 1,000

and expressed per 1,000 women aged 15-19). The analysis uses the classification of the ABR as proposed by the United Nations. Based on this classification the ABR is high if greater than 80 births per 1,000 women, medium if 19 to 80 births per 1,000 women and low if less than 19 births per 1,000 women.

A summary of the findings follows:

- The analysis which covers 17 countries representing 97 per cent of the total females of ages 15-19 years old at 2010, shows that at 1990-1995, 7 of the 17 selected countries fell in the category of high adolescent birth rate with rates in excess of 80 per 1,000. Of the 7 countries, 4 had rates in excess of 100 per 1,000-Belize (122), St. Lucia, French Guiana (105), and Jamaica (103). Other high adolescent birth rate countries in the earlier period were Guyana (99), St. Vincent (88) and Grenada (83). There were no low ABR countries as the remaining 10 fell into the medium category. By 2005-2010 there was a dramatic change with only one country, Guyana with an ABR of 94 being eligible for classification as high. Six countries classified as high ABR in 1990 and all others originally medium were now medium level ABR. Guadeloupe had the lowest ABR (20) at 2005-2010.

- All countries experienced declines in the ABR over the period. Grenada and Bahamas saw the highest decreases of 49 per cent and 43 per cent respectively. A comparison of the extent of decline in the ABR compared to the TFR reveals that from all indications the ABR declined at a faster rate than the TFR over the period.

- The overall effect of the movement in rates is reflected in the rates at 2005-2010 expressed as a percentage of the rates at 1990-1995. The countries with the largest declines had the greatest reductions. In 2005-2010, adolescent birth rates for Grenada and Bahamas which experienced the largest declines, were about 51 per cent and 57 per cent respectively, of the 1990-1995 rates.

- The analysis of motherhood and childlessness is based on 5 countries representing 57 per cent of the female population 15-19 years old at 2010. Overall for the 6 countries the percentage of 15-19 years old women who were mothers was approximately 12 per cent in 1990. By 2010 this had declined by 3 percentage points to about 9 per cent. Overall, for all countries combined, the share of mothers at age 15 was just about 1 per cent at 1990 and 2010. By age 19 this had increased to about 30 per cent in 1990 and 21 per cent in 2010.

- Childlessness is the complement to the proportion of women who are mothers so in the same way that motherhood increased with age, childlessness declined with age, being higher among the younger of the two adolescent cohorts. At 2010, 96 per cent of women 15-17 years was childless, 13 percentage points more than the approximately 83 per cent of women 18-19 years.

- The discussion on reproductive inequalities is restricted to the factors of residence, education, socio-economic status and ethnicity, for a small number of countries. Variations by residence are examined for Belize and Jamaica. The findings show that for Belize with a classification of urban and rural, urban adolescent women had fewer children than their rural counterparts. For Jamaica the classification is three-fold with the urban area being separated into the main city and smaller towns. Here the pattern has shifted over time from rural fertility being higher than urban adolescent fertility, to a situation where the adolescent fertility levels of the women of the smaller towns have been higher than the levels for rural women.

- The data on education and fertility show that overall for the 6 countries (with available data), combined, the general research findings of declining fertility with increasing educational levels is observed. The country patterns however present a mixed picture as not all countries reflected the total pattern of highest fertility among the least educated. Three countries-Belize, Jamaica and Trinidad and Tobago reflected this general pattern with fairly large variations between the proportions. The pattern was reversed for the other 3 countries, Barbados, Grenada and St. Lucia with motherhood being the lowest among the least educated adolescents and highest among the secondary level women.

- The examination by socio-economic status for Belize and Jamaica reflect a pattern of declining fertility as wealth increased. Ethnicity discussed for Belize only, show variations by the major ethnic groups in that ethnically diverse society.
- The United Nations (2013) review of governments' views and policies found that within the context of declining population growth rates and decreased fertility levels, adolescent fertility was a major concern. In most countries there was direct government support for family planning activities. General services include reproductive health counselling and education through lectures and distribution of posters, magazines and brochures. Youth friendly services have been integrated into clinical services which distribute contraceptives and offer pregnancy testing, STI checks and PAP smear screening among others. Creative teen programmes such as 'Teen Services', 'Teen Seen', the 'Under 20 Club' and the Youth Advocacy Movement (YAM) project are among the most active. There are facilities providing reproductive and health care for the youth such as 'De Living Room' project in Trinidad and Tobago, 'Teen Haven' in Bermuda and The Women's Centre in Jamaica.

Introduction and background

A. Definition of adolescence

The World Health Organization (WHO) describes adolescence as the "period in human growth and development that occurs after childhood".

> "It represents one of the critical transitions in the life span and is characterized by a tremendous pace in growth and change that is second only to that of infancy. Biological processes drive many aspects of this growth and development, with the onset of puberty marking the passage from childhood to adolescence. The biological determinants of adolescence are fairly universal; however, the duration and defining characteristics of this period may vary across time, cultures, and socioeconomic situations (WHO, 2015)".

The United Nations (1998) describes this stage of life as one during which individuals reach sexual maturity; the period of transition from childhood to adulthood. "Although the change is biological, the duration and nature of adolescence are primarily a social construct and vary greatly from culture to culture. In some cultures, adolescence may not exist at all: the child moves directly into what is considered adulthood" (1998, 10).

The period of adolescence is generally marked by key development experiences described by WHO to include physical and sexual maturation, movement toward social and economic independence and the development of identity "While adolescence is a time of tremendous growth and potential, it is also a time of considerable risk during which social contexts exert powerful influences" (WHO, 2015). Examples of these influences are pressures to use alcohol and drugs and to initiate sexual relationships at early ages.

Kingsley Davis (1949, 223) describes adolescence as a peculiar period. He continues:

> "Whether publically recognized as a separate status or not, the adolescent period seemingly has one outstanding peculiarity: it is a time when the individual is attaining physical maturity without necessarily attaining social maturity. In terms of growth, strength, fecundity, and mental capacity, full maturity tends to be attained only a short time after puberty, but socially the adolescent still has a long way to go before full status is reached".

B. Theories of adolescence

There are seven key developmental areas which have proposed as the basis of theories of adolescence. These areas and the focus of each are as follows:

Box 1
Summary of Theories of Adolescence

Development al Area	Focus
Biological	Focus of the period is physical and sexual development determined by genes and biology.
Psychological	Focus on adolescence as a period of sexual excitement and anxiety.
Psychosocial	Focus is on identity formation; adolescents struggle between achieving identity and identity diffusion.
Cognitive	Focus is on formal operational thought; moving beyond concrete, actual experiences and beginning to think in logical and abstract terms.
Ecological (interaction between individual and the environment)	Focus is on the context in which adolescents develop; adolescents are influenced by family, peers, religion, schools, the media, community and world events.
Social Cognitive Learning	Focus is on the relationship between social and environmental factors and their influence on behaviour. Children learn through modelling.
Cultural	Focus is on the culture in which the child grows up.

Source: ACT for Youth Upstate Centre of Excellence. 2004. Research Facts and Findings. Retrieved September 2015 from http://www.actforyouth.net/resources/rf/rf_stages_0504.pdf.

UNICEF (2011, 8) argues that adolescence is difficult to define in precise terms, and identifies as a main reason the fact that each individual experiences the period differently depending on his or her "physical, emotional and cognitive maturation as well as other contingencies." As it relates to the onset of puberty as a clear line of demarcation between childhood and adolescence, the view is that this cannot resolve the difficulty of definition as puberty occurs at different points for girls and boys and at different points even for different individuals of the same sex.

Another complicating factor identified is the wide variation in national laws establishing the thresholds of minimum age for participating in 'adult' activities such as voting, marriage and property ownership. UNFPA (2005, 45) states that the "use and meanings of the terms "young people', "youth"' and "adolescents" vary in different societies around the world depending on political, economic and sociocultural context." Notwithstanding the complexities of definitions and the absence of what may be regarded as an international definition the age group used by the UN, WHO and PAHO is 10-19 years. Within this broad age range sub-divisions into young adolescents (10-14), middle adolescents 15-17 years and advanced (18 and 19 years) are often made.

C. International and regional action on adolescents

The landmark Programme of Action of the International Conference on Population and Development (ICPD) held in Cairo in 1994 drew attention to the needs and rights of adolescents as related to reproductive rights and reproductive health. According to paragraph 7.3:

> "Reproductive health eludes many of the world's people because of such factors as inadequate levels of knowledge about human sexuality and inappropriate or poor-quality reproductive health information and services; the prevalence of high-risk sexual behaviour; discriminatory social practices; negative attitude towards women and girls; and the limited power many women and girls have over their sexual and reproductive lives. Adolescents are particularly vulnerable because of their lack of information and access to relevant services in most countries".

In paragraph 7.41 the document indicated that to date, the reproductive health needs of adolescents as a group had been largely ignored by existing reproductive health services. It was recognized that the response of societies should be based on information that helps to make adolescents attain a level of maturity required to make responsible decisions. Such decisions would be related to an understanding of their sexuality and protection from unwanted pregnancies, sexually transmitted diseases and the subsequent risk of infertility. Motherhood at a very young age poses a higher than average risk of maternal death and children of young mothers are subject to higher levels of mortality and morbidity.

The recommended Action as outlined in paragraph 7.45 states as follows:

> "Recognizing the rights, duties and responsibilities of parents and other persons legally responsible for adolescents to provide, in a manner consistent with the evolving capacities of the adolescent, appropriate direction and guidance in sexual and reproductive matters, countries must ensure that the programmes and attitudes of health-care providers do not restrict the access of adolescents to appropriate services and the information they need. Countries should, where appropriate, remove legal, regulatory and social barriers to reproductive health information and care for adolescents".

UNFPA (2005, 45), states that within the world of the young, adolescents are at a particularly formative stage. Their minds are open to acquiring knowledge, learning skills and absorbing values. Their attitudes are still being shaped. In the State of the World 2005 report, UNFPA observed that adolescents are not mentioned in the UN Millennium Declaration and are largely invisible in the Millennium Development Goals (MDGs) despite the fact that they represent such a sizeable share (estimated at 1.2 billion in 2005) of the world's poor and affect and are affected by all of the goals.

UNFPAs State of the World Population 2013 (2013) highlighted the challenges associated with adolescent pregnancies. Some of these challenges were identified as missed educational and other opportunities, perpetuation of poverty and exclusion, basic human rights denied and the ongoing unfulfilment of girls' potential. The UNFPA argues that the action taken by many countries have been focused primarily about changing the behaviour of the girl and not addressing the underlying determinants. Among the main determinants identified are child marriages, gender inequality, poverty, sexual violence and coercion, lack of access to education and reproductive health services and national policies restricting access to contraception. It is the view of the UNFPA (2013, ix)that the action taken by many countries, aimed at preventing adolescent pregnancy, and in some cases to support girls who have become pregnant, have been primarily about changing the behaviour of the girl rather than addressing the underlying determinants outlined.

The focus on reproductive health has been reiterated and given more comprehensive treatment in the Montevideo Consensus on Population and Development adopted by member countries and associate members of the United Nations Economic Commission for Latin America and the Caribbean in August 2013. The Consensus which was the outcome of the First Session of the Regional Conference on Population and Development in Latin America and the Caribbean contains a series of agreements to strengthen implementation of population and development issues beyond 2014. The Montevideo Consensus identified eight priority areas to follow-up the Programme of Action of the ICPD. Reproductive Health and Rights are covered in the first and the third priority areas. In the first priority area which relate to the "rights, needs, responsibilities and requirements of girls, boys, adolescents and youths," countries agreed to provide all such groups with among other things, "comprehensive sexual and reproductive health programmes prioritizing the prevention of teenage pregnancy and eliminating unsafe abortions." Priority number three relates to universal access to sexual and reproductive health services. Countries agreed to the following:

> "To promote policies to ensure that people can exercise their sexual rights and make decisions in a free and responsible way, with respect for their sexual orientation, without coercion, discrimination or violence. Countries also commit to reviewing legislation, standards and practices that restrict access to reproductive health services and ensuring that access to these is universal. Similarly they agreed to ensure that there are safe and quality abortion services for women with unwanted pregnancies, in cases where abortion is legal, as well as calling on States to advance towards amending laws and public policies on abortion to protect the lives and health of women and adolescents (ECLAC, 2013)".

D. The study area

This study covers territories which fall within the cultural sphere referred to by Wagley (1960) as Plantation America because of the important influence of the plantation on the history and society of the area. All countries shared the plantation experience but for varying lengths of time and with varying degrees of intensity. "Briefly, the cultural sphere extends spatially from about midway up the coast of Brazil into the Guianas, along the Caribbean coast, throughout the Caribbean itself, and into the United States. It is characteristically coastal. Not until the nineteenth century did the way of life of the Plantation culture sphere penetrate far into the mainland interior, and then only in Brazil and the United States. This area has an environment which is characteristically tropical (except in the southern United States) and lowland" (1960, 5). "Where the plantation system and slavery were fundamental institutions, a way of life took form which resulted in many common problems and many similar contemporary culture traits throughout the region" (1960, 6).

A total of 32 countries, former colonies of the British, the French and the Dutch are represented. The countries covered are the former British colonies comprising the independent island states of Antigua and Barbuda, The Bahamas, Barbados, Dominica, Grenada, Jamaica, St. Kitts-Nevis, St. Lucia, St. Vincent and the Grenadines and Trinidad and Tobago and the mainland states of Belize (Central America) and Guyana (South America). The next group of English speaking countries comprises the British Overseas territories of Anguilla, Bermuda, British Virgin Islands, the Cayman Islands, Montserrat and Turks and Caicos Islands and the unincorporated territory of the United States of America, the United States Virgin Islands.

Former French colonies are the islands of Guadeloupe, Martinique, (now politically regions of France), St. Martin, St. Barthelemy (St. Barts) and St. Pierre and Miquelon (overseas collectivities) and the mainland territory of French Guiana (South America), also a political region of France.

The former Dutch colonies are the islands of Aruba, Bonaire, Curacao, Saba, St. Eustatius, St. Maarten and mainland Suriname (South America). Historically the Dutch islands formed the Netherland Antilles. Aruba separated around 1986 and became a constituent country within the Kingdom of the Netherlands. The others remained as a group until October 2010 when the Netherland Antilles was dissolved. Curacao and St. Maarten joined Aruba as a constituent country while the remaining islands became special municipalities of the Netherlands proper. For this report the islands of Bonaire, Saba and St. Eustatius have been combined and referred to as 'Other Dutch.'

A prominent feature of the area is the considerable variation in the population size of the countries. The island of Jamaica with a population of 2.7 million is the largest accounting for about 32 per cent of the total. The three largest territories which are Jamaica, Trinidad and Tobago and Guyana accounted for 57 per cent of the total in 2010. At the other end are the very small islands of St. Pierre and Miquelon (.07 per cent), Montserrat (.05 per cent), St. Eustatius (.03 per cent) and Saba (.02 per cent).

E. Data sources

The main sources of data for this study are the decennial censuses of population and housing, the system of vital registration and other administrative registers and relevant specialised surveys. The core data for the analysis of adolescent fertility gathered from these sources are stored in the MATERNILAC database maintained by CELADE, the Population Division of ECLAC. Census data covering population size and age-sex composition have been obtained from printed and electronic reports prepared by the National Statistical Offices and the CARICOM Secretariat (for CARICOM member states). Other sources of this data are The United Nations Statistics Division's Demographic Yearbook collection in printed form and through downloadable databases. Collection of this data by the UNSD is through a set of questionnaires dispatched annually to National Statistical Offices. An important source for population estimates and demographic indicators is the database for the *World Population Prospects: 2015 Revision,* the official United Nations publication of population estimates and projections (United Nations, Department of Economic and Social Affairs). The 2015 Revision incorporates the results from the 2010 round of national population censuses as well as findings from recent specialised Demographic and Health Surveys that have been conducted. Another source which has proved to be useful in providing

estimates of population age-sex composition and summary demographic indicators for small countries (minimum population size 5000), is the International Data Base of the United States Census Bureau.

Specialised surveys used are those conducted as part of the Demographic and Health (DHS), Reproductive Health (RHS) and Multiple Cluster Indicator (MICS) programmes. The DHS are nationally representative household surveys that provide data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition. The RHS are national reproductive health surveys that provide high quality, population-based data about reproductive health indicators. Each country's needs guide the survey content. Countries use data from these surveys to evaluate programmes and interventions, assess reproductive health status, and develop policy. The MICS is an international household survey initiative developed by UNICEF "to assist countries in filling data gaps for monitoring human development in general and the situation of children in particular." Listed among the data items collected from women 15-49 years old are marriage, contraception and sexual behaviour.

F. Data limitations

Perhaps the main limitation of most studies on adolescent fertility is the fact that available data almost always relate to females and to older adolescents of 15-19 years only. The age limit is understandable in most societies as younger adolescents and in particular those under 14 years old are not normally included in surveys requiring information on sexual activity. The UNFPA (2013, 7) reiterates the concern about this limitation by stating that "although the United Nations defines "adolescents" as anyone between the ages of 10 and 19, most of the internationally comparable statistics and estimates that are available on adolescent pregnancies or births cover only part of the cohort ages 15 to 19. Far less information is available for the segment of the adolescent population between the ages of 10 and 14 yet it is this younger group whose needs and vulnerabilities may be the greatest."

Even for the older ages it is not uncommon for Caribbean countries to exclude persons attending school at the primary and secondary levels on a full-time basis. This is because of the negative reaction from parents who consider it inappropriate to question students on these issues. In some cases the forms are administered only after permission is obtained from the parents. With the passage of time and as discussions of sexuality have become more open there appears to be less resistance.

For the Caribbean societies in the study one major limitation is the lack of key data for an analysis of adolescent fertility, of the type and in the detail available from the MATERNILAC database, for all the relevant years, for most countries of the region. No data exist for the French or Dutch countries and the majority of the English countries are excluded. Data available from other sources are for the most part limited either to the 15-19 years old as a group or in some cases for 15-24 years only and not by single years of age. It is recognized that the general difficulty in getting data at the level of detail required is the small population size of many countries and the concern regarding confidentiality.

The United Nations database from the World Population Prospects 2015 which is a very useful source, provide details of age, sex and the demographic indicators only for countries with populations of at least 90,000. This excludes a number of Caribbean territories. This latest set of revisions by the UN has taken account of the results of the 2010 round of population censuses. Even in using the UN data however there is the expected inconsistency between that series and the series prepared by the National Statistics Offices. Notwithstanding any adjustments which might have been made by the UN there are a small number of instances where the inconsistencies are of such a magnitude to suggest that the results of the 2010 round were not taken into account.

Specialised surveys are not available for most countries in the Caribbean. For the Caribbean as defined for this study, only Guyana, Jamaica and Trinidad and Tobago participated in the World Fertility Survey (WFS) programme in the 1970s. Trinidad and Tobago is the only country which appears on record as having participated in a DHS programme (1987). Jamaica has a long history of Contraceptive Prevalence/Reproductive Health Surveys (1987, 1989, 1993, 1997, 2002; 2008). Belize participated in a Family Health Survey in 1991. Since 2000 a number of countries have participated in the MICS programme: Barbados (2012), Belize (2006, 2011) Guyana (2000, 2006, 2014), Jamaica (2005, 2008, 2011), St. Lucia (2012) and Trinidad and Tobago (2000, 2006).

G. The report plan

This study is a descriptive comparison between the countries of the Caribbean as defined in the study area with regard to the levels and trends in adolescent motherhood and fertility and links to social inequality as far as data allow, covering the period 1990-2010. Countries with available datasets from the 2010 round of censuses, in the MATERNILAC database or with similar data from any other source will be prioritized in the analysis. For countries for which 2010 data are not available the analysis will cover the period up to 2000.

In general for the background analysis in the report, the term "adolescent" refers to the population 10-19 years old. Younger adolescents are those of ages 10-14 years and older adolescents those 15-19 years old. The target group for the fertility analysis is females of ages 15-19 years. Where possible the separation of the 15-19 years group into middle adolescents (15-17 years) and advanced adolescents (18-19 years) for the analysis, is made.

The report is presented in sections. The present section, Introduction and Background, outlines the definitions and the developmental phases of the period of adolescence, and summarizes the ICPD and Montevideo resolution on adolescence and reproductive health. Included also is a description of the study area, identification of the data sources and data limitations and an outline of the report plan. Section I is the literature review which presents a brief review of relevant literature for the study of fertility in general and more specifically the findings related to adolescent fertility since the ICPD. Such findings are principally related to trends and determinants. Section II is a summary of the demographic trends in the Caribbean over the study period. The analysis will involve an examination of the movements in the growth components of fertility, mortality and migration and changes in the age-sex structure. Section III is an analysis of the movements in the adolescent population of the Caribbean within the context of the global changes. Included also is a summary profile of the target population for the study, females 15-19 years old. Emphasis for the profile is on the characteristics closely associated with adolescent fertility for which data are available, marital and union status, and educational level. Section IV presents the analysis of the levels and trends in adolescent motherhood and fertility and reproductive inequalities. The focus is on the main indicators, the adolescent birth rate and the proportion of mothers and childless women. The final section (Section V) is a review of policies and programmes related to Adolescent Health and Rights which have been implemented in keeping with mandates of international and regional initiatives.

I. Literature review

A. Review of the proximate determinants model

Human fertility has traditionally been investigated in two separate disciplines: biology and the social sciences, with each discipline identifying factors relevant to it as the sole determinants. Davis and Blake (1956) proposed a more systematic approach when they first identified the mechanisms through which socioeconomic processes and human behaviour interact with the biological aspects of human reproduction. They proposed that the biological and behavioural dimensions of human fertility are linked through a set of 'proximate determinants' or 'intermediate fertility variables'. Examples of proximate determinants as proposed by Davis and Blake are the age at first marriage (controlling the onset of exposure to socially sanctioned childbearing), the use of contraception (to reduce or eliminate the probability of conceiving) and the breastfeeding duration and pattern (determining the length of the anovulation interval after a birth).

Bongaarts (1978) developed a framework for analyzing the proximate determinants which was expanded later (Bongaarts and Potter, 1983). The authors suggested that the Davis/Blake model had not been easily incorporated into reproductive models, and proposed the four proximate determinants of fertility which explain *nearly all the variation* in fertility levels among populations to be the proportion of married women, the prevalence of contraceptive use, the incidence of induced abortion and the fertility inhibiting effect of breastfeeding (lactational infecundibility).

Stover (1998) proposed a review of the proximate determinants based on new data which had become available since the original proposal. Stover proceeded by examining each of the four determinants and suggested the type of new data which could be incorporated into the relevant index. Using datasets for selected countries from recent Demographic and Health (DHS) Surveys the author presented revised proximate determinants. To the index of marriage he proposed the inclusion of data on sexual activity as a more direct measure of exposure to pregnancy than marriage. The index of postpartum infecundability is intended to describe the effects of extended periods of postpartum amenorrhea on fertility and is calculated as the average birth interval in the absence of breastfeeding divided by the average length in the presence of breastfeeding. Stover proposed the use of the median duration instead as recent data showed that the distribution of breastfeeding duration is highly skewed

with a few individuals breastfeeding for considerably longer than the average. The index of contraception is intended to describe the fertility-inhibiting effects of contraceptive use. The index as proposed by Bongaarts assumes that only fecund women use contraception but Stover suggests that this assumption may not hold as there may be considerable use of sterilization by infecund women. The alternative proposal was to separate contraception and sterility into different indexes.

He did conclude however that there might be some question about the extent to which the suggested new definitions are measured as accurately as the original definitions by Bongaarts. To the extent that they are better representations of the actual determinants, they should however provide a more accurate measure of the fertility-inhibiting effects of each determinant.

Guengant (2002) raised the issue of the relevance of the model within the context of the fertility transition. He argued that the framework is neither appropriate to explain what happens after the onset of the fertility transition nor to explain post transitional fertility differentials. The determinant, the proportion of married women which has to be modified for Caribbean societies where union types are of greater relevance was also addressed by Guengant. He acknowledged the appropriateness of using the union status typology rather than marital status and stated that in many societies of different cultural backgrounds informal types of unions of the common law and visiting types have become increasingly important. He cautioned that "in societies where many unions are without cohabitation ("visiting unions" type, as they are called in the Caribbean), estimates of the women in union might not be accurate." The writer emphasises that "the proportion of women in union varies greatly from one country to another and over time, and is very difficult to project."

More recently Bongaarts (2015) revised his original model. What he regards as a 'fine-tune' has become necessary, he says in light of new evidence, research and data that have become available over the past three decades. He explains that the model as originally conceived remains conceptually sound and there is no reason to change the general multiplicative nature of the main equation. "However in recent decades reproductive behaviour has changed substantially and certain original simplifying assumptions have become less accurate over time. In addition new research allows some features of the model to be improved. A few revisions of features of the model are therefore desirable" (2015, 536).

The revisions he proposes are essentially in line with those proposed by Stover. He accepts the change to the index of marriage to take account of sexual activity outside of formal unions and with regard to contraception his revisions address Stover's observation of an overlap between postpartum amenorrhea and contraceptive use. Revisions related to abortion are based on the analysis by Bongaarts and Westoff (2000) and for postpartum infecundability he takes into account the average 27-month delay between a change in postpartum infecundability. Bongaarts does not accept Stover's proposal for an index of sterility as he sees no need for it in contemporary populations. Such an index he argues, would be useful if variations in sterility exist among populations and contribute significantly to variations in fertility.

B. Recent research findings

Following is a summary of the findings on global levels and trends in adolescent fertility since the ICPD in Cairo in 1994 as presented by the United Nations (2013). As stated in the report "the period under review, from 1990-1995 to 2005-2010, coincides with assessments of progress in implementing the Programme of Action of the International Conference on Population and Development and the unfinished agenda of the Millennium Development Goals, both of which include a focus on reducing early childbearing, expanding access to reproductive health and investing in the human capital of youth, especially girls" (2013, iii).

Some of the main findings are as follows:

(i) The decline in the adolescent birth rate since 1990 is universal. Increase in school enrolment, increase in the demand for contraception and declines in the proportion of ever married adolescents are cited as factors associated with this pattern of overall reduction in rates.

(ii) Despite overall declines adolescent fertility is still high (greater than 80 births per 1,000 women aged 15-19) in many developing countries. Countries with low adolescent fertility

(less than 19 births per 1,000 women aged 15-19) are concentrated in Europe and Northern America. There are no low adolescent fertility countries in sub-Saharan Africa or Latin America and the Caribbean.

(iii) Adolescent fertility is declining more slowly than total fertility in some regions.

(iv) Early marriage remains a strong factor underlying adolescent fertility. Adolescent fertility is high in countries where the proportion of ever-married adolescents is high.

(v) Within a short period of time in adolescence, there is a rapid progression to sexual activity and marriage. Survey data from 42 countries show that the proportion of young women aged 20-24 who have had sex or are married by age 18 is more than twice the proportion of those who had sex by age 15.

(vi) There are adolescents who are sexually active before entering into marriage in nearly every country.

(vii) Most adolescent childbearing occurs within marriage. Even in countries where sexual initiation is common outside of marriage, most adolescent childbearing occurs within marriage.

(viii) Higher levels and longer duration of schooling for girls are linked to lower levels of adolescent childbearing.

Findings based on data from household surveys provide the basis of a UNFPA (2013a) report providing estimates of adolescent pregnancy at the country, regional and global levels and to assess trends over the period 2000-2010.

Following are some of the key findings from the report:

(i) Almost one in five women aged 20-24 (19 per cent) had a live birth by their 18th birthday. There are substantial variations across different regions ranging from 28 per cent in West and Central Africa to a low 4 per cent in Eastern Europe and Central Asia. By contrast Latin America and the Caribbean show a value close to the global estimates at around 18 per cent.

(ii) Only one Caribbean country, the Dominican Republican, show 20 per cent or more of women aged 20-24 having a live birth before age 18.

(iii) In absolute terms, in 2010, 36.4 million women aged 20-24 had their first live birth before age 18 and 5.6 billion did so before age 15. This value is equivalent to 7.3 million girls under the age of 18 giving birth every year, or 20,000 every day.

(iv) Over the recent past, the global prevalence of pregnancies among girls less than 18 years of age has slightly declined, by 14 per cent, from 23.3 per cent to 20.1 per cent. All regions with the exception of Latin America and the Caribbean appear to be moving towards a decline.

Research in adolescent fertility has focused not only on levels and trends but also on the determinants. Nyarko (2012) used secondary data from the 2008 Ghana Demographic and Health Survey and found that adolescent fertility was significantly influenced by the level of education of the female adolescent and her partner, the work status of the female adolescent, the wealth status and the exposure to media as other factors. For Ethiopia, (Tewdros, Haider, Habte, 2010) the DHS 2005 showed the major factors associated with adolescent fertility to be age, educational status, place of residence, employment, marriage, contraceptive use and postpartum infecundibility. "The odds for increased adolescent fertility were significantly higher in early adolescents, for those who had lower education, among rural teens, and currently working than their counterparts." Sarkar (2009) who used the 2007 DHS of Bangladesh describes adolescent fertility in that country as a complex phenomenon due to various factors related to the socio-economic and cultural environment. The major factor is the early age at marriage and childbearing. The study shows that the majority of teenage mothers live in the rural areas where early and forced marriages is the ideal with marital fertility among adolescents as high as 96 per cent.

Gupta and Leite (1999) used three DHS conducted in North-eastern Brazil, in 1986, 1991 and 1995.The researchers found level of education to be the factor most strongly and consistently associated with the probability of giving birth during adolescence. "In particular, an adolescent with no more than primary schooling is more than twice as likely to have had a first birth as an adolescent with at least a secondary education, even after the analysis is controlled for age, time period and other characteristics. Religious affiliation and mass media exposure did not consistently affect adolescent fertility over time."

One prominent factor in the study of determinants of overall fertility is contraceptive use. The inclusion of this factor in studies of adolescent fertility is acknowledged as a somewhat sensitive issue and is seen as presenting some difficulties (US Bureau of the Census 1996, 34). "The real difficulty arises from the sensitivity of questioning unmarried teens about their family planning practices, and by implication, their sexual activities." As the report states there has been since the late 1960s an increase in family planning activities in the developing world and a general acceptance of the rights of women to limit their family size. With this has come also a greater level of acceptance of the enquiries through household surveys designed to capture information on issues related to reproductive health. An important component of these surveys has been modules specifically targeting young adults.

Recent discussions have focused on the issue of reproductive inequalities. As defined by the WHO health inequalities are observable differences in health between subgroups of a population. Subgroups can be defined by demographic, geographic or socio-economic factors such as age, economic status, education, place of residence and sex. When health data are disaggregated by subgroups they reveal differences between social groups that might have otherwise remained hidden behind the overall average. ECLAC (2006) examines the topic using a variety of data sources and indicators, items of geographic boundaries, socio-economic level and ethnicity.

Findings on inequality from UNFPA (2013a, 20) show that overall the ABR is higher among adolescents in rural areas than in urban areas, lower among the most educated than the least educated and higher among those in poor households than those in wealthier households. "Adolescents in rural areas, with no education and in the poorest 20 per cent of households have ABRs that are 1.8, 2.8 and 2.8 times higher than the ones observed for those in urban areas, with a secondary or higher education, or in the richest 20 per cent of households respectively." While East Asia and the Pacific have the largest residence disparity and West and Central Africa have the largest disparity by education, the largest wealth disparity is to be found in Latin America and the Caribbean. In this region, "adolescents in the poorest 20 per cent of households are 4.8 times as likely to give birth as those in the richest 20 per cent (148 versus 31, respectively)."

II. Population trends in the Caribbean: 1990-2010

The estimate of the population of the Caribbean around 2010 was 8.5 million. Table 1 presents the estimates based on the population censuses conducted in the region as part of the 1990, 2000 and 2010 rounds of population and housing censuses. The data in the table are presented for the groups of countries classified according to language. Over three-quarters (78 per cent) of the population (6.6 million) lived in the 19 countries of the English speaking Caribbean, 12 per cent (1 million) lived in the 5 countries of the French Caribbean and 10 per cent (843,000) lived in the Dutch Caribbean (7 countries), at 2010.

Table 1
Distribution of the population of the Caribbean by language groups: 1990-2010

Country Group	1990	2000	2010
		Number of Persons	
Total	**7 276 204**	**7 970 217**	**8 469 354**
English	5 743 344	6 245 403	6 615 995
French	867 743	966 191	1 010 547
Dutch	665 117	758 623	842 812
		Per Cent of Total	
Total	**100.0**	**100.0**	**100.0**
English	78.9	78.4	78.1
French	11.9	12.1	11.9
Dutch	9.2	9.5	10.0

Source: Calculations based on table 3.

The region added approximately 1.2 million people over the twenty year period, an increase of 16 per cent indicative of an annual rate of growth of 0.84 per cent per annum (table 2). The table shows in the first place that growth was higher in the first period than in the second period, moving from 1.0 per cent between 1990 and 2000 to 0.68 per cent in the period 2000 to 2010. In the second place the data show that of the three groups of countries, growth was highest for the Dutch as a group. The annual rate of growth for this group was 1.32 per cent compared to 0.95 per cent for the French countries and 0.70 per cent for the English group.

Table 2
Population change for Caribbean countries by language groups: 1990-2010

Country Group	1990-2000	2000-2010	1990-2010
		Absolute Change	
Total	**694 013**	**499 137**	**1 193 150**
English	502 059	370 592	872 651
French	98 448	44 356	142 804
Dutch	93 506	84 189	177 695
		Percentage Change	
Total	**9.54**	**6.22**	**16.40**
English	8.74	5.93	15.19
French	11.35	4.59	16.46
Dutch	14.06	11.10	26.72
		Annual Rate of Growth (%)	
Total	**1.01**	**0.68**	**0.84**
English	0.84	0.58	0.71
French	1.19	0.64	0.95
Dutch	1.46	1.17	1.32

Source: Calculations based on table 3.

Table 3 presents the population and changes over the period for the individual countries. Notwithstanding the fact that the group showing the highest growth was the Dutch group, the individual countries showing by far the highest rates of growth were from the English group. Four countries showed annual rates of growth of 3 per cent or higher for 1990-2010. From the English group they were Turks and Caicos (4.6 per cent), Cayman Islands (3.7 per cent) and British Virgin Islands (3.1 per cent) and from the French group, French Guiana (3.7 per cent) .Countries showing the next highest rates of 2 per cent or higher but less than 3 per cent were Belize (2.7 per cent), Aruba (2.2 per cent) and Anguilla (2.0 per cent). Rates in excess of 1 per cent but less than 2 per cent can be observed for Suriname (1.7 per cent), the Other Dutch countries and Bahamas (1.6 per cent), Antigua and Barbuda (1.5 per cent) St. Lucia (1.2 per cent) and Grenada (1.1 per cent). Twelve countries experienced growth of less than 1 per cent. Included among these were the largest territories of Jamaica (0.6 per cent), Trinidad and Tobago (0.5 per cent) and Guyana (0.1 per cent). These low rates ranged from 0.01 per cent for Dominica to 0.7 per cent for St. Kitts-Nevis. Montserrat and St. Pierre and Miquelon registered decreased rates of growth of 3.9 per cent and 0.1 per cent respectively.

There are special circumstances surrounding population movements in Montserrat over the past two decades. The volcanic eruptions of the Soufriere Hills in that country which began in 1995 resulted in a mass exodus of persons mainly to the United Kingdom which introduced a voluntary evacuation scheme for residents of the island. The data show that there has been some return migration since 2000.

A. Movements in the growth components

The impressive declines in fertility and gains in life expectancy which have been experienced in many countries over the past three decades have also been evident in the Caribbean. Fertility indicators for the broad period extending from 1990 to 2010 reflect the declines for the Caribbean (table 4). From an estimated average of 21.4 per 1,000 the crude birth rate fell by 26 per cent to 15.8 per 1,000, while the total fertility rate moved down slowly from 2.5 to about replacement level of 2.1. The table also shows that occurring simultaneously was the decrease in the crude death rate by about 1.5 per cent from 6.8 per 1,000 to 6.7 per 1,000. The overall effect of these movements was a decline in the rate of natural increase from 14.6 to 9.1 per 1,000, a considerable fall of about 38 per cent. Improvements in life expectancies have accompanied the fertility declines and gains prominence as a factor in population ageing, described as one of the most distinctive demographic events of the twentieth century. The average for the 27 countries in the available database rose from about 73 years in the period 1990-1995 to about 75 years in 2005-2010.

Table 3
Population of the Caribbean by country: 1990-2010

Country	1990	2000	2010	Annual Rate of Growth (%) 1990-2010
All Countries	7 276 204	7 970 217	8 469 354	0.84
English	**5 743 344**	**6 245 403**	**6 615 995**	**0.71**
Anguilla	8 960	11 430	13 037	1.97
Antigua and Barbuda	63 878	76 886	85 567	1.54
Bahamas	255 049	303 611	351 461	1.60
Barbados	247 288	250 010	277 821	0.58
Belize	189 392	240 204	322 453	2.66
Bermuda	58 460	62 059	64 237	0.50
British Virgin Islands	16 116	23 161	29 640	3.08
Cayman Islands	25 355	39 020	55 036	3.69
Dominica	71 183	69 775	71 293	0.01
Grenada	85 123	103 137	106 667	1.13
Guyana	723 673	751 223	747 884	0.15
Jamaica	2 380 666	2 607 632	2 697 983	0.63
Montserrat	10 769	4 303	4 922	-3.91
St. Kitts-Nevis	40 618	46 325	46 398	0.67
St. Lucia	133 308	156 741	166 526	1.17
St. Vincent and the Grenadines	106 499	109 022	109 188	0.12
Trinidad and Tobago	1 213 733	1 262 366	1 328 019	0.45
Turks and Caicos	11 465	19 886	31 458	4.59
United States Virgin Islands	101 809	108 612	106 405	0.22
French	**867 743**	**966 191**	**1 010 547**	**0.95**
French Guiana	114 808	156 790	205 954	3.65
Guadeloupe[a]	387 034	422 222	400 736	0.21
Martinique	359 579	380 863	397 732	0.46
St. Pierre and Miquelon	6 322	6 316	6 125	-0.14
Dutch	**665 117**	**758 623**	**842 812**	**1.50**
Aruba	66 687	90 506	101 484	2.21
Curacao	144 187	130 627	150 563	0.23
Sint Maarten	32 221	30 594	33 609	0.26
Suriname	408 866	492 464	539 910	1.74
Other Dutch	13 156	14 432	17 246	1.59

Sources: 1990-1991 Population and Housing Census of the Commonwealth Caribbean, Volume of Basic Tables. 2000 Round of Population and Housing Census Data Analysis Sub-Project, Volume of Basic Tables. 2010 Census Reports of Aruba, Antigua and Barbuda, Bahamas, Belize, Bermuda, Barbados, Cayman Islands, Guyana, Jamaica, Montserrat, Sint Maarten, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago.
Caribbean Community (CARICOM). United Nations Demographic Yearbook and related database. United States Census Bureau International Database.
[a] Totals for Guadeloupe includes St. Barthelemy and St. Martin.
Note: See Annex 1. Technical Notes and Notes to the Tables for additional explanations.

Migration has played a very important role in the demographic history of the Caribbean. Historically, the larger countries have experienced emigration to a greater degree than immigration and on a scale much larger than currently exists. What has become evident in recent decades is the considerable inflows into some of the smaller countries. This movement is reflected in the changes which have been observed in the pattern of migration from a net outflow around 1990 to a net inflow at 2010.

Table 4
Components of growth for the Caribbean: 1990-1995 and 2005-2010

Indicator	1990-1995	2005-2010
Fertility		
Crude Birth Rate	21.4	15.8
Total Fertility Rate	2.5	2.1
Mortality		
Crude Death Rate	6.8	6.7
Life Expectancy	72.7	75.2
Rate of Natural Increase	14.6	9.1
Net Migration Rate	-0.8	9.5

Source: Based on table 5.
Note: These estimates represent averages of the rates for the individual countries in table 5.

Countries exhibiting the highest rates of growth were those experiencing considerable net inflows of people. From table 5 it can be observed that for the Turks and Caicos net migration estimated at 27 per 1,000 in the first period doubled to 54 per 1,000 in the second period. For the British Virgin Islands the rates were 25 per 1,000 and 22 per 1,000 for 1990-95 and 2005-2010. The high rate of approximately 30 per 1,000 in the first period for the Cayman Islands dropped to 17 per 1,000. Evidence of the impact of immigration on growth rates can also be observed for Anguilla and Aruba. For Anguilla the net migration rate for the entire period averaged about 18 per 1,000, being 21 per 1,000 and 15 per 1,000. For Aruba the extremely large net inflow of 40 per 1,000 between 1990 and 1995 was offset by a small net outflow of 0.9 per 1,000 in the second period.

Table 5
Components of growth for selected Caribbean countries: 1990-1995 and 2005-2010

Country	Fertility		Mortality		Rate of Natural Increase	Net Migration Rate
	Crude Birth Rate	Total Fertility Rate	Crude Death Rate	Life Expectancy		
English						
Anguilla						
1990-1995	18.0	2.1	5.5	78.00	12.5	21.0
2005-2010	13.0	1.8	4.0	81.0	9.0	15.0
Antigua and Barbuda						
1990-1995	19.0	2.1	7.3	71.88	11.7	8.0
2005-2010	17.6	2.2	6.4	75.0	11.2	-0.2
Bahamas						
1990-1995	23.6	2.6	5.5	71.12	18.1	-0.3
2005-2010	15.8	1.9	5.8	74.31	10.0	8.3
Barbados						
1990-1995	15.5	1.7	9.6	71.94	5.9	-2.5
2005-2010	12.7	1.8	10.2	74.57	2.5	1.5
Belize						
1990-1995	34.4	4.4	5.6	70.57	28.8	-9.1
2005-2010	24.5	2.8	4.9	69.58	19.6	5.8
Bermuda						
1990-1995	14.5	1.7	7.3	76.00	7.2	3.0
2005-2010	12.0	2.1	7.0	81.00	5.0	2.0

Table 5 (continued)

Country	Fertility		Mortality		Rate of Natural Increase	Net Migration Rate
	Crude Birth Rate	Total Fertility Rate	Crude Death Rate	Life Expectancy		
British						
Virgin Islands						
1990-1995	15.0	1.6	4.0	77.00	11.0	25.0
2005-2010	10.5	1.3	4.5	77.00	6.0	22.0
Cayman Islands						
1990-1995	17.5	2.0	5.0	78.00	12.5	29.5
2005-2010	12.5	1.9	5.0	80.00	7.5	17.0
Dominica						
1990-1995	22.5	2.9	7.5	75.0	15.0	-13.0
2005-2010	16.0	2.1	8.5	75.00	7.5	-5.0
Grenada						
1990-1995	24.8	3.5	8.7	69.01	16.1	-8.0
2005-2010	19.3	2.3	7.7	72.00	11.6	-8.2
Guyana						
1990-1995	31.6	3.4	8.6	63.83	23.0	-21.2
2005-2010	19.8	2.8	7.7	65.84	12.1	-9.1
Jamaica						
1990-1995	24.7	2.8	7.1	72.01	17.6	-21.2
2005-2010	18.7	2.3	7.0	74.20	11.7	-9.1
Montserrat						
1990-1995	17.0	1.9	10.0	75.00	7.0	-14.0
2005-2010	13.0	1.3	10.5	71.00	2.5	170.0
St. Kitts-Nevis						
1990-1995	20.5	2.4	10.0	70.00	10.5	-8.5
2005-2010	14.0	1.8	7.0	74.00	7.0	1.0
St. Lucia						
1990-1995	26.1	3.2	7.0	71.32	19.1	-6.7
2005-2010	17.2	2.0	6.5	73.99	10.7	3.3
St. Vincent and the Grenadines						
1990-1995	24.0	2.9	6.7	70.51	17.3	-16.1
2005-2010	17.7	2.4	7.3	71.85	10.4	-9.4
French						
French Guiana						
1990-1995	31.6	4.1	4.5	72.75	27.1	7.0
2005-2010	28.2	3.6	3.2	77.97	25.0	2.7
Guadeloupe						
1990-1995	17.7	2.1	6.4	74.61	11.3	-2.1
2005-2010	15.1	2.1	6.7	79.38	8.4	-5.7
Martinique						
1990-1995	16.5	2.0	7.1	75.68	9.4	-3.7
2005-2010	13.5	2.0	7.5	80.11	6.0	-7.1
St. Pierre and Miquelon						
1990-1995	12.0	1.5	7.0	76.00	5.0	-4.0
2005-2010	9.5	1.5	8.0	79.00	1.5	-9.5

Table 5 (concluded)

Country	Fertility		Mortality		Rate of Natural Increase	Net Migration Rate
	Crude Birth Rate	Total Fertility Rate	Crude Death Rate	Life Expectancy		
Dutch						
Aruba						
1990-1995	18,1	2.2	7.0	73.56	11.1	39.9
2005-2010	11.5	1.7	7.6	74.72	3.9	-0.9
Curacao						
1990-1995	18.6	2.3	6.6	74.54	12.0	-15.9
2005-2010	12.3	2.0	8.2	76.12	4.1	22.2
Sint Maarten						
1990-1995	19.0	1.9	4.0	72.00	15.0	-20.0
2005-2010	13.0	2.0	4.0	76.00	9.0	12.0
Suriname						
1990-1995	26.3	3.2	7,2	67.60	19.1	-1.6
2005-2010	19.9	2.5	7.3	69.65	12.6	-2.2

Sources: United Nations World Population Prospects: 2015 Revision (Extracted from Files FERT/3, MORT/2, MORT/7-1, MIGR/1). United States Census Bureau International Database.
Note: See Annex 1. Technical Notes and Notes to the Tables for details on sources.

For countries such as Barbados, Jamaica, Guyana and Trinidad and Tobago it is emigration which has dominated population changes in the past and continues to keep growth rates at the very low levels observed. In the more recent periods immigration to the small islands has emerged as a very important growth component in these countries.

An examination of the data for the individual countries (table 5) reflects the variations in the three components.

With regard to the fertility indicators and specifically the crude birth rate the data show that at the beginning of the period only 4 countries reported crude birth rates in excess of 30 per 1,000. The highest was Belize (34), followed by Guyana and French Guiana, each with about 32 per 1,000 and Turks and Caicos (31 per 1,000). Rates of less than 20 per 1,000 are observed for the majority of countries, 14, ranging from the lowest 12 per 1,000 for St. Pierre and Miquelon to about 19 per 1,000 for Sint Maarten, Curacao and Antigua and Barbuda. By 2010 the highest rates had fallen to under 30 per 1,000. The largest decline was experienced by Guyana which declined by 37 per cent to about 20 per 1,000. The rate for Belize fell by 29 per cent to 25 per 1,000 and for French Guiana to 28 per 1,000, a drop of 11 per cent.

Regarding the total fertility rate, the data show that at 1990, 7 countries had a total fertility rate of 3 or more. Belize had the highest rate of 4.4 followed by French Guiana (4.1), Grenada (3.5), Turks and Caicos and Guyana (3.4) and St. Lucia and Suriname (3.2). At 1990, a total of 8 countries had rates below replacement level of 2.1. The rates ranged from the lowest 1.5 for St. Pierre and Miquelon to 2.0 for Cayman Islands and Martinique. By 2010 declines are observed for the majority of countries (20) and for 9 of these the decrease took rates which were above replacement level to replacement level or below. Of note is the fact that there was a small upturn in rates for 4 countries all of which were at replacement level or below at 1990. This is possibly indicative of some delayed childbearing. For Antigua and Barbuda the rate moved from 2.1 to 2.2, Barbados moved from 1.7 to 1.8, Bermuda from 1.7 to 2.1 and St Maarten from 1.9 to 2.0.

Life expectancies for the more recent period were lowest for Guyana (66 years) and highest, between 80 and 81 years for the small islands of Anguilla, Bermuda, Martinique, Cayman Islands and Turks and Caicos. Of note is the observation that with the exception of Martinique, these are islands having a high proportion of foreign born population.

The high rates of immigration previously discussed are reflected in the fairly substantial percentages of foreign born people in the affected countries. At 2010, more than 60 per cent of the population of Turks and Caicos was foreign born up from 48 per cent at 2000. For the British Virgin Islands the percentages were 58

per cent at 2000 compared to 50 per cent at 1991. The data for Cayman Islands show movements from 33 per cent at the 1989 census increasing to 47 per cent in 1999 before falling to a still large 43 per cent at 2010. Table 6 presents data for countries for which available data show 10 per cent or more of the population as foreign born. For Anguilla the movement was from 23 per cent in 1991 to 37 per cent in 2001.

Table 6
Distribution of the foreign born population for selected Caribbean countries: 1990-2010

Country and Census Year	Total Population Reporting	Foreign Born Population	
		Number	Per Cent of Total
Anguilla			
1990	8 960	2 076	23.2
2000	11 430	4 224	37.0
Aruba			
2000	66 607	30 104	45.2
2010	90 506	34 432	38.0
Bahamas			
1990	251 990	28 892	11.5
2000	302 822	36 195	12.0
Belize			
1990	184 722	25 548	13.8
2000	232 111	34 279	14.8
Bermuda			
1990	58 457	17 675	30.2
2000	61 965	15 823	25.5
British Virgin Islands			
1990	16 116	8 035	49.9
2000	23 161	13 398	57.9
Cayman Islands			
1989	25 355	8 387	33.1
1999	39 020	18 529	47.5
2010	55 036	23 521	42.7
Turks and Caicos Islands			
1990	11 465	5 062	44.2
2000	19 886	9 550	48.0
2010	31 458	19 766	62.9
Curacao			
1990	144 187	23 139	16.0
2000	130 627	25 101	19.2
2010	150 563	35 647	23.7

Source: National Census Reports.

B. Sex and age composition

From table 7 it can be observed that females outnumbered males consistently for each year under review, with a sex ratio of about 97 per 100. The excess of women over men rose from 108,350 in 1990 to 124,724 in 2010 but overall the sex ratio has remained stable at 97. The country group with the lowest sex ratio at 2010 was the French with a ratio of 90 compared to the 98 per 100 observed for the English, the highest.

At the country level (table 8) the highest sex ratios at 2010, well above the total of 97, of 107 and 104 is observed for Montserrat and 104 for Dominica, Turks and Caicos and St. Vincent and the Grenadines. The lowest is observed for Curacao (84). Three other countries had sex ratios of less than 90 per 100: Martinique (88) Sint Maarten and Guadeloupe (89).

The declines in fertility and improvements in life expectancies described previously have had important implications for population ageing. The median ages of the countries for 2000 and 2010 are presented in table 9 and form the basis of the discussion on ageing. The median age is that age which divides a population into numerically equal parts of younger and older persons. The estimate of the median age for the Caribbean around 2010 was 33.0 years up from 29.5 years around 2000.

Table 7
Population of the Caribbean by sex and language groups: 1990-2010

Item	Total	English	French	Dutch
1990				
Male	3 583 927	2 828 916	426 013	328 998
Female	3 692 277	2 914 428	441 730	336 119
Excess of Females	108 350	85 512	15 717	7 121
Sex Ratio	97.07	97.07	96.44	97.88
2000				
Male	3 928 958	3 089 209	465 948	373 801
Female	4 040 659	3 156 194	500 243	384 222
Excess of Females	111 701	66 985	34 295	10 421
Sex Ratio	97.24	97.88	93.14	97.29
2010				
Male	4 172 315	3 278 806	479 265	414 244
Female	4 297 039	3 337 189	531 282	428 568
Excess of Females	124 724	58 383	52 017	14 324
Sex Ratio	97.10	98.25	90.21	96.66

Source*:* Calculated from Appendices 3-5.

Table 8
Sex ratios for selected Caribbean countries: 1990 and 2010

Country	Sex Ratio	
	1990	2010
All Countries	97.07	97.10
English	**97.07**	**98.25**
Anguilla	99.69	98.49
Antigua and Barbuda	93.07	91.94
Bahamas	96.05	93.96
Barbados	92.10	91.86
Belize	103.50	100.00
Bermuda	94.12	92.45
British Virgin Islands	105.22	93.54
Cayman Islands	95.29	97.84
Dominica	99.33	104.38
Grenada	96.91	102.14
Guyana	97.11	99.26
Jamaica	96.08	97.88
Montserrat	94.95	107.15
St. Kitts Nevis	96.36	96.95
St. Lucia	94.15	99.19
St. Vincent and the Grenadines	99.68	103.57
Trinidad and Tobago	99.84	100.69
Turks and Caicos	103.71	103.99
United States Virgin Islands	93.56	91.54
French	96.44	90.21
French Guiana	108.70	97.94
Guadeloupe	95.62	89.01
Martinique	93.63	87.50
St. Pierre and Miquelon	99.31	98.16
Dutch	97.88	96.66
Aruba	96.91	90.61
Curacao	89.92	84.25
Sint Maarten	97.43	89.44
Suriname	100.93	102.05
Other Dutch	101.59	99.40

Source: Calculated from Appendices 3 and 5.

Table 9
Median age (in years) for selected Caribbean countries: 2000 and 2010

Country	Median Age		Years Added
	2000	2010	
All Countries	29.5	33.0	3.5
English	**28.4**	**31.8**	**3.4**
Anguilla	29.3	33.3	4.0
Antigua and Barbuda	29.2	29.8	0.6
Bahamas	27.0	30.9	3.9
Barbados	33.5	37.0	3.5
Belize	19.2	21.9	2.7
Bermuda	36.8	41.0	4.2
British Virgin Islands	31.4	34.5	3.1
Cayman Islands	33.2	35.7	2.5
Dominica	28.2	30.8	2.6
Grenada	21.8	25.0	3.2
Guyana	22.7	24.5	1.8
Jamaica	24.7	27.3	2.6
Montserrat	37.0	39.1	2.1
St. Kitts Nevis	27.1	32.0	4.9
St. Lucia	24.3	29.5	5.2
St. Vincent and the Grenadines	24.2	27.9	3.7
Trinidad and Tobago	27.8	31.9	4.1
Turks and Caicos	28.9	33.1	4.2
United States Virgin Islands	33.6	39.3	5.7
French	**31.3**	**35.4**	**4.1**
French Guiana	23.9	24.4	0.5
Guadeloupe	31.9	37.3	5.4
Martinique	34.1	40.5	6.4
St. Pierre and Miquelon	35.3	39.5	4.2
Dutch	**32.2**	**35.5**	**3.3**
Aruba	34.4	38.5	4.1
Curacao	36.0	40.3	4.3
Sint Maarten	31.8	35.6	3.8
Suriname	24.6	27.5	2.9
Other Dutch	34.0	35.6	1.6

Sources: United Nations World Population Prospects: 2015 Revision (Extracted from File POP/5). United States Census Bureau International Database. For 'Other Dutch' calculated from age distributions from census data.
Note: See Annex 1. Technical Notes and Notes to the Tables for details on sources.

The population of the Dutch group with a median age of 32.2 years in 2000 was the oldest at that date, just slightly older than the French (31.3 years) and somewhat older (3.8 years) than the English group. By 2010 the French added 4.1 years compared to 3.3 years for the Dutch with the result that the gap between them closed considerably with a difference of only 0.1 year (Dutch 35.5 years, French 35.4 years). The English group remained the youngest population with a median age of 31.8 years at 2010. Countries with the oldest populations at 2010, as indicated by the highest median ages, 39 years and above, were Bermuda (41.0), Martinique (40.5), Curacao (40.3), St. Pierre and Miquelon (39.5 years), United States Virgin Islands (39.3 years) and Montserrat (39.1 years). At the other end were the

countries with the youngest populations with median ages below 29 years – Belize (21.9 years), French Guiana (24.4 years), Guyana (24.5 years), Grenada (25.0 years), Jamaica (27.3 years), Suriname (27.5 years) and St. Vincent and the Grenadines (27.9 years). The majority of countries, 15 of the 28 had median ages of between 29 years and 39 years.

On average for the period 2000-2010 about 3.5 years were added to the median age of the Caribbean. For 4 countries the number of years added was around 5 years or more. The highest was added by Martinique (6.4 years) followed by United States Virgin Islands (5.7 years), Guadeloupe (5.4 years) and St. Lucia (5.2 years).

III. Trends in the adolescent population of the Caribbean: 1990-2010

A. Global adolescent population trends

The World Population Prospects 2015 report has produced estimates of the global adolescent population at 2010, of 1.2 billion divided almost equally between the younger 10-14 years old and the 15-19 years old (table 10).

Table 10
World adolescent population: 1990, 2010 and 2030
(thousands)

Age Group	1990	2010	2030
	Total Population		
10-19	1 046 042	1 201 823	1 328 687
10-14	527 969	594 389	669 744
15-19	518 073	607 434	658 943
	Per Cent of Total		
10-19	100.00	100.00	100.00
10-14	50.47	49.46	50.41
15-19	49.53	50.54	49.59

Source*:* United Nations World Population Prospects: 2015 Revision. (Extracted from File POP/7-1).
Note: See Annex 1. Technical Notes and Notes to the Tables for details on source.

In 2010 the overwhelming majority (88 per cent) of these persons lived in the developing world (table 11). This represents an increase of 4 percentage points over the 84 per cent estimated for the year 1990. According to the medium projections the share of the less developed region will move up to 89 per cent, by 2030.The report estimated that in 2010 Latin America and the Caribbean comprised about 9 per cent of the world's adolescents and based on the medium projections the proportion will decline to about 8 per cent by 2030.

Table 11
Percentage distribution of world adolescent population by development groups, regions and sub-regions: 1990, 2010 and 2030

Region and Sub-Region	1990	2010	2030
World	100.00	100.00	100.00
More Developed Region	15.53	11.88	10.67
Less Developed Region	84.47	88.12	89.33
Africa	13.84	19.46	27.81
Asia	62.89	60.25	54.21
Europe	9.69	6.70	6.00
Latin America and the Caribbean	9.35	9.23	7.89
Caribbean[a]	0.66	0.61	0.52
Northern America	3.77	3.89	3.57
Oceania	0.45	0.47	0.52

Source: United Nations World Population Prospects: 2015 Revision. (Extracted from File POP/1-1)
[a] Caribbean represents the sub-region as defined by the United Nations.
Note: See Annex 1. Technical Notes and Notes to the Tables for details on source.

Table 12 shows that the adolescent population grew overall by about 15 per cent, adding over 150 million persons between 1990 and 2010. The growth of an estimated 20 per cent for the less developed region was offset by the 12 per cent decline for the more developed region. The bulk of the growth for the developing world came from Africa which saw an increase of just over 89 million persons resulting in a growth of 61 per cent. Growth for Latin America and the Caribbean was estimated at 13 per cent, an addition of 13 million representing 7.5 per cent of the total additions to the adolescent population of the developing world.

Table 12
Change in world adolescent population by development groups, regions and sub-regions: 1990-2010
(thousands)

Region and Sub-Region	1990	2010	Change 1990-2010	
			Absolute	Percentage
World	**1 046 042**	**1 201 823**	**155 781**	**14.89**
More Developed Region	**162 459**	**142 783**	**-19 676**	**-12.11**
Less Developed Region	**883 583**	**1 059 040**	**175 457**	**19.86**
Africa	144 822	233 839	89 017	61.47
Asia	657 853	724 102	66 251	10.07
Europe	101 336	80 565	-20 771	-20.50
Latin America and the Caribbean	97 856	110 962	13 106	13.39
Caribbean[a]	6 901	7 389	488	7.07
Northern America	39 437	46 731	7 294	18.49
Oceania	4 737	5 623	886	18.70

Source: United Nations World Population Prospects: 2015 Revision. (Extracted from File POP/1-1)
[a] Caribbean represents the sub-region as defined by the United Nations.
Note: See Annex 1. Technical Notes and Notes to the Tables for details on source.

B. Caribbean adolescent population trends

The population 10-19 years old for the Caribbean as defined for this study was approximately 1.5 million around 2010 (table 13). This represents about 18 per cent of the total population of the region. From table 13 it can also be seen that when the total adolescent group of 10-19 years is examined separately for the young (10-14 years) and the old (15-19 years), the older group accounted for 51 per cent of the total compared to the 49 per cent share for the younger group. Within the language groups however the differential is not maintained for the French and the Dutch countries where the proportions are reversed. Overall for these latter named country groups the 10-14 years accounted for more than a half of the total adolescent population. Boys and young men outnumbered girls and young women in all country groupings. The highest sex ratio of any group is observed for the younger adolescents of the Dutch countries with a sex ratio of 104.5.

At the individual country level, an examination of the adolescents as a percentage of the total country population at 2010, as shown in table 14 shows generally that countries with high percentages are those which have historically maintained fairly high levels of fertility while those with low percentages are those which have seen low levels of fertility, in recent decades. There are five countries with percentages above the overall average. Belize and Guyana with 22 per cent of the total population being adolescents were highest followed by Jamaica and French Guiana (20 per cent) and St. Lucia (19 per cent). Countries with the lowest percentages of adolescents were those which had experienced low levels of fertility, Cayman the lowest (10 per cent), Bermuda (11 per cent) and Barbados (13 per cent).

Table 13
Distribution of the adolescent population of the Caribbean by sex, age groups and language groups: 2010

Country Group and Age Group	Total	Male	Female	Sex Ratio	Total	Male	Female
	Number of Persons				Per Cent of Total		
Total 10-19	**1 515 194**	**769 954**	**745 240**	**103.3**	**100.00**	**100.00**	**100.00**
10-14	748 265	380 840	367 425	103.7	49.38	49.46	49.30
15-19	766 929	389 114	377 815	103.0	50.62	50.54	50.70
English							
10-19	**1 204 505**	**611 966**	**592 540**	**103.3**	**100.00**	**100.00**	**100.00**
10-14	589 908	300 385	289 523	103.8	48.98	49.09	48.86
15-19	614 597	311 581	303 017	102.8	51.02	50.91	51.14
French							
10-19	**167 508**	**85 037**	**82 471**	**103.1**	**100.00**	**100.00**	**100.00**
10-14	85 527	43 240	42 287	102.3	51.06	50.85	51.27
15-19	81 981	41 797	40 184	104.0	48.94	49.15	48.73
Dutch							
10-19	**143 181**	**72 953**	**70 229**	**103.9**	**100.00**	**100.00**	**100.00**
10-14	72 830	37 215	35 615	104.5	50.87	51.01	50.71
15-19	70 351	35 738	34 614	103.2	49.13	48.99	49.29

Source: Calculated from Annex 8.

The overall sex ratio for adolescents was 103.3 reflecting the pattern in the three country groupings and in all but 6 countries: Bermuda (96.1), British Virgin Islands (92.2), Sint Maarten (95.0), Turks and Caicos (95.0), the United States Virgin Islands (96.5) and St. Kitts-Nevis (97.0) were the only countries with low sex ratios indicating an excess of female adolescents.

In considering growth rates of the adolescent population over the period 1990-2010 the table 14 shows a low annual rate of growth of 0.16 per cent. At the level of the country groupings the rate was lowest for the English group, 0.07 per cent, 0.22 per cent for the French countries and 0.88 per cent for the Dutch countries. At the country level high rates in excess of 2 per cent per annum obtained for 4 countries: Belize, British Virgin Islands, Turks and Caicos, French Guiana and Aruba.

The highest annual rate of growth for 1990-2010 among adolescents is observed for French Guiana (3.8 per cent). This was slightly above the rate of growth of 3.7 per cent per annum for the total population of the country over the same period (table 3). The adolescent population of Turks and Caicos showed high annual rates of growth of 3.0 per cent and the adolescent population of Belize and British Virgin Islands each grew by 2.6 per cent on average, each year. For Aruba the 2.2 per cent rate of growth of adolescents was the same as for the total country.

Table 15 shows the impact of adolescent population growth on overall population growth for these 5 countries. For Belize and French Guiana, just over one-fifth of the total population growth was from the growth of the adolescent population. For Aruba, British Virgin Islands and Turks and Caicos, the growth in the adolescent population accounted for more than 10 per cent of the total population growth.

Table 14
Distribution and sex ratio of the adolescent population of selected countries of the Caribbean at 2010 and change between 1990-2010

Country	Population 10-19 Years at 2010		Sex Ratio	Annual Rate of Growth (%) 1990-2010
	Total	Per Cent of Total Population of Country		
All Countries	1 515 194	17.89	103.3	0.16
English	**1 204 505**	**18.21**	**103.3**	**0.07**
Anguilla	2 007	15.39	107.9	1.54
Antigua and Barbuda	14 401	16.83	101.2	1.32
Bahamas	63 040	17.94	100.7	0.87
Barbados	37 437	13.48	101.9	-0.72
Belize	72 339	22.43	100.1	2.55
Bermuda	6 912	10.76	96.1	-0.17
British Virgin Islands	4 181	14.11	92.2	2.57
Cayman Islands	5 709	10.37	107.1	1.85
Dominica	12 266	17.21	108.1	-1.18
Grenada	18 825	17.65	100.4	0.20
Guyana	162 926	21.78	105.0	-0.06
Jamaica	541 244	20.06	104.0	0.29
Montserrat	678	13.77	117.3	-4.50
St. Kitts Nevis	7 471	16.10	97.0	-0.65
St. Lucia	30 827	18.51	103.6	0.00
St. Vincent and the Grenadines	19 672	18.02	105.4	0.20
Trinidad and Tobago	186 251	14.02	103.2	-0.86
Turks and Caicos	4 344	13.81	95.0	3.02
United States Virgin Islands	13 976	13.13	96.6	-1.60
French	**167 508**	**16.58**	**103.1**	**0.22**
French Guiana	41 082	19.95	101.0	3.82
Guadeloupe	63 947	15.96	104.8	-1.07
Martinique	61 652	15.50	102.7	-0.10
St. Pierre and Miquelon	827	13.50	105.7	-1.37
Dutch	**143 181**	**16.99**	**103.9**	**0.88**
Aruba	14 794	14.58	104.9	2.21
Curacao	22 106	14.68	105.1	-0.36
Sint Maarten	4 867	14.48	95.0	-0.53
Suriname	98 987	18.33	104.0	1.12
Other Dutch	2 427	14.07	100.8	0.69

Source: Calculated from Appendices 6 and 8.

Table 15
Contribution of adolescent population growth to total population growth for selected Caribbean countries: 1990-2010

Country	Absolute Growth in Total Population 1990-2010	Absolute Growth in Adolescent Population 1990-2010	Percentage of Total Growth Contributed by Adolescent Growth
Belize	133 061	27 795	20.9
French Guiana	91 146	18 788	20.6
Aruba	34 797	5 065	14.6
British Virgin Islands	13 524	1 616	11.9
Turks and Caicos	19 993	2 108	10.5

Source: Calculated from Appendices 3, 5, 6 and 8

The adolescent population in another 4 countries had annual rates of growth of more than 1 per cent but less than 2 per cent: Cayman (1.9 per cent), Anguilla (1.5 per cent), Antigua and Barbuda (1.3 per cent) and Suriname (1.1 per cent).

For all other countries the movements in the adolescent population showed either very small growth or declines. The largest decline is observed for Montserrat at an annual rate of 4.5 per cent. The large countries of Guyana and Trinidad and Tobago saw small declines of 0.1 per cent and 0.9 per cent respectively while Jamaica saw only minimal growth (0.3 per cent).

C. Profile of Caribbean female population 15-19 years old

The female population of ages 15-19 years old at 2010 was an estimated 377,800, about one-quarter of the total adolescent population of 1.5 million. Table 16 shows that since 1990 the percentage increase in the female adolescent population of this age group (4.8 per cent) was just over one and a half times more than the increase among all adolescents (2.9 per cent).

Table 16
Changes in female population 15-19 years old 1990-2010

Year	Total Population 10-19 Years	Female Population 15-19 Years	Females 15-19 Years as Percentage of Total 10-19 Years
1990	1 472 853	360 517	24.5
2000	1 516 887	363 194	23.9
2010	1 515 194	377 810	24.9
% change 1990-2010	2.87	4.80	-

Source: Calculated from Appendices 6, 7 and 8.

The ages 15-19 years old represent the initial stages of the reproductive span of 15-49 years. In most countries it is very likely that the majority of young women in this age group are still attending schools. In many countries also where early marriage is prevalent, many of these women are in married unions and accordingly at high risk of childbearing.

Research has consistently identified the risks associated with teenage sexual behaviour, pregnancy and childbearing. The WHO (2014) states that complications linked to pregnancy and childbirth are the second cause of death for 15-19 year old girls globally.

Table 17 presents the total population of women 15-49 years for the countries, at 1990 and 2010, and shows the percentage of the total accounted for by the 15-19 years group. Overall females 15-19 years old accounted for about 17 per cent of women 15-49 years at 2010 down from the approximately 20 per cent in 1990. At 2010, the countries with the highest percentages were Belize and Guyana (20 per cent). Cayman Islands had the lowest share of 8 per cent.

The inadequacy of studying fertility in terms of marital status, in Caribbean societies has long been recognized. Roberts (1976, xv) explains that as early as the 1940s British Caribbean censuses took account of classifications specifically relevant to the diverse family patterns. By the 1960 round of censuses a clear distinction had been made between marital status and union status. A very important aspect of the work of Roberts (1957, 1975, and 1978) relates to the life cycle of unions: the involvement of women in the various union types as they age. At the youngest ages (among the 15-19 years old), the majority of unions are of the visiting (non-cohabiting) type, the second most frequent type is the common law and the least frequent, the married union.

Table 18 presents marital status for selected countries and the data show consistently very low marriage rates among Caribbean adolescents. The table shows rates of less than 1 per cent for 6 of the 8 countries shown for 2010. Belize and Trinidad and Tobago have tended to show higher rates of marriage for female adolescents. This can be linked to the comparatively higher levels of ethnic diversity of these countries compared to the other countries shown.

Table 17
Distribution of the female population 15-49 years old and share of 15-19 years old for selected countries: 1990 and 2010

Country	1990		2010	
	Females 15-49	Per Cent 15-19	Females 15-49	Per Cent 15-19
All Countries	1 841 710	**19.52**	**2 267 303**	**16.64**
English	**1 423 656**	**20.16**	**1 777 322**	**16.96**
Anguilla	2 267	16.45	3 606	12.75
Antigua and Barbuda	16 155	16.26	25 100	14.02
Bahamas	65 678	18.93	98 454	15.74
Barbados	67 189	16.67	57 612	13.39
Belize	41 935	24.46	84 928	20.39
Bermuda	16 903	10.68	15 966	10.95
British Virgin Islands	4 671	13.17	9 084	12.64
Cayman Islands	7 844	13.86	16 718	8.15
Dominica	16 245	21.66	18 383	17.27
Grenada	18 690	21.71	27 070	18.13
Guyana	192 740	21.29	208 588	19.90
Jamaica	583 353	21.40	735 800	18.33
Montserrat	2 600	16.96	1 160	12.07
St. Kitts Nevis	9 757	20.22	12 651	15.08
St. Lucia	33 677	22.20	45 368	17.08
St. Vincent and the Grenadines	25 479	23.82	27 879	17.43
Trinidad and Tobago	287 383	18.06	354 167	13.74
Turks and Caicos	3 124	18.56	9 679	11.86
United States Virgin Islands	27 966	17.14	25 109	14.60
French	**237 368**	**18.47**	**263 815**	**15.15**
French Guiana	29 720	17.84	53 895	17.43
Guadeloupe	109 028	19.13	104 265	14.63
Martinique	96 955	17.95	104 193	14.74
St. Pierre and Miquelon	1 665	17.36	1 462	13.74
Dutch	**177 334**	**15.78**	**213 540**	**15.88**
Aruba	18 665	11.72	25 778	13.66
Curacao	40 894	14.09	37 788	14.95
Sint Maarten	10 666	8.94	9 634	12.33
Suriname	107 109	17.88	140 340	16.87
Other Dutch	1 423 656	20.16	1 777 322	16.96

Sources: National Census Reports. United Nations Demographic Yearbook and related database. United States Census Bureau International Database.
Note: See Annex 1. Technical Notes and Notes to the Tables for more details on sources.

Table 18
Percentage of the female population 15-19 years old ever (legally) married for selected Caribbean countries: 1980-2010

Country	1980	1990	2000	2010
Bahamas	2.1	1.5	0.8	0.4
Barbados	0.6	0.6	0.3	0.2
Belize	8.9	7.7	6.9	3.3
Bermuda	1.8	0.8	0.4	0.1
Jamaica	0.2	0.5	0.3	0.3
Trinidad and Tobago	11.4	4.7	2.5	1.9
Aruba	4.1	3.2	2.1	0.8

Source: National Census Reports.

Data on union type presented in table 19 show a higher level of involvement by young women. The comparatively much higher proportion for Belize should be noted. Caution is recommended in the interpretation of census data on union types due to changes in the classifications over time and between countries. For example, Jamaica has found it increasingly difficult over time to collect data on unions of the visiting type in the census. On this account the 2001 and 2011 censuses measure residential unions only. As noted for the data presented for Belize for 1990, the visiting unions are excluded. Roberts (1975, 105) says that the national census is not a suitable vehicle for the collection of data on the basis of what he refers to as 'an intricately structured family typology'. "This is best studied under survey conditions when a detailed questionnaire dealing with the woman's union history in its entirety can be administered" (Roberts 1976, xvi). Data collection presents many challenges. For Jamaica, respondents generally object to the personal nature of the questions which they regard as too intrusive. Non-response for the 2011census of Jamaica was estimated at about 5 per cent. Tables presented in the most recent census reports for Barbados and Trinidad and Tobago show even higher non-response rates for union status. For Barbados a table presenting number of live born children by union status for women 15-64 years shows 19 per cent 'not stated' union type. In the case of Trinidad and Tobago the table for women 14-54 years by age and union status shows a 14 per cent 'not stated'. Despite these challenges the census remains an invaluable source and the only source for some countries for data on union types for studying family patterns and providing a context for the study of fertility. The important point to be made is that data users must be aware of the deficiencies.

Table 19
Percentage of the female population 15-19 years old ever in union for selected Caribbean countries: 1980, 1990 and 2010

Country	1980	1990	2010
Bahamas	n.a.[a]	8.6	4.1
Barbados	15.1	3.9	3.3
Belize[b]	21.1	18.0	23.4
Jamaica[b]	11.7	7.2	7.1
Trinidad and Tobago	n.a.	11.3	7.6

Source: National Census Reports.
[a] n.a. – not available.
[b] Data for Belize 1990 and Jamaica 2010 represent married and common law unions only.

Considerable improvements in the educational status of Caribbean populations have taken place over the past 50 years. Within the 15-19 years old, the percentage receiving no schooling is quite low in most countries as primary and even secondary level education is now almost universal in most countries. Data on motherhood and educational levels from the censuses of 2000 and 2010 rounds provide the basis for an assessment of related inequalities. Table 20 and the graphical representation at figure 1, present data showing the educational attainment for total adolescents for 6 countries for which 2000 data are available: Antigua and Barbuda, Bahamas, Barbados, Jamaica, St. Lucia and St. Vincent and the Grenadines. The data show in the first place the very small percentage (0.2 per cent) reporting lower than primary level of education. This includes persons with no schooling and those who had pre-primary level only. On the other hand more than 9 of every 10 had attained at least a secondary level. This includes 7 per cent at the post secondary level for the 6 countries combined at 2000.

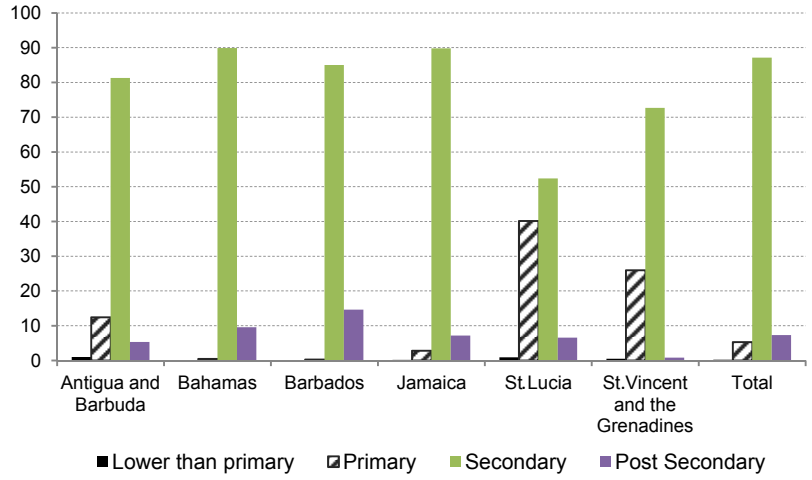
When the country differences for 2000 are examined, educational levels were highest for Barbados and Bahamas,with secondary level and higher almost universal and Jamaica (97 per cent). For Antigua and Barbuda, St. Vincent and the Grenadines and St. Lucia the proportion with secondary and higher level of education are approximately 86 per cent, 73 per cent and 59 per cent respectively.

Table 20
Percentage distribution of the female population 15-19 years old by highest level of education attained for selected Caribbean counties: 2000

Year and Country	Educational Level			
	Lower than Primary	Primary	Secondary	Post Secondary
Antigua and Barbuda	0.99	12.40	81.28	5.33
Bahamas	0.11	0.43	89.90	9.56
Barbados	0.06	0.28	85.02	14.64
Jamaica	0.19	2.81	89.81	7.19
St. Lucia	0.89	40.15	52.40	6.56
St .Vincent and the Grenadines	0.51	25.98	72.68	0.83
Total	**0.23**	**4.60**	**88.09**	**7.08**

Sources: MATERNILAC Database for all countries excluding Jamaica. Census of Jamaica, 2001. Calculations for educational level based on Annex 10. Excludes persons not reporting educational level.

Figure 1
Percentage distribution of the female population 15-19 years old by highest level of education attained for selected Caribbean countries: 2000



Source: Table 20.

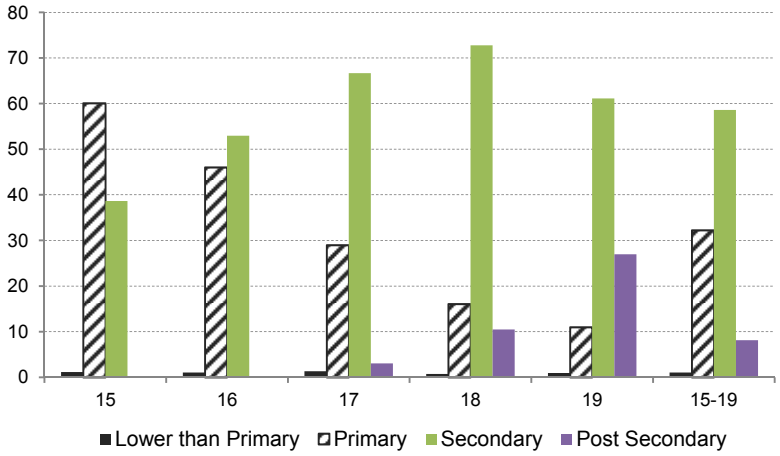
Data on educational levels for adolescents for 2010 for 4 countries: Grenada, Jamaica, St. Lucia and Trinidad and Tobago are presented in table 21 and figures 2-4. The high levels of educational attainment among female adolescents are apparent from the data. For Trinidad and Tobago and Jamaica, more than 9 of every 10 adolescents had received secondary or higher education. The proportion was highest for Jamaica (97 per cent) compared to 94 per cent for Trinidad and Tobago. These levels were lower for St. Lucia (66 per cent) and Grenada (67 per cent) as these countries had considerably higher percentages of young women who had not attained higher than a primary level education: just over 3 of every 10 adolescent women in both countries. Comparative percentages at the lowest level for Jamaica and Trinidad and Tobago were approximately 2 per cent and 6 per cent respectively. Post secondary education in most cases which typically begins around age 17, increased with age and peaked around age 19. Of the 4 countries percentages at this level were highest for Trinidad and Tobago at about 17 per cent followed by Grenada and Jamaica (8 per cent), with St. Lucia showing 7 per cent.

Table 21
Percentage distribution of the female population 15-19 years old by single years of age and highest level of education attained for selected Caribbean counties: 2010

Educational Level	Age and Country					
	15	16	17	18	19	15-19
			Grenada			
Lower than Primary	1.2	1.1	1.3	0.7	0.9	1.0
Primary	60.1	46.0	29.0	16.1	11.0	32.2
Secondary	38.6	52.9	66.7	72.8	61.1	58.6
Post Secondary	0.1	0.0	3.0	10.5	27.0	8.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
			Jamaica			
Lower than Primary	0.1	0.2	0.2	0.2	0.2	0.2
Primary	0.7	1.6	2.2	2.5	2.9	1.9
Secondary	99.1	98.1	91.9	83.3	76.2	90.2
Post Secondary	0.0	0.0	5.7	14.1	20.7	7.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
			St. Lucia			
Lower than Primary	2.5	2.0	0.9	1.1	1.1	1.5
Primary	66.5	50.9	25.9	10.7	7.5	32.8
Secondary	30.9	46.4	71.2	78.5	71.0	59.2
Post Secondary	0.2	0.6	2.1	9.8	20.5	6.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
			Trinidad and Tobago			
Lower than Primary	1.1	1.0	0.7	0.6	0.6	0.8
Primary	8.5	7.8	5.6	4.0	3.3	5.8
Secondary	90.4	87.4	81.9	68.9	58.2	76.9
Post Secondary	0.0	3.8	11.8	26.4	37.9	16.6
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

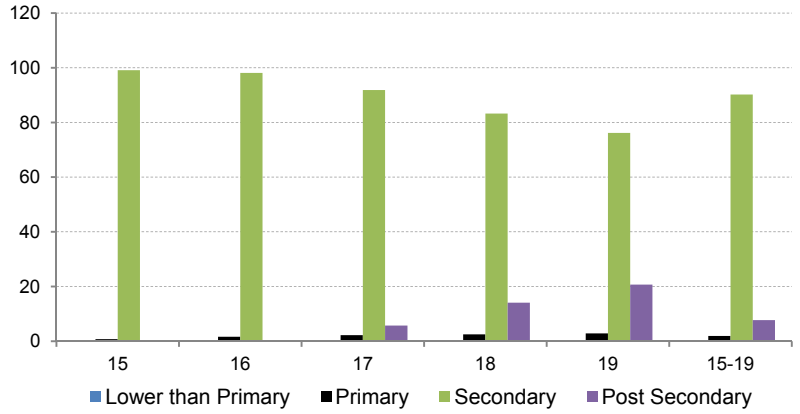
Sources: MATERNILAC Database for all countries excluding Jamaica. Census of Jamaica, 2011. Calculations for educational level based on Annex 10. Excludes persons not reporting educational level.

Figure 2
Percentage distribution of the female population 15-19 years old by highest level of education attained for Grenada: 2010



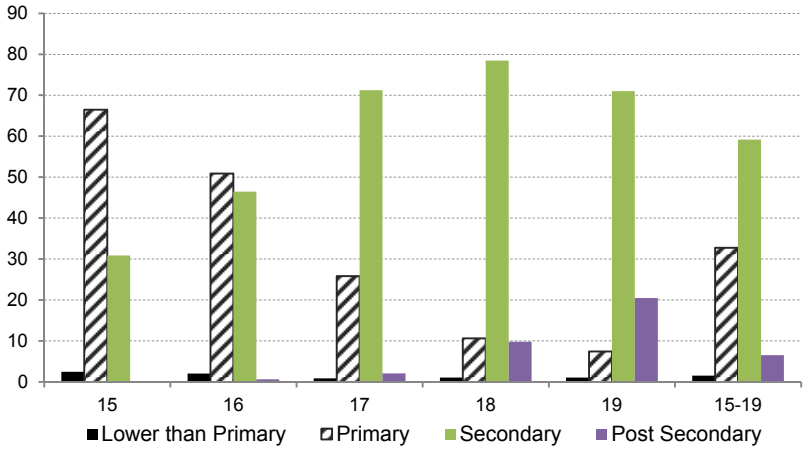
Source: Table 21.

Figure 3
Percentage distribution of the population 15-19 years by single years of age and highest level of education attained for Jamaica: 2010



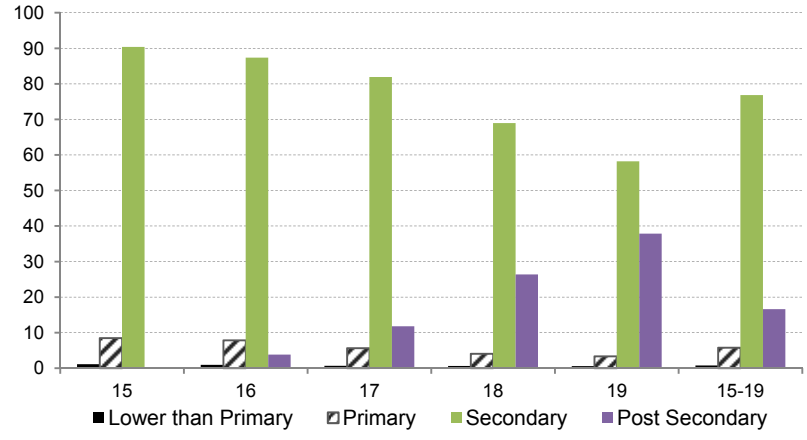
Source: Table 21.

Figure 4
Percentage distribution of the female population 15-19 years old by single years of age and highest level of education attained for St. Lucia: 2010



Source: Table 21.

Figure 5
Percentage distribution of the female population 15-19 years old by single years of age and highest level of education attained for Trinidad and Tobago: 2010



Source: Table 21.

IV. Levels and trends of adolescent fertility in the Caribbean: 1990-2010

Data for 17 of the 32 countries in the study, representing 97 per cent of the population of women 15-19 years old in 2010, indicate that these adolescents produced 15 per cent of the annual total of 717,000 births- about 108,000 births in the period 2005-2010 (table 22). This reflects a decline in births to adolescent women both as a percentage of total births and in absolute numbers over 1990-1995. Annual births for all women of reproductive ages totalled 835,000 in the earlier period of which the young women contributed 143,000 or about 17 per cent of the total.

The country variations which are presented in the table reveal that the decline was not universal. Births to adolescents actually increased in percentage terms only, in 5 of the countries shown. St. Lucia and Curacao saw increases of approximately 4 percentage points in the share of births to adolescent mothers between 1990 and 2010 while Guyana and Suriname had increases of 3.2 and 1.3 percentage points respectively. The share for Martinique rose by a small 0.7 percentage point while Aruba remained unchanged. All other countries experienced declines, the largest declines being for Grenada (6.7 percentage points).

A. The adolescent birth rate

The main indicator of adolescent fertility is the adolescent birth rate (ABR) derived as the births to women 15-19 years divided by the total women in the same age group (usually multiplied by 1,000 and expressed per 1,000 women). This is also the age specific fertility rate for the 15-19 years age group. It is common practice to include births to women under 15 years old in this group. In cases where this is done that should be made clear as it will tend to inflate the indicator. As a component of the total fertility rate (TFR) an important aspect of the study of the ABR is its contribution to the TFR. Table 23 presents the ABR, the TFR and the percentage contribution of the former to the latter for 1990-1995 and 2005-2010.

Table 22
Births to women 15-49 years and per cent of total to women 15-19 years for selected Caribbean countries: 1990-1995 and 2005-2010

Country	1990-1995		2005-2010		Percentage Point Change for 15-19
	Total 15-49 *(thousands)*	Per Cent 15-19	Total 15-49 *(thousands)*	Per Cent 15-19	
Total	**835**	**17.1**	**717**	**15.3**	**-1.8**
Antigua and Barbuda	6	16.7	7	14.3	-2.4
Bahamas	32	12.5	27	11.1	-1.4
Barbados	20	15.0	18	11.1	-3.9
Belize	34	20.6	37	16.2	-4.4
Grenada	12	16.7	10	10.0	-6.7
Guyana	114	18.4	74	21.6	3.2
Jamaica	301	21.6	253	19.0	-2.6
St. Lucia	19	15.8	15	20.0	4.2
St. Vincent and the Grenadines	13	23.1	10	20.0	-3.1
Trinidad and Tobago	112	14.3	101	10.9	-3.4
United States Virgin Islands	11	18.2	8	12.5	-5.7
French Guiana	20	15.0	31	12.9	-2.1
Guadeloupe	35	8.6	34	5.9	-2.7
Martinique	30	6.7	27	7.4	0.7
Aruba	6	16.7	6	16.7	0.0
Curacao	14	7.1	9	11.1	4.0
Suriname	56	10.7	50	12.0	1.3

Sources: United Nations World Population Prospects: 2015 Revision. Extracted from File FERT/6.
Note: See Annex 1. Technical Notes and Notes to the Tables for more details on source.

Table 23
Adolescent birth rate and total fertility rate for selected Caribbean countries: 1990-1995 and 2005-2010

Country	1990-1995		2005-2010		ABR as % of TFR	
	ABR	TFR	ABR	TFR	1990	2010
Antigua and Barbuda	66.1	2.1	55.5	2.2	15.8	12.8
Bahamas	69.6	2.6	39.4	1.9	13.2	10.3
Barbados	57.9	1.7	47.9	1.8	16.7	13.5
Belize	121.7	4.4	76.2	2.8	14.0	13.4
Grenada	83.5	3.5	42.4	2.3	12.1	9.2
Guyana	99.1	3.4	94.1	2.8	14.4	17.0
Jamaica	103.4	2.8	73.5	2.3	18.2	16.1
St. Lucia	94.6	3.2	61.4	2.0	15.0	15.1
St. Vincent and the Grenadines	88.0	2.9	58.9	2.1	15.4	13.8
Trinidad and Tobago	56.1	2.2	38.1	1.8	12.9	10.6
United States Virgin Islands	77.0	2.8	50.0	2.4	13.8	10.3
French Guiana	104.7	4.1	80.3	3.6	12.9	11.1
Guadeloupe	25.8	2.1	19.5	2.1	6.2	4.6
Martinique	28.7	2.0	24.0	2.0	7.3	5.9
Aruba	49.1	2.2	33.4	1.7	11.3	9.6
Curacao	51.5	2.3	34.1	2.0	11.3	8.6
Suriname	65.3	3.2	51.3	2.5	10.3	10.1

Source: United Nations World Population Prospects: 2015 Revision. Extracted from Files FERT/4 and FERT/7.
Note: See Annex 1. Technical Notes and Notes to the Tables for more details on sources and methodology for calculations.

The ABR may be examined in terms of the classification proposed by the United Nations (2013) as high, medium and low. The rate is considered high if greater than 80 births per 1,000 women, medium if 19 to 80 births per 1,000 women and low if less than 19 births per 1,000 women. From table 23 it can be observed that in 1990-1995, 7 of the 17 selected countries fell in the category of high adolescent birth rate with rates in excess of 80 per 1,000. Of the 7 countries, 4 had rates in excess of 100 per 1,000: Belize (122), St. Lucia (95), French Guiana (105), and Jamaica (103). Other high adolescent birth rate countries in the earlier period were Guyana (99), St. Vincent and the Grenadines (88) and Grenada (84). There were no low ABR countries as the remaining 10 fell into the medium category. By 2005-2010 there was a dramatic change with only one country, Guyana with an ABR of 94 being eligible for classification as high. Six countries classified as high ABR in 1990 and all others originally medium were now medium level ABR. The lowest ABR at 2005-2010 is observed for Guadeloupe (20).

The contribution of the ABR to the TFR in 2005-2010 for these 17 countries was lowest for Guadeloupe (5 per cent) and highest for Guyana (17 per cent) in 2005-2010. For Guyana this represents an increase over the 14 per cent contribution in 1990. All other countries with the exception of Guyana show a decline in the percentage contribution in 2010 compared to 1990. The proportion for St. Lucia and Suriname remained unchanged at approximately 15 per cent and 10 per cent respectively. The largest decrease is observed for United States Virgin Islands, an estimated 4 percentage point decline. Barbados and Antigua and Barbuda each with a 3 percentage point fall, followed. Indications are therefore that in recent years the TFR has been more influenced by adult fertility than adolescent fertility.

All countries experienced declines in the ABR over the period (table 24). Grenada and Bahamas saw the highest decreases of 49 per cent and 43 per cent respectively. Seven countries saw decreases of between 32 per cent and 37 per cent: Belize (37 per cent), St. Lucia (35 per cent), United States Virgin Islands (35 per cent), Curacao (34 per cent), St. Vincent and the Grenadines (33 per cent), and Aruba and Trinidad and Tobago (32 per cent). Four countries saw declines of between approximately 22 per cent and 29 per cent: Jamaica (29 per cent), Guadeloupe (24 per cent), French Guiana (23 per cent) and Suriname (22 per cent). A less than 20 per cent fall in adolescent birth rates between 1990 and 2010 occurred for Barbados (17 per cent) and Martinique and Antigua and Barbuda (16 per cent) while Guyana witnessed the smallest decline, (5 per cent).

The tables (23 and 24) also allow for a comparison of the extent of decline in the ABR compared to the TFR and for an assessment of the relative contribution of adolescent fertility and adult fertility to the changes in total fertility. From all indications the ABR declined at a faster rate than the TFR over the period. The TFR actually increased minimally for 2 countries: Antigua and Barbuda and Barbados, from 2.1 to 2.2 and 1.7 to 1.8 respectively. For Guadeloupe and Martinique which experienced a static TFR over the period, declines of approximately 24 per cent and 16 per cent respectively in the ABR were accompanied by increases in the adult rate of about 6 per cent for Martinique and 4 per cent for Guadeloupe. For St. Lucia which saw a decrease in the TFR from 3.2 to 2.0 the percentage decline was at the same level (approximately 35 per cent) for both adolescent and adult fertility rates.

The overall effect of the movement in rates may be examined from the data which show the rates at 2005-2010 as a percentage of the rates at the earlier period, 1990-1995 as presented in table 24. The countries with the largest declines show the greatest reductions. In 2005-2010, adolescent birth rates for Grenada and Bahamas which, as discussed, showed the largest declines, were about 51 per cent and 57 per cent respectively, of the 1990-1995 rates. The rate for Guyana which had a minimal fall in adolescent birth rates was at about 95 per cent of the 1990-1995 rate in 2005-2010.

B. Motherhood and childlessness

Motherhood and Childlessness are key factors in the study of fertility. Indicators of motherhood and childlessness are based on census questions on children ever-born typically directed to women of reproductive ages. For the Caribbean over time, the target population in some cases has excluded young women attending primary or secondary school full-time. Census reports generally produce data on fertility for five-year age groups. The MATERNILAC database contains data for single years of age which allows for a separation of the 15-19 years group into the middle and advanced adolescent categories. Data from the 2010 round of censuses are available in the database for 4 countries: Belize,

Grenada, St. Lucia and Trinidad and Tobago. Similar data for a fifth country, Jamaica, can be produced from the micro data available to the writer.

Table 24
Percentage change in adolescent fertility rate and total fertility rate for selected Caribbean countries: 1990-2010

Country	Percentage Change 1990-2010			2005-2010 as percentage of 1990-1995	
	ABR	Fertility Rate 20-49 years	TFR	ABR	TFR
Antigua and Barbuda	-16.1	7.3	3.6	83.9	103.8
Bahamas	-43.4	-25.3	-27.7	56.7	72.3
Barbados	-17.3	6.2	2.3	82.7	102.3
Belize	-37.4	-34.2	-34.7	62.6	65.3
Grenada	-49.2	-31.3	-33.5	50.8	66.5
Guyana	-5.0	-21.9	-19.5	94.9	80.5
Jamaica	-28.9	-17.7	-19.7	71.1	80.3
St. Lucia	-35.1	-35.3	-35.2	64.9	64.8
St. Vincent and the Grenadines	-33.0	-23.8	-25.2	67.0	74.7
Trinidad and Tobago	-32.1	-15.3	-17.4	67.9	82.6
United States Virgin Islands	-35.1	-9.3	-12.8	64.9	87.5
French Guiana	-23.3	-8.3	-10.3	76.7	89.6
Guadeloupe	-24.3	3.9	2.2	75.6	101.9
Martinique	-16.4	5.5	3.9	83.6	104.1
Aruba	-32.0	-10.0	-20.2	68.0	80.2
Curacao	-33.9	-10.6	-13.2	66.1	86.8
Suriname	-21.5	-19.4	-19.6	78.5	80.4

Source: United Nations World Population Prospects: 2015 Revision. Extracted from File FERT/7.
Note: See Annex 1. Technical Notes and Notes to the Tables for more details on source.

Tables 25 and 26 present the percentage distribution of mothers and childless women separately by single years of age for adolescents for 1990 and 2010 for the 5 countries: Belize, Grenada, Jamaica, St. Lucia and Trinidad and Tobago. The data are separated for the younger and older adolescents and adult rates are presented for comparisons and to highlight their respective roles in the fertility movements over the period.

Overall for the 5 countries the percentage of 15-19 years old women who were mothers was approximately 12 per cent in 1990. By 2010 this had declined by 4 percentage points to about 8 per cent. By comparison about three-quarters of women 20-24 years old in 1990 were mothers. By 2010 the share had fallen to 69 per cent. When the decreases among adolescents and adults are considered in percentage terms, the drop in the adolescent proportions was by 28 per cent more than 3.5 times the decline in the adult proportion.

A look at the country variations as related to the percentage of adolescent mothers, show that at 2010 Belize (12 per cent) had the highest proportions and Trinidad and Tobago had the lowest (5 per cent). When the drop in proportions is examined however, by far the largest decreases over the ten year period, in excess of 50 per cent are evident for St. Lucia and Grenada. The proportion of adolescent mothers in St. Lucia fell by 52 per cent from 13 per cent to 6 per cent. For Grenada the downward movement was by 51 per cent from 13 per cent to 7 per cent. For Jamaica and Trinidad and Tobago the fall in proportions was by approximately 29 per cent and 28 per cent respectively. For Jamaica the proportion of adolescent mothers moved from about 14 per cent in 1990 to approximately 10 per cent in 2010. Trinidad and Tobago had the lowest proportion at both dates, 7 per cent in 1990 and 5 per cent in 2010.

As expected, in all cases the odds of being a mother increased with age at both periods with the result that adolescents at the older ages were more likely to be mothers than those of younger ages. Overall, for all countries combined, the share of mothers at age 15 was just about 1 per cent at 1990 and 2010. By age 19 this had increased to about 30 per cent in 1990 and 21 per cent in 2010. The pattern is the same for each country, but to varying degrees. In 2010 the proportion of mothers at age 15 range

between 0.4 per cent for Trinidad and Tobago and 1.4 per cent observed for Belize and Jamaica. By age 19 the proportions had increased to the lowest, 13 per cent for Trinidad and Tobago to a high of about 27 per cent for Belize.

Table 25
Percentage distribution of mothers by single years of age for adolescents and broad age group for adults for selected Caribbean countries: 1990 and 2010

Year and Age	Total	Belize	Grenada	Jamaica[a]	St. Lucia	Trinidad and Tobago[a]
1990						
15	1.4	1.2	2.9	1.7	2.2	0.6
16	6.0	7.7	6.0	7.1	4.8	3.2
17	12.2	15.4	13.8	14.8	10.8	6.1
18	20.9	26.2	19.9	24.0	18.8	12.3
19	29.6	35.0	26.5	33.6	27.2	18.9
15-17	**5.2**	**6.0**	**7.4**	**6.2**	**5.9**	**2.7**
18-19	**25.1**	**30.5**	**23.1**	**28.7**	**23.0**	**15.4**
Total 15-19	**11.8**	**13.9**	**13.4**	**13.6**	**12.7**	**6.7**
20 -49	**74.7**	**81.5**	**77.1**	**74.3**	**75.8**	**73.7**
2010						
15	1.1	1.4	1.3	1.4	0.8	0.4
16	3.3	3.9	2.0	3.9	1.9	1.7
17	6.8	9.4	5.6	7.8	4.2	3.7
18	13.2	18.1	8.8	15.2	9.1	8.1
19	20.6	27.3	15.1	23.4	15.0	12.9
15-17	**3.6**	**4.9**	**3.0**	**4.3**	**2.3**	**1.6**
18-19	**16.8**	**22.6**	**11.9**	**19.2**	**12.1**	**10.4**
Total 15-19	**8.4**	**11.7**	**6.6**	**9.7**	**6.1**	**4.8**
20-49	**68.8**	**73.6**	**64.3**	**73.1**	**66.9**	**58.3**
Percentage Change 15-19	-28.8	-15.8	-50.8	-28.7	-52.0	-28.4
Percentage Change 20-49	-7.9	-9.7	-16.6	-1.6	-11.7	-20.9

Sources: MATERNILAC Database for all countries excluding Jamaica. Census of Jamaica, 1991 and 2011. Calculations based on Annex 9.
[a] 14 year old included with age 15 for 1990 Jamaica and Trinidad and Tobago and 2010 Trinidad and Tobago.
Note: See Annex 1. Technical Notes and Notes to the Tables for details of calculations.

At 1990 for 2 of the 5 countries, Grenada and St. Lucia, adolescents of ages 18 and 19 years old were between 3 and 4 times more likely than those 15-17 years old, to be mothers. For the remaining 3 countries, Belize, Jamaica and Trinidad and Tobago the older cohort was 5 or 6 times more likely to be mothers. By 2010 the odds of being a mother was still higher for the older cohort but there were changes in the relationship as for some countries the levels decreased while for some there were increases. For St. Lucia the likelihood of motherhood for ages 18-19 years rose from 4 times the 15-17 years old in 1990 to 5 times in 2010. For Grenada there was an increase from 3 times to 4 times and for Trinidad and Tobago the odds of motherhood for the older adolescents rose by 1 point from 6 times to 7 times more than the younger adolescents. For St. Vincent and the Grenadines the change was a fall from 4 times to 3 times.

Not unexpectedly levels of childlessness were high among young adolescent women. Estimates of childlessness at 2010 for the 5 selected countries shown in table 26 was 92 per cent up from the 88 per cent observed at 1990. At age 15 years old about 99 per cent of the young women were childless. Among the countries the highest proportion of childless adolescent women at 2010 is observed for Trinidad and Tobago (95 per cent) and the lowest for Belize (88 per cent) the only country with a proportion under 90 per cent. Increases in the proportions between 1990 and 2010 were small, from about 8 per cent for Grenada and St. Lucia from 87 per cent to 93 per cent and from 87 per cent to 94 per cent respectively for these two countries, to 2 per cent for Trinidad and Tobago. The movement in this latter case was from 93 per cent to 95 per cent.

Table 26
Percentage distribution of childless women by single years of age for adolescents and broad age group for adults for selected Caribbean countries: 1990 and 2010

Year and Age	Total	Belize	Grenada	Jamaica[a]	St. Lucia	Trinidad and Tobago[a]
1990						
15	98.6	98.8	97.1	98.3	97.8	99.4
16	94.0	92.3	94.0	92.9	95.2	96.8
17	87.7	84.6	86.2	85.2	89.2	93.9
18	79.1	73.8	80.1	76.0	81.2	87.7
19	70.4	65.0	73.5	66.4	72.8	81.1
15-17	**94.8**	**94.0**	**92.6**	**93.8**	**94.1**	**97.3**
18-19	**74.5**	**69.5**	**76.9**	**71.3**	**77.0**	**84.6**
Total 15-19	**88.2**	**86.1**	**86.6**	**86.4**	**87.3**	**93.3**
20-49	**25.3**	**18.5**	**22.9**	**25.7**	**24.2**	**26.3**
2010						
15	98.9	98.6	98.7	98.6	99.2	99.6
16	96.7	96.1	98.0	96.1	98.1	98.3
17	93.2	90.6	94.4	92.2	95.8	96.3
18	86.8	81.9	91.2	84.8	90.9	91.9
19	79.4	72.7	84.9	76.6	85.0	87.1
15-17	**96.4**	**95.1**	**97.0**	**95.7**	**97.7**	**98.4**
18-19	**83.2**	**77.4**	**88.1**	**80.8**	**87.9**	**89.6**
Total 15-19	**91.6**	**88.3**	**93.4**	**90.3**	**93.9**	**95.2**
20-49	**31.2**	**26.4**	**35.7**	**26.9**	**33.1**	**41.7**
Percentage Change						
15-19	3.9	2.6	7.9	4.5	7.6	2.0
Percentage Change						
20-49	23.3	42.7	55.9	4.7	36.8	58.6

Sources: MATERNILAC Database for all countries excluding Jamaica. Census of Jamaica, 1991 and 2011. Calculations based on Annex 9.
[a] 14 year old included with age 15 for 1990 Jamaica and Trinidad and Tobago and 2010 Trinidad and Tobago.
Note: See Annex 1. Technical Notes and Notes to the Tables for details of calculations.

Childlessness is the complement to the proportion of women who are mothers so in the same way that motherhood increased with age, childlessness declined with age, being higher among the younger of the two adolescent cohorts. At 2010, 96 per cent of women 15-17 years was childless, 13 percentage points more than the approximately 83 per cent of women 18-19 years. Comparisons with the adult population show wide differentials in the percentage childless and also in the extent of the increase over the 20 years. In 2010 the proportion of adult women estimated as childless was 31 per cent compared to the 92 per cent for adolescents as previously described. The 31 per cent for adults represents an increase of about 23 per cent over the 25 per cent childless at 1990. This increase was almost 6 times the upward movement of approximately 4 per cent for the adolescents.

The data for Antigua and Barbuda, Barbados and St. Vincent and the Grenadines, available for 1990 and 2000 only and presented in table 27 reflect a similar pattern of age distribution with motherhood increasing with age as childlessness decreased among older women. What should be noted is that of the 8 countries with data for 1990, Antigua and Barbuda had the highest proportion of mothers (about 3 per cent) at age 15 years, about 3 times the proportion for Barbados. This dropped to about 2 per cent at 2000 to be the same level as Barbados which showed a slight upward movement over the period. For St. Vincent and the Grenadines the proportion of mothers at age 15 years in 1990 was approximately 2 per cent. Like Barbados there was an upturn over the period to 3 per cent at 2000.

At 2000, by age 19 years, the share of motherhood was 18 per cent for Antigua and Barbuda and 21 per cent for Barbados. With the level of reduction at age 15 for Antigua and Barbuda, described earlier, the fall in proportions for the 15-19 years group as a whole was by about 27 per cent from approximately 12 per cent to approximately 9 per cent. For St. Vincent and the Grenadines the

fall was by about 16 per cent from 15 per cent to 13 per cent. This compares with a considerably smaller decline of only 1 per cent for Barbados.

Table 27
Percentage distribution of mothers and childless women by single years of age for adolescents and broad age group for adults for Antigua and Barbuda, Barbados and St. Vincent and the Grenadines: 1990 and 2000

Year and Age	Mothers			Childless		
	Antigua & Barbuda	Barbados	St. Vincent & the Grenadines	Antigua & Barbuda	Barbados	St. Vincent & the Grenadines
1990						
15	3.4	1.3	2.4	96.6	98.7	97.6
16	5.6	3.0	6.6	94.4	97.0	93.4
17	9.2	7.0	14.0	90.8	93.0	86.0
18	15.6	12.4	23.7	84.4	87.6	76.3
19	24.9	18.9	31.3	75.1	81.1	68.7
15-17	**6.0**	**3.9**	**7.5**	**94.0**	**96.1**	**92.5**
18-19	**20.3**	**15.6**	**27.4**	**79.7**	**84.4**	**72.6**
Total 15-19	**11.8**	**8.6**	**15.2**	**88.2**	**91.4**	**84.8**
20-49	**73.4**	**69.2**	**81.5**	**26.6**	**30.8**	**18.5**
2000						
15	1.6	1.6	2.5	98.4	98.4	97.5
16	3.2	2.8	7.1	96.8	97.2	92.9
17	8.3	6.3	11.4	91.7	93.8	88.6
18	12.7	12.7	19.2	87.3	87.3	80.8
19	17.9	21.4	24.5	82.1	78.6	75.5
15-17	**4.3**	**3.6**	**7.1**	**95.7**	**96.4**	**92.9**
18-19	**15.2**	**16.9**	**21.6**	**84.8**	**83.1**	**78.4**
Total 15-19	**8.6**	**8.5**	**12.8**	**91.4**	**91.5**	**87.2**
20-49	**74.5**	**69.5**	**81.1**	**25.5**	**30.5**	**18.9**
Percentage Change 15-19	-27.1	-1.2	-15.8	3.6	0.1	2.8
Percentage Change 20-49	1.5	0.4	-0.5	-4.1	-1.0	2.2

Sources: MATERNILAC Database for all countries excluding Jamaica. Census of Jamaica, 1991 and 2011.
Note: See Annex 1. Technical Notes and Notes to the Tables for details of calculations.

In 1990 childlessness was lowest for adolescents of St. Vincent and the Grenadines (85 per cent) compared to 88 per cent and 91 per cent for the adolescents of Antigua and Barbuda and Barbados respectively. Increases over 10 years were highest for Antigua and Barbuda (4 per cent) compared to 3 per cent for St. Vincent and the Grenadines and a minimal 0.1 per cent for Barbados. The effect of these changes was a closing of the gap between Antigua and Barbuda and Barbados as the proportion childless for 2000 was 91 per cent and 92 per cent respectively, while the proportion childless for St. Vincent and the Grenadines remained under 90 per cent at approximately 87 per cent. Of interest is the decline in childlessness over the 10 years among the adult women of Antigua and Barbuda from 27 per cent to 26 percent while for Barbados the proportion remained static at approximately 31 per cent. On the other hand the percentage of childless adult women for St. Vincent and the Grenadines moved by 2 per cent from 18.5 per cent to 18.9 per cent.

In addition to deriving proportions of mothers and childless women census data based on children ever-born is also the basis for calculation of children born per mother/per 1,000 mothers. Typically at this age the number of children born to a woman rarely exceeds 4. Table 28 presents data for 4 countries Barbados, Belize, Jamaica and Trinidad and Tobago for 1990 and 2010 for adolescent females of ages 15-19 years. The MATERNILAC database does not provide data on number of children ever born. The data shown in the table have been extracted from available reports. The 1990 reports did not include

the data for 14 year old women. As a result this age is also excluded from 2010 in order to ensure consistency for comparative purposes.

Table 28
Indicators of motherhood and childlessness for adolescent women for selected Caribbean countries: 1990 and 2010

Country and Date	Women	Mothers	Children	Mothers per 1000 Women	Children per 1000 Women	Children per 1000 Mothers
Total						
1990	198 090	27 231	33 666	137	170	1 236
2010	208 874	17 944	20 433	86	98	1 139
Percentage Change	5.4	-34.1	-39.3	-37.2	-42.4	-7.8
Barbados						
1990	11 198	958	1 032	86	92	1 077
2010	9 418	524	572	56	61	1 092
Percentage Change	-15.9	-45.3	-44.6	-34.9	-33.7	1.4
Belize						
1990	10 167	1 552	2 401	153	236	1 547
2010	17 317	2 019	2 443	117	141	1 210
Percentage Change	70.3	30.1	1.7	-23.5	-40.3	-21.8
Jamaica						
1990	124 814	20 540	24 915	165	200	1 213
2010	133 475	12 990	14 291	97	107	1 100
Percentage Change	6.9	-36.8	-42.6	-41.2	-46.5	-9.3
Trinidad and Tobago						
1990	51 911	4 181	5 318	81	102	1 272
2010	48 664	2 411	3 127	50	64	1 297
Percentage Change	-6.3	-42.3	-41.2	-38.3	-37.3	2.0

Source: National Census Reports.

Overall for the 4 countries the number of children ever born per mother at 1990 was 1.2 which dropped to 1.1 in 2010. In 1990 the adolescents of Belize had 1.5 children per mother, the highest, followed by Trinidad and Tobago and Jamaica with 1.3 and 1.2 respectively and Barbados, the lowest (1.1).

There is a mixed picture when changes over the period are examined. Two of the 4 countries showed declines. Belize had the largest decline from 1.5 to 1.2, a fall of 22 per cent while for Jamaica the downward movement was by about 9 per cent from 1.2 to 1.1. In the case of Barbados and Trinidad and Tobago, the number of children ever born per mother moved up by an estimated 1.4 per cent and 2.0 per cent respectively. Table 28 shows that when expressed per 1,000 mothers children per mother for Barbados moved from 1,077 to 1,092 and for Trinidad and Tobago from 1,272 to 1,297.

One aspect of the adolescent fertility pattern and changes which may be examined is the extent to which the two components of motherhood and childlessness contribute to the changes in rates. In his seminal work *Fertility and Mating in Four West Indian Populations*, Roberts (1976), proposes a methodology for assessing the contribution of each component to the changes in overall fertility, as indicated by the number of children born. Fertility rates, he argues "are the products of the two components as:

$F = F_1 * F_2$

Where

F= the rate of children ever born per mother.

F_1 = the proportion of women who are mothers.

F_2 = the number of children ever born per mother.

If this is considered to be the initial (1990) fertility then the position at 2010 may be: $F' = F'_1 * F'_2$

This expression affords a ready indication of the degree to which childlessness or the complements of F^1 and F^1_1 influence the general level of fertility. It is also possible to express the change between F and F^1 as the sum of two components, one reflecting changes in childlessness and the other indicating the rate of childbearing among women who are already mothers. In accordance with the derivatives of products it follows that:

$$F' - F = F'_2 (F'_1 - F_1) + F_1 (F'_2 - F_2)$$

Where the first term on the right hand side represents the component of change due to childlessness and the second term represents the component indicating size of family as assessed on the experience of mothers only" (Roberts1976, 54).

Using the data for the 4 countries as presented in table 28 it is possible to apply the formula as developed.

The findings with respect to the contribution of the two components of fertility change-childlessness and children ever born (family size) reveal that childlessness had the greater impact in 3 of the 4 countries (table 29). For Trinidad and Tobago and Jamaica increasing childlessness accounted for over 70 per cent of the decrease in adolescent fertility. For Barbados the effect of childlessness was more marked, with this factor accounting for more than 100 per cent of the changes observed. For Belize, with childlessness contributing less than 50 per cent of the change the implication is that the family size component and more specifically the decline in children per mother from 1.5 to 1.2 had the greater impact.

Table 29
Children per woman, mothers per woman, children per mother for 1990 and 2010 and percentage of change over the period due to increases in childlessness for selected Caribbean countries

Country	Children Per Woman			Mothers per Woman		Children per Mother		Percentage of change in children per woman 1990-2010 due to change in childlessness 1990-2010
	1990	2010	Change	1990	2010	1990	2010	
Total	**0.170**	0.098	-0.072	0.136	0.087	1.249	1.119	76.15
Barbados	0.092	0.061	-0.031	0.086	0.056	1.077	1.092	105.68
Belize	0.236	0.141	-0.095	0.153	0.117	1.547	1.210	45.85
Jamaica	0.200	0.107	-0.093	0.163	0.097	1.213	1.110	78.06
Trinidad and Tobago	0.102	0.064	-0.038	0.08	0.056	1.279	1.150	72.63

Source: Calculated from table 28.

C. Parity

Further insights into the movements in adolescent fertility can be obtained by examining changes in a given year by birth: order (parity). Harewood (1975, 53) argues that if women are tending to have fewer children then it is expected that the proportion of high-order births will decline and the proportion of first and second order births will increase. Data on this aspect of fertility are available from the vital registration system. Table 30 shows the proportion of maternities of each order for selected years between 2000 and 2012 for Bahamas, Jamaica and St. Lucia. Jamaica is the only country showing second-order births for the under 15 year old. For adolescents under 15 years old first order maternities for Bahamas and St. Lucia are 100 per cent at both dates. For Jamaica the proportion increased from 98 per cent to 99 per cent over the period while second-order cases declined from 2 per cent to 1 per cent. The 155 cases of births to the younger adolescents for Jamaica at 2010 represents a decline of more than 40 per cent over 2004 and compared to the 347 recorded for 2000 (not shown in the table), the fall was by 55 per cent.

Table 30
Percentage distribution of births to adolescent mothers by parity for selected Caribbean countries: 2000 and 2010

Age and Parity/Birth Order	Bahamas		Jamaica		St. Lucia	
	2005	2012	2004	2010	2000	2011
Total Births under 15	8	4	268	155	7	3
I	100.0	100.0	97.8	98.7	100.0	100.0
2			2.2	1.3	-	
3+			-		-	
Total Births 15-19	531	456	8 021	7 104	476	296
I	91.0	90.5	81.0	85.7	81.1	88.9
2	7.9	7.7	17.1	13.2	16.2	10.5
3+	1.1	1.8	1.9	1.1	2.7	0.6

Source: Country Vital Statistics Reports.
Note: See Annex 1. Technical Notes and Notes to the Tables for details of source.

For the older adolescents, the pattern is generally one of increasing proportions of first-order maternities occurring simultaneously with decreased proportions of second- and third-order cases. First-order cases for this age group remained about the same (91 per cent) for the Bahamas at both dates but increased from 81 per cent to 86 per cent for Jamaica and from 81 per cent to 89 per cent for St. Lucia. Decreases in the second-order births are evident for the 3 countries from 7.9 per cent to 7.7 per cent for Bahamas, 17.1 per cent to 13.2 per cent for Jamaica and 16.2 per cent to 10.5 per cent for St. Lucia. The small number of third-order births for Bahamas increased from 1.1 per cent to 1.8 per cent but for the other 2 countries there are declines from 1.9 per cent to 1.1 per cent for Jamaica and a considerable fall from 2.7 per cent to 0.6 per cent for St. Lucia. The changes observed can be accepted as indicative of the declines in adolescent fertility reflected in the indicators previously presented.

The decrease in high-order births among Jamaican adolescents may in part be attributed to the efforts of the Women's Centre of Jamaica which intervenes after a first pregnancy and has as one of its primary goals, to delay a second pregnancy until professional goals are achieved.

D. Reproductive inequalities

As indicated in the literature review, the issue of social inequalities as related to changes in adolescent fertility has emerged as an important topic. The observation is that there are social inequalities which are not reflected in regional or country level averages when adolescent birth rates are examined. Education is the most often used indicator of social status and is a very prominent variable in the study of correlates of adolescent fertility. As defined by ECLAC (2006, 182) inequality refers to important and systematic differences to be found among individuals and social groups in any given population. In the ECLAC study, it is proposed that "Inequalities in reproduction correspond to gaps in the probabilities of more intensive and earlier reproduction between population groups or geographical units which are differentiated, respectively, by their socio-economic level and urban or rural residence." Urban and rural distinctions are not very marked in many of the small countries of the region so the discussions on these differentials are usually restricted to the larger countries.

The findings of the specialised surveys for a number of countries in the region provide some basis for an analysis of inequalities related to levels of adolescent fertility. The topic will be discussed in terms of the differentials by residence, education and socio-economic status observed for the indicators of adolescent fertility, the adolescent birth rate the proportion of adolescent mothers and the proportion of childless adolescent women. The tables presented summarise the results of specialised surveys, census data from the MATERNILAC database and from National Census Reports, for selected Caribbean countries within the review period covered by this study.

E. Residence

Table 31 presents the adolescent birth rate and the total fertility rate by residence for Jamaica at 1997 and 2008. Residence is classified by the Kingston Metropolitan Area (KMA) the main urban conglomerate for the country, other urban comprising all other urban centres and rural. The KMA comprises parish Kingston, the urban part of the adjoining parish of St. Andrew, the capital of the adjoining parish of St. Catherine and one other large urban centre in St. Catherine. The category 'other urban' comprises all other parish capitals and urban centres of other parishes. This distinction which was made initially for studies of poverty assessments beginning in the late 1980s to capture the observable differences in lifestyle, housing and consumption in the three types of areas, has been retained for all specialised surveys conducted since that time.

Table 31
Adolescent birth rate and total fertility rate by residence for Jamaica: 1997 and 2008

Residence	1997		2008		Percentage Change	
	ABR	TFR	ABR	TFR	ABR	TFR
Total	112	2.8	72	2.4	-35.7	-14.3
K MA	82	2.2	51	1.9	-37.8	-13.6
Other Urban	114	2.6	83	2.3	-27.2	-11.5
Rural	133	3.3	74	2.7	-44.4	-18.2

Source: Jamaica Reproductive Health Survey, 1997 and 2008.

The data show that the rates vary by residence. In 1997 urban adolescent women were having fewer children than their rural counterparts. The ABR for women in the KMA (82) and other urban (114) reflect on average .05 children per woman and 0.2 children per woman less respectively compared to rural adolescent women. A similar pattern is observed for the TFR with the 3.3 for rural women being higher than the 2.6 for other urban and 2.2, the lowest for the KMA. The figures for 2008 show a somewhat reversal of the pattern when adolescent birth rates are examined. At this point while the adolescents of the KMA remain the group with the least children with a rate of 51, the adolescents of the other urban area now were having more children than rural women, with a rate of 83 compared to 74. This is likely linked to the extent of the declines over the period. Declines were highest for rural women (44 per cent), compared to 38 per cent for the KMA and the smallest, 27 per cent for other urban. A possible contributing factor to changing regional patterns is internal migration which sees the movement of young rural women into the urban centres.

Notwithstanding these shifts in the ABR, the pattern for the TFR remained unchanged with the lowest fertility for the KMA and the highest for rural women being maintained, the likely impact of changes in adult fertility which has a greater influence on the TFR.

For Belize, variations in urban-rural fertility among adolescent women are shown in table 32. In 1991 rural adolescents were having about 0.06 more children per woman than their urban counterparts. Between 1991 and 2011 the ABR for urban women fell by about two-thirds (67 per cent) compared to a 51 per cent decrease among the rural women. While rural adolescent women continued to have a higher birth rate than urban adolescents, the differential falls to 0.04 children.

Table 32
Adolescent birth rate and total fertility rate by area for Belize: 1991 and 2011

Residence	1991		2011		Percentage Change	
	ABR	TFR	ABR	TFR	ABR	TFR
Total	137	4.5	64	2.6	-53.3	-42.2
Urban	117	3.9	39	2.1	-66.7	-46.2
Rural	174	5.8	82	3.1	-51.1	-46.6

Sources: Belize Family Health Survey, 1991. Belize Multiple Indicator Cluster Survey, 2011.

F. Education

Education consistently appears as an important determinant of fertility-related behaviour. Generally, the more educated the lower the fertility. This is evident from tables 33 and 34 which show the adolescent birth rate by educational level as measured by the number of years of schooling for Jamaica in 2008 and Belize in 2011. In the Jamaican school system 0-9 years would cover primary and secondary up to grade 11. Grades 12 and 13 of secondary school cover 10-12 years and 13+ years indicate post secondary and tertiary level education. The rates presented show highest fertility (140 ABR and 3.4 TFR) for the least educated and lowest fertility (12 ABR and 1.6 TFR) for the most educated.

Table 33
Adolescent birth rate and total fertility rate by educational attainment for Jamaica: 2008

Years of Schooling	ABR	TFR
Total	72	2.4
0-9	140	3.4
10-12	70	2.3
13+	12	1.6

Source: Jamaica Reproductive Health Survey, 2008.

Table 34
Adolescent birth rate by educational attainment for Belize: 2011

Educational Level	ABR
Total	64
Primary and less	145
Secondary	37

Source: Belize Multiple Indicator Cluster Survey, 2011.
Note: The category 'Primary and less' represents a merging of the categories 'None' and 'Primary' presented in the MICS report where the estimate for 'None' was reported as '0' because of the small sample size.

A similar pattern is seen for Belize (tables 34 and 35) where the categories for education indicate the levels, no schooling, primary and secondary only. Both the ABR and the TFR show women with secondary level schooling having the lowest ABR (37) and TFR (2.0) compared with 145 and 3.3 for the ABR and the TFR respectively for less educated women. What is noticeable is the considerable differential (108 births per 1,000 women) in the adolescent birth rate between the two groups of women.

Table 35
Total fertility rate by educational attainment for Belize: 2011

Educational Level	TFR
Total	2.6
None	6.0
Primary	3.3
Secondary	2.0

Source: Belize Multiple Indicator Cluster Survey, 2011.

The consideration of inequalities as related to education must be viewed within the broader context of changing and improved educational attainment of the adolescent population of the Caribbean. This was highlighted previously based on data presented in tables 20 and 21 and accompanying graphs. Tables 36-38 which follow, present available data on motherhood and educational attainment for 6 countries for 2000 and 4 countries for 2010. Table 36 shows the combined totals for the 6 countries covered in 2000. The table shows that 14 per cent of girls aged between 15 and 19 years were mothers in 2000. When this percentage is disaggregated by educational level the proportions ranged from a high

just about twice the total to a low that was one half of the total. The data reflect decreased rates of motherhood at each higher level of education. At 2000, approximately 28 per cent of the least educated women were mothers. The proportion fell to 14 per cent for young women with secondary level education and to a lower 7 per cent for young women with post secondary education.

Table 36
Percentage distribution of adolescent mothers by single years of age and highest level of educational attainment for selected Caribbean countries: 2000

Age	Educational Level			Total
	Primary or lower	Secondary	Post Secondary	
15	9.6	2.2	6.7	2.5
16	17	4.3	8.7	5.1
17	21.7	11.5	5.5	11.5
18	39.4	22.3	5.7	20.6
19	52.4	35.4	7.8	31.3
15-17	**16.5**	**5.8**	**5.6**	**6.3**
18-19	**45.5**	**28.4**	**6.8**	**25.7**
Total 15-19	**28.4**	**13.7**	**6.6**	**14.0**

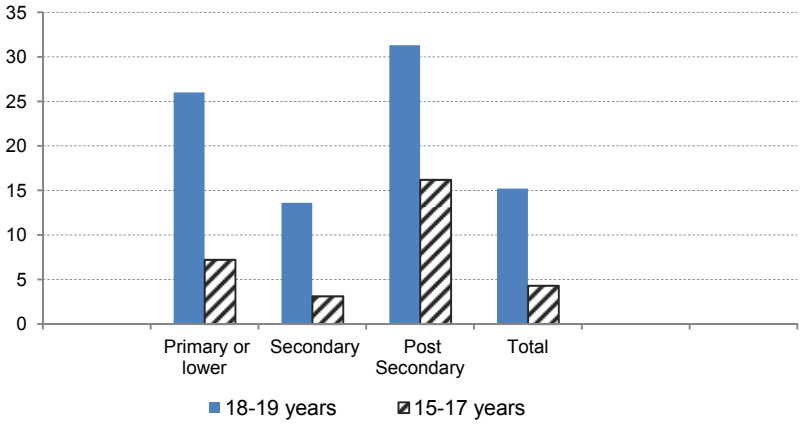
Sources: MATERNILAC Database for all countries excluding Jamaica. Census of Jamaica, 2001.
Note: Combined totals for 6 countries shown in table 37.

Table 37
Percentage distribution of adolescent mothers by single years of age and highest level of educational attainment for selected Caribbean countries: 2000

Age	Primary or Lower	Secondary	Post Secondary	Total	Primary or Lower	Secondary	Post Secondary	Total
	Antigua and Barbuda				Bahamas			
15	1.1	1.9	3.2	1.6	0.0	1.1	0.0	1.1
16	10.3	1.6	23.5	3.2	0.0	3.9	0.0	3.9
17	12.7	6.0	30.0	8.3	20.0	7.1	11.1	7.3
18	22.1	11.1	25.0	12.7	33.3	17.7	3.5	14.7
19	33.3	16.2	35.9	17.9	39.5	27.6	4.7	22.2
15-17	**7.2**	**3.1**	**16.2**	**4.3**	**20.0**	**4.0**	**11.1**	**4.1**
18-19	**26.0**	**13.6**	**31.3**	**15.2**	**37.5**	**22.7**	**4.1**	**18.6**
Total 15-19	**13.0**	**7.4**	**23.7**	**8.6**	**33.8**	**10.1**	**4.5**	**9.7**
	Barbados				Jamaica			
15	0.0	1.6	0.0	1.6	41.2	2.4	0.0	2.9
16	33.3	2.7	0.0	2.8	38.2	4.6	0.0	5.4
17	50.0	7.4	0.9	6.3	35.5	12.8	5.6	12.8
18	16.7	16.0	3.7	12.7	49.0	24.4	6.0	22.5
19	46.2	28.8	5.7	21.4	61.1	38.8	8.1	34.3
15-17	**33.3**	**3.7**	**0.9**	**3.6**	**37.5**	**6.3**	**5.6**	**7.0**
18-19	**32.0**	**22.0**	**4.7**	**16.9**	**54.9**	**31.1**	**7.2**	**28.1**
Total 15-19	**32.3**	**9.3**	**3.8**	**8.5**	**47.3**	**15.0**	**6.9**	**15.4**
	St. Lucia				St. Vincent and the Grenadines			
15	1.0	0.6	9.0	0.8	5.1	1.5	50.0	2.5
16	3.9	3.2	0.0	3.2	20.2	3.1	0.0	7.1
17	6.9	5.6	10.1	6.1	25.3	6.8	16.7	11.4
18	21.4	9.0	9.1	12.0	38.7	12.0	13.3	19.2
19	33.6	18.5	11.5	20.3	47.1	16.4	0.0	24.5
15-17	**3.8**	**3.3**	**8.0**	**3.4**	**16.7**	**3.9**	**18.2**	**7.1**
18-19	**26.4**	**13.7**	**10.6**	**16.0**	**42.5**	**13.9**	**5.7**	**21.6**
Total 15-19	**9.2**	**8.2**	**10.0**	**8.2**	**27.5**	**7.8**	**8.7**	**12.8**

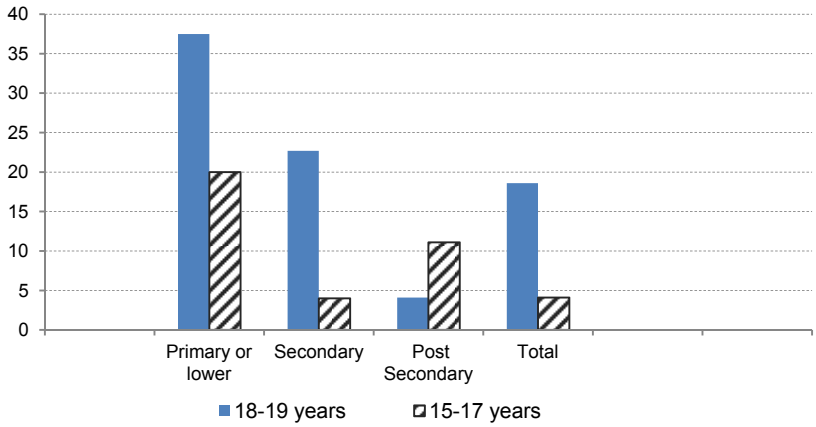
Sources: MATERNILAC Database for all countries excluding Jamaica. Census of Jamaica, 2001. Calculations for educational level based on Annex 10. Excludes persons not reporting educational level.

Figure 6
Percentage distribution of adolescent mothers by highest level of education attained for Antigua and Barbuda: 2000



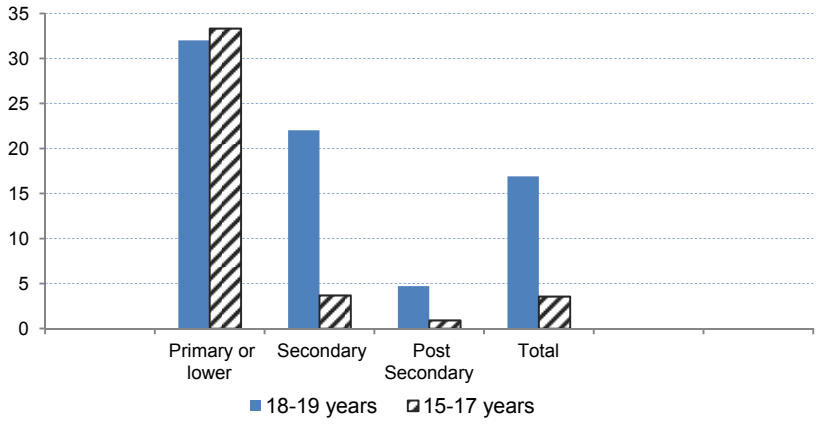
Source: Table 37.

Figure 7
Percentage distribution of adolescent mothers by highest level of education attained for Bahamas: 2000



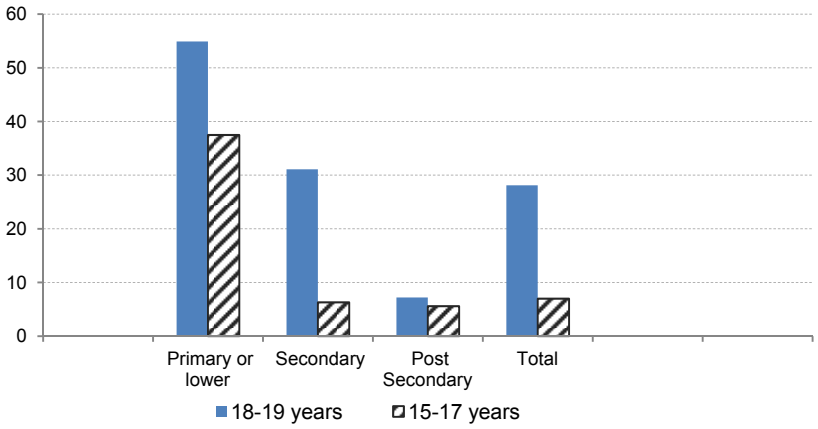
Source: Table 37.

Figure 8
Percentage distribution of adolescent mothers by highest level of education attained for Barbados: 2000



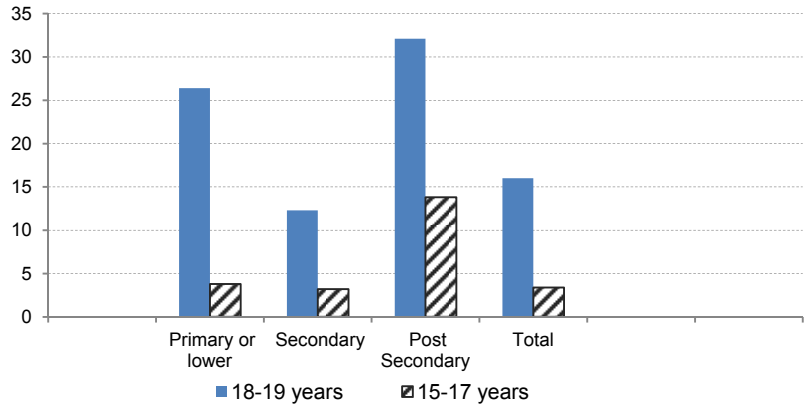
Source: Table 37.

Figure 9
Percentage distribution of adolescent mothers by highest level of education attained for Jamaica: 2000



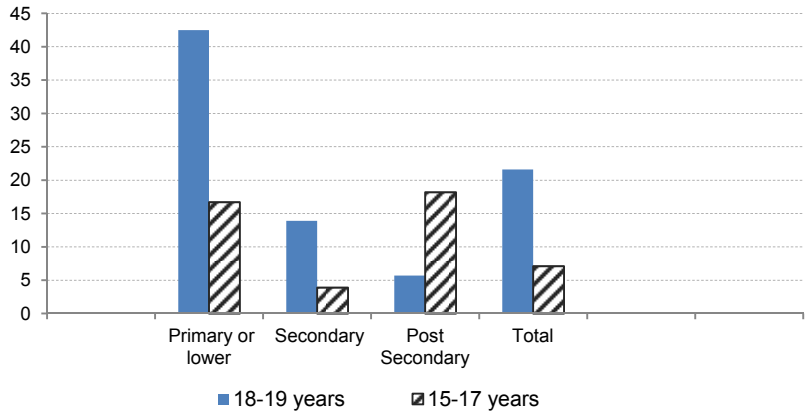
Source: Table 37.

Figure 10
Percentage distribution of adolescent mothers by highest level of education attained for St. Lucia: 2000



Source: Table 37.

Figure 11
Percentage distribution of adolescent mothers by highest level of education attained for St. Vincent and the Grenadines: 2000



Source: Table 37.

Table 38
Percentage distribution of adolescent mothers by single years of age and highest level of educational attainment for selected Caribbean countries: 2010

Age	Primary or Lower	Secondary	Post Secondary	Total	Primary or Lower	Secondary	Post Secondary	Total
	Grenada				Jamaica			
15	0.3	2.7	0.0	1.3	18.0	1.2	0.0	1.4
16	2.2	2.0	0.0	2.1	32.0	3.0	0.0	3.9
17	3.4	6.6	6.7	5.5	30.5	8.1	2.6	7.8
18	4.8	10.5	4.9	8.9	38.7	17.0	4.3	15.2
19	17.5	17.6	8.1	15.0	44.4	27.7	8.0	23.4
15-17	**1.7**	**4.1**	**6.5**	**3.0**	**28.5**	**3.9**	**2.6**	**4.3**
18-19	**10.0**	**13.7**	**7.2**	**11.9**	**41.7**	**22.1**	**6.5**	**19.2**
Total 15-19	**3.1**	**8.5**	**7.1**	**6.6**	**35.3**	**9.9**	**5.9**	**9.7**
	St. Lucia				Trinidad and Tobago			
15	0.4	2.0	0.0	0.9	0.9	0.6	0.0	0.6
16	1.0	3.2	11.1	2.1	2.8	1.6	1.3	1.7
17	2.7	4.8	12.9	4.3	4.9	4.0	1.3	3.7
18	18.8	8.1	6.8	9.2	13.6	9.9	2.7	8.1
19	33.6	16.6	4.5	15.4	20.4	18.2	3.8	12.9
15-17	**1.0**	**3.7**	**11.6**	**2.4**	**2.7**	**2.1**	**1.3**	**2.1**
18-19	**25.0**	**12.1**	**5.3**	**12.3**	**16.5**	**13.5**	**3.3**	**10.4**
Total 15-19	**3.8**	**7.9**	**5.8**	**6.3**	**6.5**	**6.1**	**2.9**	**5.6**

Sources: MATERNILAC Database for all countries excluding Jamaica. Census of Jamaica, 2011. Calculations for educational level based on Annex 10. Excludes persons not reporting educational level.

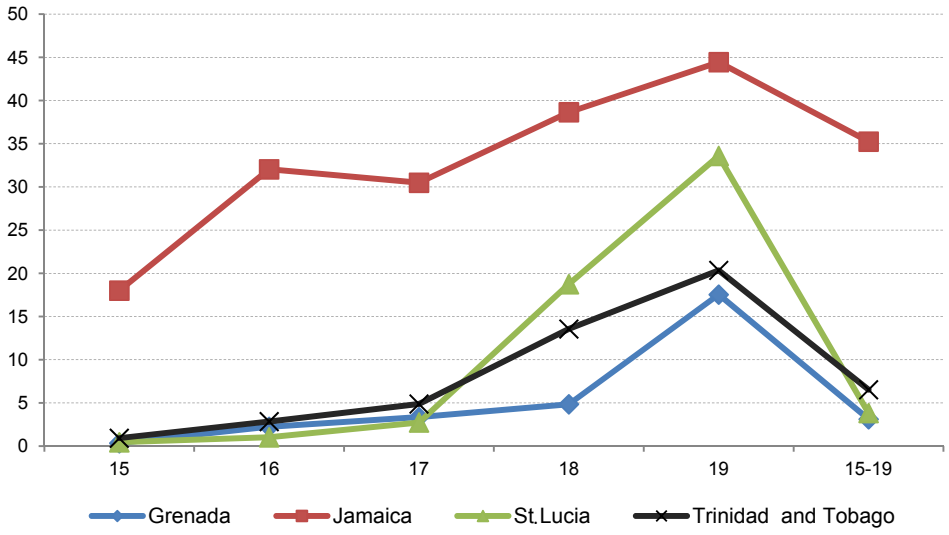
A close look at the age distribution shows that at all educational levels, motherhood was more common for the older adolescents. The table 36 shows fairly wide variations in percentages between the younger and older women. Overall for the 6 countries combined, the share of mothers of ages 18-19 years was highest for the least educated at 46 per cent. This was over 2.5 times more than the 17 per cent for adolescents 15-17 years old. The disparity is even greater among secondary level women, with 28 per cent and 6 per cent of the older and younger women respectively as mothers. In contrast, at the highest level, the post secondary, the difference in proportions between the younger and older women was very minimal. For this group, the share for older adolescents was 7 per cent compared to 6 per cent for the younger group.

The country patterns for 2000 (table 37) present a mixed picture as not all countries reflect the overall pattern of declining rates of motherhood as educational level increased. Four countries – Bahamas, Barbados, Jamaica and St. Vincent and the Grenadines– reflect this general pattern with fairly large variations between the proportions for each educational level. Of the 4 countries, Jamaica had the largest percentage of the least educated mothers (47 per cent) compared to 34 per cent for Bahamas, 32 per cent for Barbados and 28 per cent for St. Vincent and the Grenadines. Motherhood fell considerably for all 4 countries among secondary level adolescents and even further among adolescents with post secondary level. The fall was to 15 per cent among secondary level women for Jamaica, 10 per cent for Bahamas, 9 per cent for Barbados and 8 per cent for St. Vincent and the Grenadines. For these 4 countries motherhood was lowest among post secondary level adolescents being 4 per cent for Barbados, 5 per cent for Bahamas, and 7 per cent and 9 per cent for St. Vincent and the Grenadines and Jamaica respectively.

The pattern is reversed for the other 2 countries with motherhood being the highest among the most educated adolescents of St. Lucia (10 per cent), and Antigua and Barbuda (24 per cent) and lowest among the secondary level women, 8 per cent, and 7 per cent respectively for these 2 countries. Approximately 13 per cent of the least educated young women of Antigua and Barbuda and 9 per cent of those of St. Lucia were mothers at 2000.

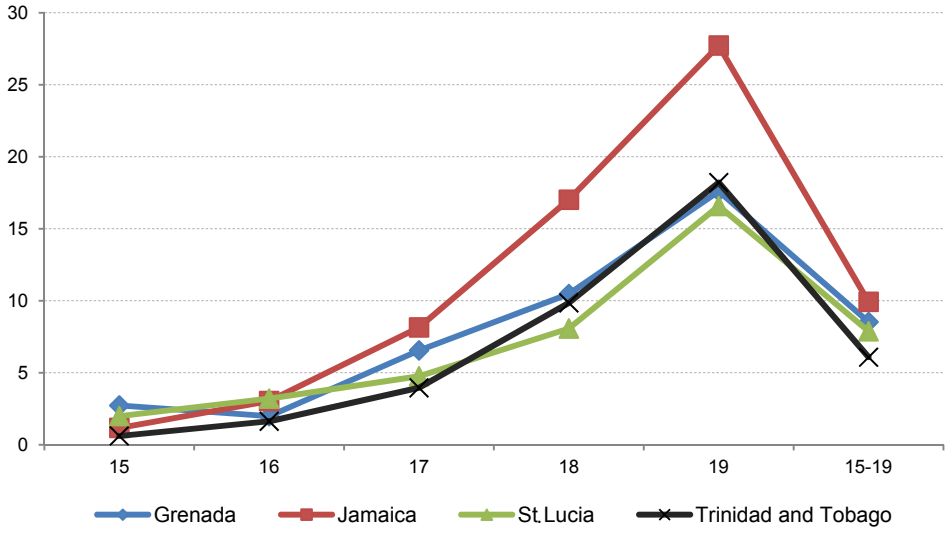
Data on motherhood and educational level for 2010 are available for 4 countries: Grenada, Jamaica, St. Lucia and Trinidad and Tobago and are presented in table 38 and as graphs in figures 12-18.

Figure 12
Percentage distribution of adolescent mothers with primary or lower level of education by age for selected Caribbean countries: 2010



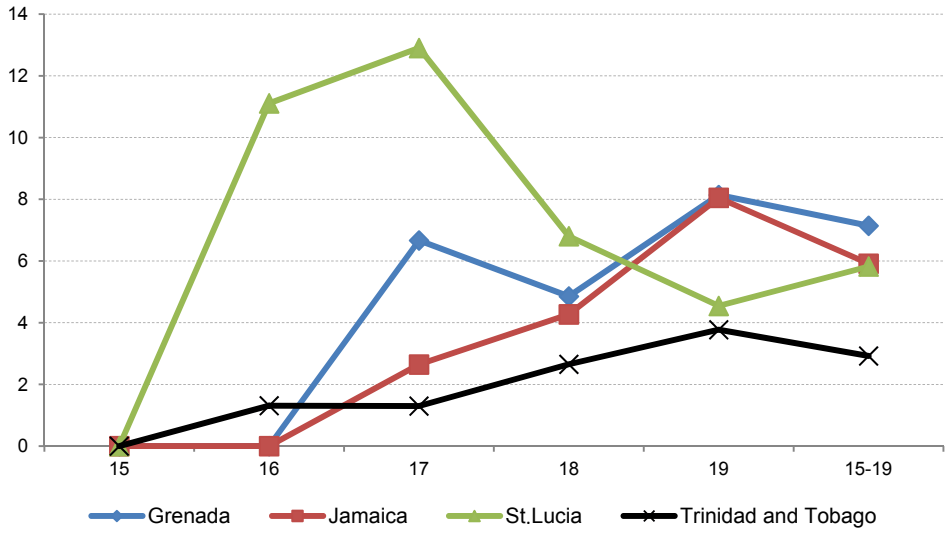
Source: Table 38.

Figure 13
Percentage distribution of mothers with secondary level education by age for selected Caribbean countries: 2010



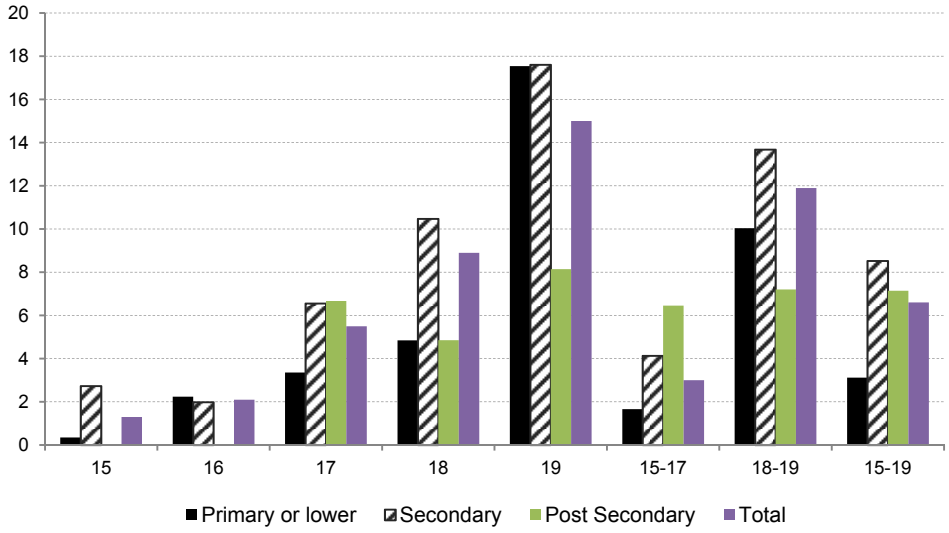
Source: Table 38.

Figure 14
Percentage distribution of adolescent mothers with post secondary level education by age for selected Caribbean countries: 2010



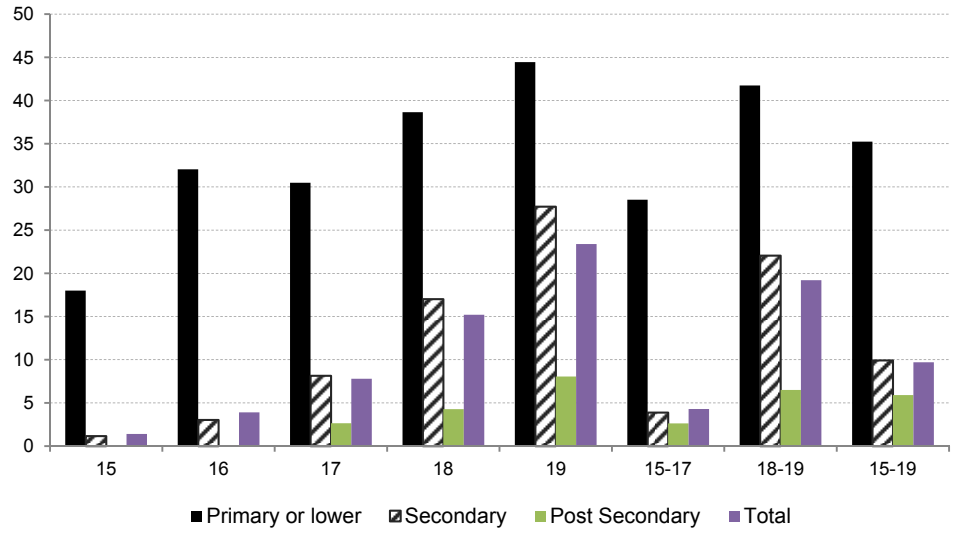
Source: Table 38.

Figure 15
Percentage distribution of adolescent mothers by age and highest level of education attained for Grenada: 2010



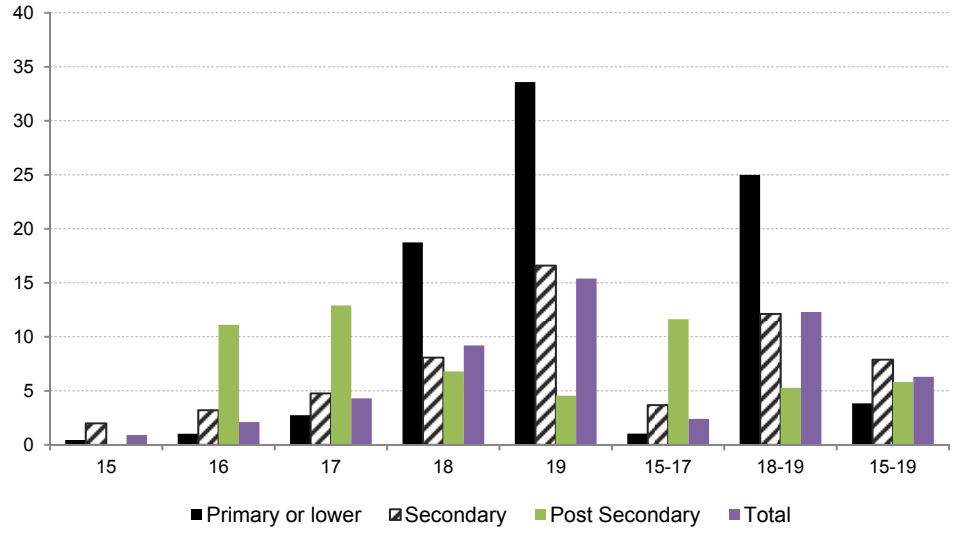
Source: Table 38.

Figure 16
Percentage distribution of adolescent mothers by age and highest level of education attained for Jamaica: 2010



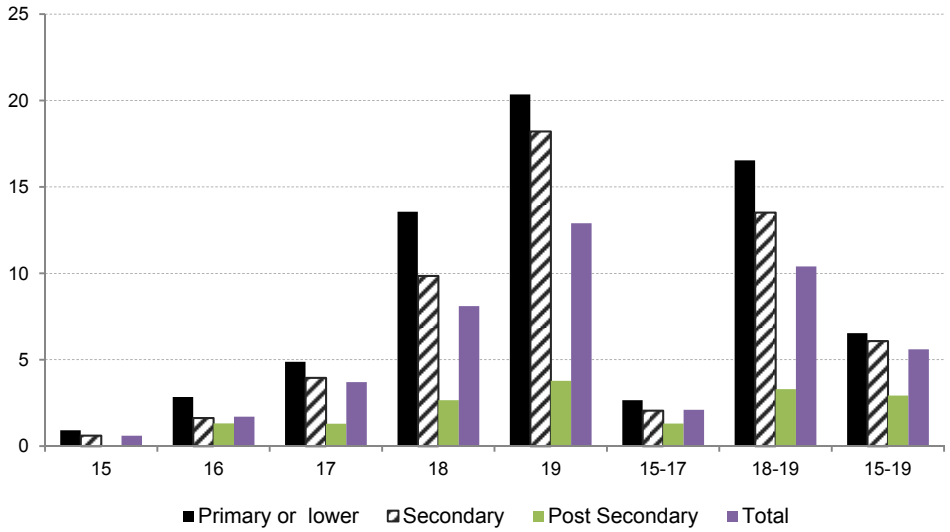
Source: Table 38.

Figure 17
Percentage distribution of adolescent mothers by age and highest level of education attained for St. Lucia: 2010



Source: Table 38.

Figure 18
Percentage distribution of adolescent mothers by age and highest level of education attained for Trinidad and Tobago: 2010



Source: Table 38.

What is immediately apparent is the contrast between Jamaica and the other countries especially as it relates to the high rates of motherhood among the least educated young women. For Jamaica more than one-third (35 per cent) of adolescents at this educational level were mothers. This is three and a half times more than the 10 per cent of all Jamaican adolescents who were mothers at 2010. Figure 12 highlights the wide variation between Jamaica and the other countries at all ages. The percentage of adolescent mothers with the lowest level of education was much lower for the other countries, being approximately 7 per cent for Trinidad and Tobago, 4 per cent for St. Lucia and 3 per cent for Grenada. A pattern similar to Jamaica, whereby the proportion of least educated mothers was higher than the proportion of all mothers is only observed for Trinidad and Tobago, albeit at much lower percentages. About 6 per cent of adolescents of this country were mothers compared to the 7 per cent of the least educated. The pattern for the other 2 countries was in direct contrast. About 7 per cent of Grenadian adolescents and 6 per cent of St. Lucian adolescents were mothers compared to the lower proportions for the least educated adolescents, outlined above.

There was much less variation between Jamaica and the other countries when motherhood among secondary level adolescents is examined. About 10 per cent of Jamaican secondary level adolescents were mothers. Motherhood was most common among secondary level adolescents of Grenada (9 per cent) and St. Lucia (8 per cent). For Grenada this was 3 times the percentage of primary and lower level women and for St. Lucia, 2 times the least educated. For Trinidad and Tobago, motherhood among secondary level adolescents (6 per cent) was only slightly lower than the 7 per cent observed for those with primary or lower level education.

Examination of motherhood among post secondary level adolescents also reveals contrasting patterns between Jamaica and Trinidad and Tobago and the other two countries, with a reversed position of the countries. Motherhood among this group was higher than for the least educated for Grenada (7 per cent) and St. Lucia (6 per cent). For Grenada this actually doubled the 3 per cent at the lower level and for St. Lucia it was one and a half times more. For Jamaica and Trinidad and Tobago the percentage of mothers was lowest among the most educated with 6 per cent for Jamaica and a much lower 3 per cent for Trinidad and Tobago. For these countries, this was the only education group with proportions lower than the total adolescents who were mothers at 2010.

The pattern with respect to age was the same for all countries, motherhood was more prevalent among the older adolescents, with a considerable difference between the two broad age groups in some countries. Such differences were especially marked among the least educated. For St. Lucia

approximately one-quarter (25 per cent) of the least educated women was between the ages of 18 and 19 years, considerably higher than the 1 per cent of ages 15-17 years. For Grenada the older adolescents with the lowest education (10 per cent) were about 5 times as likely as the younger adolescents (2 per cent), to be mothers. For Trinidad and Tobago the least educated older adolescents (17 per cent) were more than 5 times as likely as the younger adolescents (3 per cent) to be mothers. For Jamaica approximately 42 per cent of the least educated 18-19 year old adolescents were mothers compared to 29 per cent of those between the ages of 15 and 17 years.

The availability of data related to motherhood and educational level for 2000 and 2010 for Jamaica and St. Lucia makes it possible to assess the changes which have taken place over the ten years. Table 39 summarises the percentage changes for the adolescent group by educational level. For Jamaica the data show that approximately 10 per cent of girls 15-19 years old at 2010 were mothers compared to 15 per cent at 2000, a fall of 37 per cent. Declines are evident at each educational level, with the largest observed for secondary level adolescents. The movement for these young women more or less follow the overall pattern from approximately 15 per cent to 10 per cent over the period. Movement among the least educated previously identified as the group with the highest percentage of mothers, was by approximately one-quarter from 47 per cent in 2000 to 35 per cent in 2010.

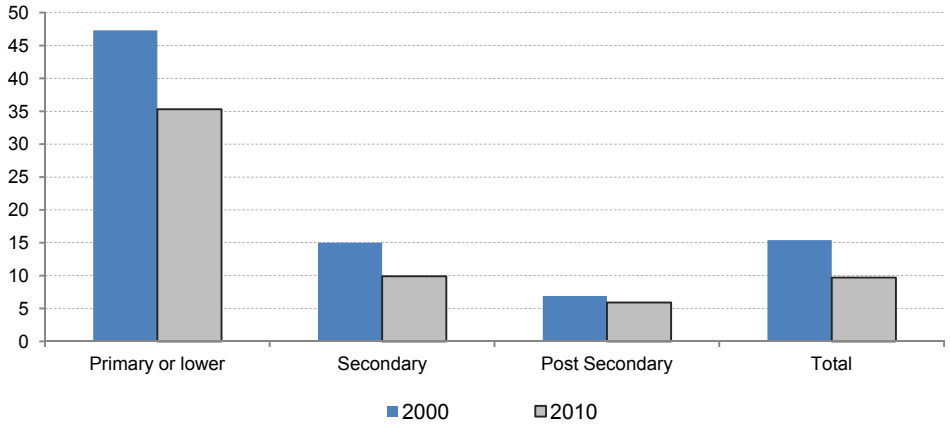
Table 39
Changes in adolescent motherhood by highest level of education attained for Jamaica and St. Lucia: 2000-2010

Educational Level	Jamaica			St. Lucia		
	2000	2010	Change 2000-2010 *(percetage)*	2000	2010	Change 2000-2010 *(percetage)*
Primary and Lower	47.3	35.3	-25.4	9.2	3.8	-58.7
Secondary	15.0	9.9	-34.0	8.2	7.9	-3.7
Post Secondary	6.9	5.9	-14.5	10.0	5.8	-42.0
Total	15.4	9.7	-37.0	8.2	6.3	-23.2

Source: Tables 37 and 38.

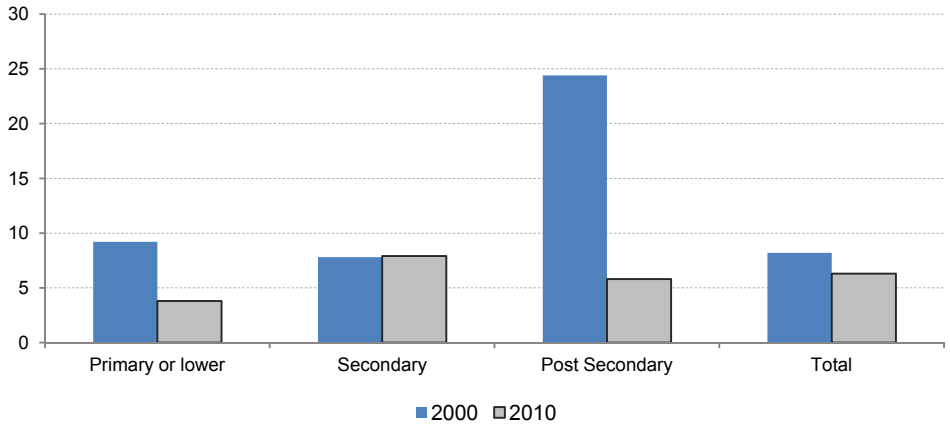
For St. Lucia the overall drop in total adolescent motherhood was 23 per cent. In this case, it was among the least educated that the largest decline of more than one half (58 per cent) occurred. This is followed by a 42 per cent decline among the most educated and of about 4 per cent for secondary level women.

Figure 19
Percentage distribution of adolescent mothers by highest level of education attained for Jamaica: 2000 and 2010



Source: Table 38.

Figure 20
Percentage distribution of adolescent mothers by highest level of education attained for St. Lucia: 2000 and 2010



Source: Table 38.

The data relating motherhood to educational attainment do not appear to reveal any consistent pattern of sharp inequalities for the small number of countries covered. The findings are quite mixed. Countries such as Grenada and St. Lucia with 3 of every 10 persons who in 2010 had gone no further than the primary level saw rates of adolescent motherhood of fewer than 5 per cent among these, the least educated. On the other hand, Jamaica with over 90 per cent attainment of secondary level and higher saw motherhood rates of over 30 per cent among the lowest educational level. Undoubtedly other factors are at play but examination of possible other factors are beyond the scope of this analysis. Lloyd (undated, 2) argues that the rapid growth in educational attainment in developing countries has meant that increasingly young people are becoming sexually mature while attending school. The writer extends this thought that this maturity often occurs during the primary school years. The conclusion is therefore that being in school as an adolescent is likely to have important implications for adolescent health. With this in mind the researcher is of the view that "expanding opportunities for secondary schooling could represent one of the most significant reproductive health interventions for youth" (Lloyd undated, 17).

G. Socio-economic status

An index reflecting socio-economic status or wealth is also frequently used in the assessment of social inequality. In this case an association between fertility and wealth quintiles is made possible from data from specialised surveys. Tables 40 and 41 present data for Jamaica and Belize for the most recent year for which data are available.

Table 40
Adolescent birth rate and total fertility rate by wealth quintiles for Jamaica: 2008

Wealth Quintiles	ABR	TFR
Total	72	2.4
Lowest	118	3.5
Second	74	2.9
Middle	101	2.4
Fourth	38	1.3
Highest	39	1.8

Source: Jamaica Reproductive Health Survey, 2008.

Table 41
Adolescent birth rate and total fertility rate by wealth quintile for Belize: 2011

Wealth Quintiles	ABR	TFR
Total	64	2.6
Lowest	96	4.2
Second	88	2.8
Middle	62	2.4
Fourth	53	2.5
Highest	23	1.7

Source: Belize Multiple Indicator Cluster Survey, 2011.

For both countries, the pattern is the same, women have fewer children as wealth increases. For Jamaica the ABR for the poorest was 118, three times that for the wealthiest (39). For Belize the ABR for the poorest was 96, four times the ABR of 23 for the wealthiest. The pattern observed for the TFR for both countries was similar, the lowest (1.8 for Jamaica and 1.7 for Belize) among the most affluent and the highest of 3.5 and 4.2 for Jamaica and Belize respectively, for the poorest.

H. Ethnicity

Ethnicity is a very important variable in the study of the population dynamics of Belize. The 2010 census data reflect a total of 15 categories representing ethnicity. Nearly one-half (49 per cent) of the total was classified as Mestizo/Spanish/Latino and just over one-fifth (21 per cent), classified as Creole. Table 42 presents the fertility rates for the 4 major groups and a group classified as 'other' which represents a combination of the remaining ones. At 2011, the adolescent birth rate was highest (83) for Mestizos and lowest for the combined group (23).

Table 42
Adolescent birth rate and total fertility rate by ethnicity for Belize: 2011

Ethnicity	ABR	TFR
Total	64	2.6
Creole	34	1.4
Mestizo	83	2.8
Garifuna	64	3.1
Maya	74	3.8
Other	23	3.8

Source: Belize Multiple Indicator Cluster Survey, 2011.

V. Policies and programmes

The analysis of levels and trends in adolescent fertility over the period 1990-2010 has described the changes which have been observed. This section will outline the policies and programmes which have been developed and implemented in the region and which have contributed to these changes. These policies and programmes would have been the result of the move by governments to fulfill the mandate of the ICPD Programme of Action on Reproductive Rights and Reproductive Health.

This section of the report draws on available national, regional and international assessments and evaluations as well as the relevant websites of the organisations and in particular those related to family planning, which describe the specific activities of interest.

The World Population Policies 2013 report is the most recent in a series of reports which outlines the views and policies of Governments regarding population and development. The specific policy areas of focus are population size and growth, population age structure, fertility, reproductive health and family planning, health and mortality, spatial distribution and internal migration and international migration. The 2013 report covers the period 1986-2013. For the Caribbean countries from the study area included, the most recent data related to 2011. Twelve countries are represented: Antigua and Barbuda, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago. Specific topics covered include population size and growth, fertility, reproductive health and family planning.

The report shows that at 1996, two years after the ICPD, 6 countries indicated that population growth was too high: Dominica, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines and Trinidad and Tobago. In each case the policy was to lower the growth rate. Belize was the only country with a growth rate which was perceived as too low and the policy adopted was one of non-intervention. For all other countries (5), Antigua and Barbuda, Barbados, Grenada, Guyana and Suriname, population growth was viewed as satisfactory. The policy for Antigua and Barbuda and Grenada was to maintain the rate while for Barbados, Guyana and Suriname, the policy was one of non-intervention.

By 2011, only one country, Belize, the one country with a perceived low growth rate and a policy of non-intervention in 1996, indicated that population growth was too high. All other countries now had the view that it was satisfactory. Consequently the policy adopted by Belize in 2011 was one to lower growth. Of the 11 remaining countries, 6 had a policy of no intervention to influence the rate of

population growth: Antigua and Barbuda, Barbados, Dominica, Grenada, Guyana and St. Kitts. Five countries indicated a policy of maintaining the current rate of growth: and Jamaica, St. Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago.

In general, views on fertility level were consistent with the views on population growth in 1996 and again in 2011. Where population growth was perceived to be satisfactory, fertility level was viewed as satisfactory and where population growth was considered to be too high, fertility level was considered too high. There were two exceptions to this pattern in 1996. In the case of Belize, although population growth was viewed as too low, fertility level was considered too high and for Trinidad and Tobago a perception of too high population growth was accompanied by a satisfactory view of fertility level.

In 1996, 6 countries (Belize, Dominica, Jamaica, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines) viewed fertility levels as too high. Even so, Belize had a policy of non-intervention while the other 5 countries implemented policies to lower the levels. The other 6 countries, Antigua and Barbuda, Barbados, Grenada, Guyana, Suriname and Trinidad and Tobago, viewed fertility levels as satisfactory. All but Grenada had policies of non-intervention. The policy for Grenada was to maintain the current levels. By 2011 only Belize and Jamaica stilled viewed fertility levels as too high and had policies to lower this. In the case of Barbados the view of fertility levels changed from satisfactory with a non-intervention policy in 1996 to one of too low level with a policy to raise the level in 2011. Of the remaining 8 countries, 4 had policies of maintaining the levels and 4 had policies of no intervention.

Notwithstanding the variation in views and an overall satisfaction with total fertility levels in the majority of cases at 2011, the consensus among countries then was a very high concern for adolescent fertility. All countries reported having policies in place. The governments of all but 3 countries have given direct support to family planning continuously since 1986. The three exceptions were Belize, Trinidad and Tobago and Suriname. In the case of Belize lack of support in 1986 changed to indirect support in 1996 until 2011 at which time the government began direct support. The governments of Trinidad and Tobago and Suriname supported family planning services directly in 1986 and 1996 but have since given only indirect support.

At the first 5 year review of the ICPD, ICPD+5 in 1999, a number of Caribbean governments reiterated their full support and updated the meeting on their progress as it related to policies and programmes[1] Bahamas spoke of the development of a National Policy on Family Planning and outlined aspects of the programmes implemented to be comprehensive family planning services including counselling. Relevant educational materials were also available at all primary and health care community clinics. Barbados stated that the post-ICPD years witnessed a general increase in activities in the Caribbean and in Barbados in particular, focusing on young people and organizations working with the youth. Reference was made to the experience gained from the UNFPA Caribbean Youth Summit of 1998, on Adolescent Sexual and Reproductive Health Rights. A very important outcome of the Summit was the Caribbean Regional Declaration and Regional Plan which called for the creation of reproductive health and social services for youth which are founded on the ICPD Programme of Action. Belize had established a Population Unit within the Ministry of Human Development, Women and Youth and a draft National Population and Development Policy and St. Lucia had incorporated topics on reproductive health in the Health and Family Life Curriculum. For Jamaica the most outstanding achievement since Cairo was the revision of the existing (1992) National Population Policy and the formulation of a National Plan of Action on Population and Development, consistent with the Cairo Programme of Action. For its part, Trinidad and Tobago reported that as far back as 1989, with insight gained from the IPC in Mexico in 1984, that country had reconstituted the Population Council. A draft "population-influencing" policy which had been prepared by the Council had been revised to reflect the Programme of Action of Cairo.

The Action as mandated by the ICPD Programme of Action in para 7.46 that "Countries, with the support of the international community, should protect and promote the rights of adolescents to

[1] Statements of Governments, Non-Governmental Organizations (NGOs), the United Nations and International Agencies at the Twenty-first Special Session of the General Assembly, 30 June-2 July 1999, United Nations Headquarters, New York http://www.un.org/popin/unpopcom/32ndsess/gastatements.htm.

reproductive health education, information and care and greatly reduce the number of adolescent pregnancies", is being implemented in the countries through the Family Planning bodies, working with the Ministries of Health in most cases and the Ministry of Education in some cases and as indicated by the UN Review (2013) with the direct support of governments.

Family planning activities have been taking place in the larger countries for decades. Early activity began through the efforts of social work associations and interest groups (in Jamaica as far back as the 1930s) and then gained momentum in the 1960s with the recognition by governments of the need to contain population growth. Family planning activities In Barbados and Trinidad and Tobago date back to the mid 1950s.

The International Planned Parenthood Federation is active in the region through the Caribbean Family Planning Affiliation (CPFA). The CPFA Member Associations are located in Anguilla, Antigua and Barbuda, Aruba, Bahamas, Bermuda, Curacao, Dominica, Grenada, Guadeloupe, Martinique, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines. Associate Member Associations are located in Belize, Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago. The CPFA identifies as its mission "to ensure adolescent sexual, reproductive health, rights, and well being, through the provision of peer education and peer counselling in order to help them to make more informed decisions and therefore the quality of their lives." In keeping with its mission the CPFA identifies as its objectives:

- Increase knowledge regarding sexual and reproductive health;
- Improve behaviours regarding sexual health, e.g., postponing sexual debuts, abstinence, secondary virginity, limited number of youth partners and the use of condoms for sexually active youth;
- Reduce teen pregnancy;
- Improve gender relationships;
- Reduce incidences of HIV/AIDS.

The programme in place for the achievement of these objectives is the Youth Advocacy Movement (YAM) which is being implemented in a number of countries.

Following is a summary of country activities aimed at fulfilling this mission. The information presented has been taken from the relevant websites which appear at the end of the section:

- Anguilla. The Anguilla Family Planning Association (AFPA) which is staffed entirely by volunteers assists the government by providing contraceptives and clinical supplies, and delivers comprehensive sexual and reproductive health counselling and education through schools.
- Aruba. The Foundation for the Promotion of Responsible Parenthood (FPRP) runs two permanent clinics and provides a range of sexual and reproductive health services.
- Bahamas. The Bahamas Family Planning Association (BFPA) is the only non-governmental organization providing family planning services in the Bahamas. HIV prevention and meeting the sexual and reproductive health needs of adolescents are reflected in the Information, Education and Communication efforts of the Association.
- Barbados. The Barbados Family Planning Association (BFPA) is one of the earliest in the region having been founded in 1954. It was subsequently incorporated by an Act of Parliament in 1967. In recent years, the focus of the organization has shifted from traditional fertility and contraceptive services to quality of life issues through the promotion of Sexual and Reproductive health, Family Planning, Family Life Education and related services. Services include contraception, STI checks, 'talking to your children about sexuality' and adolescent fertility. The Association has an active Youth Advocacy Movement (YAM) programme.
- Belize. The Belize Family Life Association (BFLA) was established in 1985 and is the only organization in Belize dedicated to family planning. The organization operates from an extensive network of 78 service points providing pap smears, pregnancy testing, contraceptives and health education. A firmly established outreach programme is run from mobile clinics which offer

family planning information and services in areas in need of this service, that are not easily accessible. BFLA volunteers conduct sessions at primary and secondary schools and organize youth awareness workshops for teenagers in and out of school. Volunteers, health personnel, teachers, pharmacists and community leaders are trained as back-up and support educators

- Bermuda. The programme 'Teen Services' provides sexual and reproductive health services to teenagers. It provides individual and group counselling for teens and their families focusing on sex, pregnancy, social skills, career education and placement. The male outreach programme introduces young men to the responsibilities of fatherhood.

  A core part of the 'Teen Services' programme is a teen pregnancy prevention campaign. There is also a living project called 'Teen Haven' which provides young mothers with life and parenting skills for readjustment to life into the community. Additionally, there is a continuation school which offers a holistic programme designed to meet the emotional, social and physical needs of pregnant teenagers and young mothers.

- Dominica. The Dominica Planned Parenthood Association (DPPA) was founded in 1976 and in its early years, focused on providing information and education to support the government's clinical service delivery programme. The clinic which is located in the centre of the capital city provides a wide range of services including family planning, pregnancy tests, family counseling and PAP smear screening. There is an established community outreach programme which provides family planning through volunteers and shop owners and an extensive programme of information and education activities. To reach young people the DPPA provides sexuality and life skills education in two secondary schools and to adolescents outside the school system through rap sessions, lectures, discussions and films. DPPA has also established an 'Under 20 Club' a teen group that trains its members as peer educators.

- Grenada. The Grenada Planned Parenthood Association (GPPA) operates two full-time clinics which offer comprehensive health services and counselling. The GPPA runs youth health clinics which provide sexual and reproductive advice and skills and remedial academic training for teenagers who have dropped out of the formal education system.

- Guadeloupe. The IPPF member association in Guadeloupe (AGPF) also known as La Maternite Consciente oversees maternal and child welfare and manages immunization, sexually transmitted infections (STIs) and HIV/AIDS programmes. It operates 5 clinics providing services which include contraceptive services, pregnancy tests pap smears and post-abortion screening. The AGPF also delivers outreach educational services on contraception and sexual and reproductive health in Creole to promote the use of clinical services, particularly among migrants from neighbouring islands such as Dominica, Haiti and St. Lucia who wish to use the services but are unable to pay.

- Guyana. The Guyana Responsible Parenthood Association (GRPA) was established in 1974 and is the country's leading family planning agency. The association's outlets which are located throughout all the administrative regions of the country provide access to a full range of contraceptive methods including voluntary sterilization for men and women. The GRPA also runs special youth initiatives, including an 'Under 20 Club' which provide training and support for out-of-school young people and teenage parents. Sexual and Reproductive Health issues are promoted through lectures, family planning discussions, poster displays and the distribution of pamphlets, brochures and manuals.

- Jamaica. The Jamaica Family Planning Association (FAMPLAN) which was founded in 1957 was the pioneer of family planning services in the country and played a major role in establishing government policy and programmes. Through its location outside of the capital city, the Association supports the national programme by providing family planning information and education and offering services to underserved peripheral communities. FAMPLAN has played a key role in making sexual and reproductive health services available to all Jamaicans. FAMPLAN is an advocate of school-based comprehensive sexuality

education and the need for health professionals to embrace youth-friendly services. There is a school programme which is intended to equip young people with the knowledge and resources to allow them to make informed choices and avoid unintended pregnancy. The Youth Advocacy Movement (YAM) project is active.

- St. Lucia. The St. Lucia Planned Parenthood Association (SLPPA) was inaugurated in 1967. It promotes family welfare and aims to reduce the incidence of unwanted pregnancies particularly among adolescents. It operates through a family life education programme and sexual and reproductive care services to complement the government's programme.
- Suriname**.** The main provider of family planning in Suriname called LOBI was founded in 1968. The name LOBI translates to 'Love foundation' and their slogan is "Live a Responsible Life". It delivers sexual and reproductive health services throughout the country and is a leader in HIV prevention and comprehensive sexuality education. Youth-friendly services are integrated into the clinical services provided by LOBI and it has dedicated space for youth activities, which is run by the young people themselves. Young people are trained to be peer health educators and advocates. As part of their effort to encourage youth to protect themselves against HIV, LOBI installed condom dispensers in schools and public places including shopping malls.
- Trinidad and Tobago. The Family Planning Association of Trinidad and Tobago (FPATT) was established in 1957 and is the exclusive provider of sexual and reproductive health services in Trinidad and Tobago. The Association describes its activity as spearheading "a cutting-edge, nationally recognized program for engaging parents and adolescents in conversations about sexual and reproductive health issues." The Association consists of five clinics including 'DeLiving Room' a clinic designed for the unique needs of young people and a 'Mobile Outreach Programme' that provides services to underserved communities throughout the country. De Living Room is the first and only youth sexual and reproductive health care facility in the country. The waiting area of the clinic is set up like a typical Trinidadian living room, with couches, tables and a television set. Clients have access to literature providing information on sexual and reproductive health topics as well as the facilities of a small cybercafé while they wait. De Living Room is staffed with trained nurses and social worker and a doctor twice weekly. The YAM movement is also active in the FPATT.

A. The Jamaica National Family Planning Board

The National Family Planning Board (NFPB) was created in 1967 by the Government of Jamaica and empowered by the National Family Planning Act of 1970 which made it the Government agency responsible for preparing, implementing, coordinating and promoting family planning services in Jamaica. In 1974 the Government of Jamaica officially integrated family planning services into the primary health care programme of the Ministry of Health.

The phase described by the NFPB as their Expansion Phase (1981-1995) was marked by a number of important events. Specialized family planning clinics were established in underserved areas and international donors accelerated support for clinical and counselling services in public clinics. The Government of Jamaica officially adopted the National Population Policy (1983) which reinforced political commitment to the programme and the expansion of family planning services for all men and women of reproductive age. Multiple public and private sector projects increased the availability of family planning and introduced alternative approaches to service delivery. Other highlights from the decade included the establishment of the following:

- Male responsibility programmes.
- Community-based distribution of contraceptives in rural areas.
- An adolescent fertility resource centre.
- The Parish Liaison Officers Programme.

- Mobile Units integrating family planning into nutrition programmes.
- Services designed for teenagers in urban areas.
- The conduct of a number of surveys and specialized studies for the purpose of determining unmet needs.

In 1994, the Government assumed greater financial responsibility for public sector contraceptive procurement due to dwindling resources and the growing need for family planning services.

The focus on reproductive health in general and adolescents in particular has seen the development and implementation of a number of progammes beginning in the mid 1990s. These include the improvement and expansion of access to reproductive health information and services to men and to adolescents and youth. The promotion of safe sexual behaviour, attitudes and practices to reduce the prevalence of STIs and HIV/AIDS and in general a move to achieve a more effective synergy between the HIV prevention and Family Planning programmes also became a priority.

Sexual and Reproductive Services targeting adolescents have included presentations or rap sessions on the issues which have also been made available on YouTube. The 'Teen Seen' programme developed to address such issues as unplanned pregnancy, STIs, voluntary abstinence and referral to appropriate services and counselling specifically for young people used the 'edutainment' approach. Each programme focused on a SRH topic discussion, youth news, vox pop and artistic performances. 'Teen Seen' programmes have focused on:

- Discrimination and stigma associated with teen sex and pregnancy.
- Teens and under age sex.
- Teens and male sexual responsibility.
- HIV/AIDS vulnerability.
- Communicating with parents.
- Peer Leadership.
- Teens and self-esteem.
- Teens and abortion.
- Sexuality.
- Abstinence.
- Peer pressure.

B. The Ministry of Education, Jamaica

The implementation of Health and Family Life Education in the curriculum in Jamaica has been controversial. Initially, parents and teachers objected to some of the material for students of grades 7-9 as being too explicit. This material was withdrawn and after review to ensure that the material was age appropriate, the programme was implemented in September 2013. The Ministry of Education has made it mandatory that schools teach Health and Family Life Education as a core subject in all schools from the early childhood to high school levels. The Ministry of Education has made it mandatory that schools teach Health and Family Life Education (HFLE) as a core subject.

C. The Women's Centre of Jamaica Foundation (WCJF)

The WCJF is a limited liability company which operates under the auspices of the Office of the Prime Minister. There are 7 main centres and 8 outreach locations island wide. The programme which has as its

priority, the reintegration of adolescent mothers, under the age of 17, into the secondary school system was established in 1978 in response to the prevailing high levels of adolescent pregnancies. In 1991 the programme gained foundation status and placed within a ministry portfolio. Under the programme, girls who have dropped out of school due to pregnancy are allowed to continue their education at the nearest Women's Centre for at least one term and are returned to the formal school system after the birth.

In a recent interview with the Jamaica Observer, (October 28, 2015) the Executive Director of the WCJF outlined the decline in recruitment by the centre:

> "About five years ago we had about 1,500 girls registered in the programme across the island. After that we had 1,402, then 1,400 and then 1,376. Our last count was 1,288. We do not see all the girls.... but then we also keep a tab on the girls who do not access the programme and we are really recognising that the numbers are trending down."

She also pointed out that it has been observed that girls are getting pregnant at a later age, between 16 years and 17 years, when they are out of secondary school.

One of the goals of the WCIJF is to encourage adolescent mothers to delay a second pregnancy until their professional goals are met. The Executive Director also reports that the second pregnancy rate among girls who participate in the centre's programme has remained below 2 per cent. "The girls who come to the centre are less likely to have repeat pregnancies as compared to those girls who do not come", she explained.

Source Websites for Family Planning Associations:

- For all countries excluding the National Family Planning Board Jamaica. http://www.ippf.org/our-work/where-we-work.
- Additional for Trinidad and Tobago: http://www.ttfpa.org/fpa/.
- Additional for Barbados: http://bfpa.net/cms/default.asp?V_SITE_ID=8.
- National Family Planning Board Jamaica: http://jnfpb.org/.

VI. Conclusion

Governments and development agencies have been selective in their approach to the implementation of the Programme of Action (United Nations, 2014). While the Programme of Action sets out a comprehensive, integrated agenda, the approach which emerged has been sectoral. As an example, the programmes promoting reproductive rights have ignored quality of care and inequalities in access to services. A statement to the Reproductive Health Conference held in Jamaica in October 2006, by a representative of the Planning Institute of Jamaica[2] while outlining the progress made by Jamaica, reflects similar sentiments: "the lack of a comprehensive policy to establish the normative framework and facilitate complete integration of the various components and service delivery has resulted in the perpetuation of programmes and services which are still only partially integrated and coordinated."

Undoubtedly, progress in implementation in many Caribbean countries has been impacted by a lack of resources. A newspaper article in the Jamaica Gleaner (October 30, 2015) titled "Resource Constraints Slow Family Planning Agenda" explained that ideally, the National Family Planning Board needs 800 outreach workers to effectively take its message across the island but can only afford to employ 100. Schools are targeted for implementation of special programmes such as the 'Hold On, Hold Off' programme which is targeted at students of Grades 7 and 9 and encourages abstinence. However the funding constraints limit the number of schools, to only two each year.

Notwithstanding the obstacles to policy implementation in the Caribbean, the analysis of trends in the various indicators has pointed to some success in reducing adolescent fertility. The analysis of data for 17 of the 32 countries representing 98 per cent of the female adolescent population of the Caribbean shows declines of more than 30 per cent in the ABR over the period 1990-95 to 2005-2010. In 2005-2010 only one of the 17 countries had an ABR of greater than 80 per 1,000 compared to 7 fifteen years previously. At the same time declining rates of motherhood have also been observed. Overall for 5

[2] Reproductive Health Conference: Sexual and Reproductive Health, Our Mutual Responsibility, October 26-28. Policy and Planning Implications. http://www.pioj.gov.jm/Portals/0/Social_Sector/Reproductive%20Health%20Conference%20Sexual%20and%20Reproductive%20Hea%E2%80%A6.pdf.

countries studied, representing 57 per cent of the female adolescent population, motherhood fell from 12 per cent in 1990 to 8 per cent in 2010.

Adolescent reproductive health policies have focused on reproductive health counselling and education through lectures and distribution of posters, magazines and brochures. In recent years the focus of family planning has shifted somewhat from the traditional fertility and contraceptive services to issues more directly related to quality of life. 'Teen Services' programmes provide individual and group counselling which focus not only on sex and pregnancy but also on social skills, career education and placement.

Education was a major factor in the declines observed. Over time improved educational attainment of the Caribbean adolescent population contributed to reduced adolescent fertility, with the largest falls in fertility being among the most highly educated. Education systems are central to the effort to reduce teenage pregnancies. In addition to the delivery of Health and Family Life Education programmes, education itself constitutes an effective reproductive health intervention for young people.

Research and data analysis must also be priorities. Policy and programme development, implementation, monitoring and evaluation require valid, reliable and timely data as the basis for research, which should go beyond a simple description of the data. Much of the currently available statistics do not allow for multivariate analysis, which would result in a more robust examination of causal relationships between socio-economic factors and teenage fertility, while providing a basis for some level of predictive analysis. Access to primary data in many small territories is restricted due to privacy and confidentiality concerns. Specialised surveys a source of invaluable data but are still restricted to some of the larger countries of the region.

Nevertheless, in bringing together the existing statistics to present a comprehensive analysis of trends in adolescent fertility in the Caribbean, this report constitutes a step towards overcoming these challenges. It is hoped that the report both informs future policies and programmes addressing adolescent fertility and also acts as a stimulus to further research and data analysis.

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Annexes

Annex 1: Technical notes and notes to the tables general

(i) The population totals presented as representing the years 1990, 2000 and 2010 are actually census counts from the censuses conducted as part of 'the round of censuses' for these decades. The 1990 round covered the years 1985-1994, the 2000 round covered the years 1995-2004 and the 2010 round covered the years 2005-2014. The only exception is in the case of Suriname where the estimate used for representing the 1990 round is an estimate for 1995 which technically falls in the 2000 round.

(ii) Annex 2 shows the actual census dates for each country.

(iii) It should be noted that the censuses represent a mixture of de jure and de facto counts.

(iv) Of importance also is the fact that some totals may represent the non-institutional population only while others include the institutional population. Another important distinction relates to whether the totals include adjustments for under-enumeration or not. In such cases the total may reflect the adjusted counts while the details of age and sex are based on the enumerated counts. It has not been possible to identify these distinctions for the countries.

DATA SOURCES (all online sources retrieved September-October 2015).

1990 Round of Population Censuses Counts

(i) For all English Speaking countries with the exception of Cayman Islands and United States Virgin Islands:

- CARICOM Secretariat (undated). 1990-1991 Population and Housing Census of the Commonwealth Caribbean, Volume of Basic Tables for Sixteen CAICOM Countries.
- For Cayman Islands. http://www.eso.ky/populationandvitalstatistics.html.
- For United States Virgin Islands. UN Data http://data.un.org. Table: Population by sex and urban/rural residence.

(ii) For French countries with the exception of St. Pierre and Miquelon:

- UN Data http://data.un.org Table: Population by sex and urban/rural residence.
- For St. Pierre and Miquelon. United Nations Demographic Yearbook 1999 and US Census Bureau International database http://www.census.gov/population/international/data/idb/informationGateway.php.

(iii) For Dutch countries:

- Aruba. UN Data http://data.un.org Table: Population by sex and urban/rural residence.
- Suriname. Estimate for year 1995 from UN Data http://data.un.org Table: Population by sex and urban/rural residence.
- Curacao, Sint Maarten, Other Dutch: census 1992 Excel tables obtained from Curacao Statistical Office - September 2015.

2000 Round of Population Censuses Counts

(i) For all English Speaking countries with the exception of Cayman Islands and United States Virgin Islands:

- CARICOM Secretariat (undated). 2000 Round of Population and Housing Census Data Analysis Sub-Project, Volume of Basic Tables.
- CARICOM Secretariat (undated). 2000 Round of Population and Housing Census Data Analysis Sub-Project, National Census Reports. http://www.caricomstats.org/censuspub.htm.
- For Cayman Islands. http://www.eso.ky/populationandvitalstatistics.html.
- For United States Virgin Islands. UN Data http://data.un.org Table: Population by sex and urban/rural residence.

(ii) For French countries with the exception of St. Pierre and Miquelon:

- UN Data http://data.un.org Table: Population by sex and urban/rural residence.
- For St. Pierre and Miquelon. United Nations Demographic Yearbook 2005 and US Census Bureau International database. http://www.census.gov/population/international/data/idb/informationGateway.php.

(iii) For Dutch countries:

- Aruba. Fourth Population and Housing Census Aruba. Selected Tables. June 2001.
- Curacao, Sint Maarten and Other Dutch. http://www.cbs.cw/website/statistical-information_229/item/census-2001-tables_592.html.
- Suriname. CARICOM Secretariat (undated). 2000 Round of Population and Housing Census Data Analysis Sub-Project, Volume of Basic Tables.

2010 Round of Population Censuses Counts

(i) For English countries. National Census Reports for selected countries as follows:

- Antigua and Barbuda. Census 2011 Preliminary Data. Release January 2012. Updated February 2012.
- Bahamas. 2010 Census of Population and Housing 1st release, August 2012.
- Barbados. 2010 Population and Housing Census Volume 1. September 2013.
- Belize. Population and Housing Census Country Report 2010. Volume 1. 2013.
- Bermuda. 2010 Census Population and Housing Report. June 2012.
- Cayman Islands. 2010 Census of Population and Housing Report. November 2011.
- Guyana. Population and Housing Census 2012, Preliminary Report. June 2014.
- Jamaica. Population and Housing Census 2011. Volume 1. October 2012.
- Montserrat. Census 2011 Montserrat at a Glance. March 2012.
- St. Lucia.2010 Population and Housing Census. Preliminary Report. Updated April 2011.
- St. Vincent and the Grenadines. 2012 Population and Housing Census Preliminary Report. Undated.
- Trinidad and Tobago. 2011 Population and Housing Census Demographic Report. Nov. 2012.
- Turks and Caicos. The Turks and Caicos Islands 2012 Census of Population and Housing Tables (Grand Turk to Pine Cay). December 2013. http://www.sppdtci.com/#!welcome/mainPage.
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- British Virgin Islands. US. Census Bureau International database http://www.census.gov/population/international/data/idb/informationGateway.php.
- Grenada (mid-year 2011 estimate). http://www.caricomstats.org/Files/Databases/Demography/GD.pdf.
- United States Virgin Islands. UN Data_http://data.un.org. Table: Population by sex and urban/rural residence.

(ii) For French countries:

- UN Data http://data.un.org Table: Population by sex and urban/rural residence.

(iii) For Dutch countries:

- Aruba. Fifth Population and Housing Census 2010 (undated).

- Curacao. Demography of Curacao 2011 Census. 2014.
- Suriname. Preliminary Results from the 8th Population and Housing Census (Free website copy). August 2012.
- Sint Maarten. http://stat.gov.sx/tables_n_charts/demography/table_b_02.html.
- Other Dutch. Estimate at 2009 from Statistical Yearbook Netherland Antilles. 2009.

Vital Statistics (Table 30)

- Bahamas. Vital Statistics Report, 2012. http://statistics.bahamas.gov.bs/reports.php?cat=15&page=1 2012. Live Births 2005. http://statistics.bahamas.gov.bs/archives.php?cat=71.
- Jamaica. Vital Statistics database 2004 and 2010.
- St. Lucia. Annual Statistical Digest, 2012. http://204.188.173.139:9090/stats/images/publications/2012_Statistical_Digest.pdf. Live Births, 2001. http://204.188.173.139:9090/stats/OldWebSite/vit2001.pdf.

Source: World Population Prospects: 2015 Revision

- http://esa.un.org/unpd/wpp/DVD/.

Demographic Indicators

- For all countries with the exception of Anguilla, Bermuda, British Virgin Islands, Cayman Islands Dominica, Montserrat, St. Kitts and Nevis, St. Pierre and Miquelon, Sint Maarten and Turks and Caicos.
- File FERT/3 Crude birth rate by major area, region and country, 1950-2100 (births per 1,000 population) Estimates 1950-2015.
- File FERT/4 Total fertility by major area, region and country, 1950-2100 (children per woman) Estimates 1950-2015.
- File FERT/6 Births by five year age group of mother by major area, region and country, 1950-2100 (thousands) Estimates 1950-2015.
- File FERT/7 Age specific fertility rates by major area, region and country, 1950-2100 (births per 1,000 women) Estimates 1950-2015.
- File MORT/2 Crude death rate by major area, region and country, 1950-2100 (deaths per 1,000 population) Estimates 1950-2015.
- File MORT/7-1 Life Expectancy at birth (both sexes combined) by major area, region and country, 1950-2100 (deaths per 1,000 population) Estimates 1950-2015.
- File MIGR/1 Net Migration Rate by major area, region and country, 1950-2100 (per 1,000 population) Estimates 1950-2015.
- File POP/5 Median age by major area, region and country, 1950-2100 (years) Estimates 1950-2015.

Population

- File POP/1-1 Total Population (both sexes combined) by major area, region and country, 1950-2100 (thousands) Estimates 1950-2015.
- File POP/7-1 Total Population (both sexes combined) by five year age groups by major area, region and country, 1950-2100 (thousands) Estimates 1950-2015.

Source: International Database of the United States Census Bureau.

- http://www.census.gov/population/international/data/idb/informationGateway.php.

Demographic Indicators

- File: Demographic Overview.
  For Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Montserrat, St. Kitts and Nevis, St. Pierre and Miquelon, Sint Maarten and Turks and Caicos.
  The data file presents figures for individual years. To obtain an estimate of an average for the periods 1990-1995 the average of both years was used and to derive an estimate for 2005-2010 the average of both years was used. In cases where no figures for 1990 were available (Bermuda, British Virgin Islands, Montserrat, Sint Maarten), the estimate for 1995 was used.

- File: Population by five year age groups and sex.
  In order to derive an estimate of the adolescent population, in cases where the age distribution of the census figures shown in Appendices 6, 7 and 8 were not available the distribution from this file for the relevant census year was applied to the total population of each sex (Turks and Caicos 1990, United States Virgin Islands 2000, Anguilla, Dominica, Grenada, St. Kitts and Nevis, United States Virgin Islands 2010).
  For all the countries listed above the median age was calculated from the population file.

Motherhood

- Maternilac database. (Celade – Population Divition of ECLAC). http://estadisticas.cepal.org/cepalstat/WEB_CEPALSTAT/estadisticasIndicadores.asp?idioma=e.

Calculations

Average Annual Rate of Growth (tables 3 and 14):

The average intercensal growth rates presented in the analytic tables are calculated using the specific year of the census based on the census dates.

Rates represent the exponential rate of growth calculated as follows:

Where: $r = \ln(pn/po)/n$

- r = rate of growth
- pn = population at later date
- po = population at earlier date
- n = interval

The Adolescent Birth Rate as a percentage of the Total Fertility Rate:

Adapted from United Nations (2013, 6) to be the Age specific fertility rate for age group 15-19 (ABR per woman) multiplied by 5 and divided by total fertility.

Percentage of mothers at single year of age x:

(Mothers at age x/ women at age x)*100

Percentage of childless women at single year of age x:

(Women at age x – mothers at age x)/ (women at age x)*100

Percentage change in percentage of mothers/childless between 1990 and 2010:

(Percentage of mothers/childless in 2010) – (Percentage of mothers/childless in 1990) / (Percentage of mothers in 1990)*100

Annex 2: Census dates for countries in the study area

Country	1990 Round	2000 Round	2010 Round	Interval 1990-2010
Total				**18**
English				**20**
Anguilla	13 April 1992	28 May 2001	11 May 2011	19
Antigua and Barbuda	28 May 1991	28 May 2001	27 May 2011	20
Bahamas	1 May 1990	1 May 2000	4 May 2010	20
Barbados	2 May 1990	1 May 2000	2 May 2010	20
Belize	12 May 1991	14 October 2000	12 May 2010	19
Bermuda	20 May 1991	20 May 2000	20 May 2010	19
British Virgin Islands	12 May 1991	21 May 2001	12 July 2010	19
Cayman Islands	15 October 1989	10 October 1999	10 October 2010	21
Dominica	12 May 1991	14 May 2001	14 May 2011	20
Grenada	12 May 1991	14 May 2001	12 May 2011	21
Guyana	12 May 1991	15 September 2002	15 September 2012	21
Jamaica	7 April 1991	10 September 2001	5 April 2011	20
Montserrat	12 May 1991	25 May 2001	12 May 2011	20
St. Kitts and Nevis	12 May 1991	22 May 2001	10 May 2010	19
St. Lucia	12 May 1991	14 May 2001	12 May 2011	20
St. Vincent & the Grenadines	12 May 1991	14 May 2001	12 May 2011	
Trinidad and Tobago	2 May 1990	15 May 2000	9 January 2011	22
Turks and Caicos	31 May 1990	10 September 2001	25 January 2012	20
United States Virgin Is.	April 1 1990	April 1 2000	April 1 2010	19
French				**16**
French Guiana	15 March 1990	8 March 1999	1 January 2006	16
Guadeloupe	15 March 1990	8 March 1999	1 January 2006	16
Martinique	15 March 1990	8 March 1999	1 January 2006	16
St. Pierre and Miquelon	5 March 1990	8 March 1999	March 2006	16
Dutch				**18**
Aruba	6 October 1991	28 May 2001	27 May 2011	20
Curacao	27 January 1992	29 January 2001	March 26 2011	19
Netherland Antilles	27 January 1992	29 January 2001		
Sint Maarten	27 January 1992	29 January 2001	9 April 2011	19
Suriname	1995 estimate	2 August 2004	13 August 2010	15
Other Dutch	27 January 1992	29 January 2001	2009 estimate	17

Source: United Nations Statistical Division. http://unstats.un.org/unsd/demographic/sources/census/censusdates.htm.
Notes: Suriname did not participate in the 1990 round. Figure for 1990 represents UN estimate for 1995. Curacao and Sint Maarten were included in the Netherland Antilles for the 1990 and 2000 rounds. The Netherland Antilles was dissolved in October 2010. Other Dutch comprise remainder of Netherland Antilles-Bonaire, Saba and St Eustatius. Interval used for calculating annual average rates of growth.

Annex 3: Population of study area by age and sex: 1990

Country	Total	Male	Female
Total	**7 276 204**	**3 583 927**	**3 692 277**
English	**5 743 344**	**2 828 916**	**2 914 428**
Anguilla	8 960	4 473	4 487
Antigua and Barbuda	63 878	30 793	33 085
Bahamas	255 049	124 954	130 095
Barbados	247 288	118 556	128 732
Belize	189 392	96 325	93 067
Bermuda	58 460	28 345	30 115
British Virgin Islands	16 116	8 263	7 853
Cayman Islands	25 355	12 372	12 983
Dominica	71 183	35 471	35 712
Grenada	85 123	41 893	43 230
Guyana	723 673	356 540	367 133
Jamaica	2 380 666	1 166 508	1 214 158
Montserrat	10 769	5 245	5 524
St. Kitts and Nevis	40 618	19 933	20 685
St. Lucia	133 308	64 645	68 663
St. Vincent and the Grenadines	106 499	53 165	53 334
Trinidad and Tobago	1 213 733	606 388	607 345
Turks and Caicos	11 465	5 837	5 628
United States Virgin Islands	101 809	49 210	52 599
French	**867 743**	**426 013**	**441 730**
French Guiana	114 808	59 798	55 010
Guadeloupe	387 034	189 187	197 847
Martinique	359 579	173 878	185 701
St. Pierre and Miquelon	6 322	3 150	3 172
Dutch	**665 117**	**328 998**	**336 119**
Aruba	66 687	32 821	33 866
Curacao	144 187	68 266	75 921
Sint Maarten	32 221	15 901	16 320
Suriname	408 866	205 380	203 486
Other Dutch	13 156	6 630	6 526

Source: http://esa.un.org/unpd/wpp/DVD/.

Annex 4: Population of study area by age and sex: 2000

Country	Total	Male	Female
Total	**7 970 217**	**3 928 958**	**4 040 659**
English	**6 245 403**	**3 089 209**	**3 156 194**
Anguilla	11 430	5 628	5 802
Antigua and Barbuda	76 886	36 107	40 779
Bahamas	303 611	147 715	155 896
Barbados	250 010	119 926	130 084
Belize	240 204	121 278	118 926
Bermuda	62 059	29 802	32 257
British Virgin Islands	23 161	11 436	11 725
Cayman Islands	39 020	19 033	19 987
Dominica	69 775	35 110	34 665
Grenada	103 137	51 342	51 795
Guyana	751 223	376 034	375 189
Jamaica	2 607 632	1 283 547	1 324 085
Montserrat	4 303	2 329	1 974
St. Kitts and Nevis	46 325	22 973	23 352
St. Lucia	156 741	76 681	80 060
St. Vincent and the Grenadines	109 022	55 456	53 566
Trinidad and Tobago	1 262 366	633 051	629 315
Turks and Caicos	19 886	9 897	9 989
United States Virgin Islands	108 612	51 864	56 748
French	**966 191**	**465 948**	**500 243**
French Guiana	156 790	78 963	77 827
Guadeloupe	422 222	203 146	219 076
Martinique	380 863	180 692	200 171
St. Pierre and Miquelon	6 316	3 147	3 169
Dutch	**758 623**	**373 801**	**384 222**
Aruba	90 506	43 434	47 072
Curacao	130 627	60 509	70 118
Sint Maarten	30 594	14 890	15 704
Suriname	492 464	247 846	244 018
Other Dutch	14 432	7 122	7 310

Source: http://esa.un.org/unpd/wpp/DVD/.

Annex 5: Population of study area by age and sex: 2010

Country	Total	Male	Female
Total	**8 469 354**	**4 172 315**	**4 297 039**
English	**6 615 995**	**3 278 806**	**3 337 189**
Anguilla	13 037	6 469	6 568
Antigua and Barbuda	85 567	40 986	44 581
Bahamas	351 461	170 257	181 204
Barbados	277 821	133 018	144 803
Belize	322 453	161 227	161 226
Bermuda	64 237	30 858	33 379
British Virgin Islands	29 640	14 325	15 315
Cayman Islands	55 036	27 218	27 818
Dominica	71 293	36 411	34 882
Grenada	106 667	53 898	52 769
Guyana	747 884	372 547	375 337
Jamaica	2 697 983	1 334 533	1 363 450
Montserrat	4 922	2 546	2 376
St. Kitts and Nevis	46 398	22 840	23 558
St. Lucia	166 526	82 926	83 600
St. Vincent and the Grenadines	109 188	55 551	53 637
Trinidad and Tobago	1 328 019	666 305	661 714
Turks and Caicos	31 458	16 037	15 421
United States Virgin Islands	106 405	50 854	55 551
French	**1 010 547**	**479 265**	**531 282**
French Guiana	205 954	101 907	104 047
Guadeloupe	400 736	188 720	212 016
Martinique	397 732	185 604	212 128
St. Pierre and Miquelon	6 125	3 034	3 091
Dutch	**842 812**	**414 244**	**428 568**
Aruba	101 484	48 241	53 243
Curacao	150 563	68 848	81 715
Sint Maarten	33 609	15 868	17 741
Suriname	539 910	272 690	267 220
Other Dutch	17 246	8 597	8 649

Source: http://esa.un.org/unpd/wpp/DVD/.

Annex 6: Adolescent population of the study area by age and sex: 1990

Country	Males			Females		
	10-19	10-14	15-19	10-19	10-14	15-19
Total	**739 122**	**377 671**	**361 451**	**733 731**	**373 214**	**360 517**
English	**595 438**	**307 999**	**287 439**	**593 266**	**305 107**	**288 159**
Anguilla	791	404	387	774	401	373
Antigua & Barbuda	5 557	2 925	2 632	5 507	2 880	2 627
Bahamas	26 577	13 098	13 479	26 374	12 862	13 512
Barbados	21 939	10 481	11 458	21 329	10 131	11 198
Belize	22 410	12 306	10 104	22 134	11 876	10 258
Bermuda	3 602	1 736	1 866	3 539	1 733	1 806
British Virgin Islands	1 279	675	604	1 286	671	615
Cayman Islands	1 908	942	966	1 961	874	1 087
Dominica	8 158	3 937	4 221	7 642	4 107	3 535
Grenada	9 083	4 857	4 226	8 870	4 812	4 058
Guyana	81 203	41 803	39 400	83 605	42 572	41 033
Jamaica	255 435	131 798	123 637	255 788	130 974	124 814
Montserrat	833	401	432	836	395	441
St. Kitts and Nevis	4 269	2 296	1 973	4 243	2 270	1 973
St. Lucia	15 359	8 068	7 291	15 452	7 977	7 475
St. Vincent & the Grenadines	13 097	6 949	6 148	12 823	6 753	6 070
Trinidad and Tobago	112 845	59 661	53 184	110 195	58 284	51 911
Turks and Caicos	1 138	537	601	1 098	518	580
United States Virgin Islands	9 955	5 125	4 830	9 810	5 017	4 793
French	**81 725**	**37 346**	**44 379**	**80 110**	**36 258**	**43 852**
French Guiana	11 298	5 934	5 364	10 996	5 694	5 302
Guadeloupe	38 494	16 894	21 600	37 361	16 506	20 855
Martinique	31 425	14 278	17 147	31 232	13 826	17 406
St. Pierre & Miquelon	508	240	268	521	232	289
Dutch	**61 959**	**32 326**	**29 633**	**60 355**	**31 849**	**28 506**
Aruba	4 967	2 654	2 313	4 762	2 574	2 188
Curacao	11 994	5 972	6 022	11 681	5 917	5 764
Sint Maarten	1 989	1 007	982	1 972	1 018	954
Suriname	41 897	22 081	19 816	40 893	21 742	19 151
Other Dutch	1 112	612	500	1 047	598	449

Source: http://esa.un.org/unpd/wpp/DVD/.

Annex 7: Adolescent population of the study area by age and sex: 2000

Country	Males			Females		
	10-19	10-14	15-19	10-19	10-14	15-19
Total	**768 039**	**392 553**	**375 486**	**748 848**	**385 654**	**363 194**
English	**620 222**	**316 433**	**303 789**	**604 060**	**311 452**	**292 608**
Anguilla	1 040	563	477	1 064	573	491
Antigua and Barbuda	5 341	2 851	2 490	5 796	3 035	2 761
Bahamas	27 504	14 149	13 355	27 496	14 412	13 084
Barbados	18 859	9 425	9 434	18 390	9 188	9 202
Belize	27 926	15 128	12 798	27 362	14 560	12 802
Bermuda	3 683	1 907	1 776	3 686	1 920	1 766
British Virgin Islands	1 631	847	784	1 698	932	766
Cayman Islands	2 028	1 082	946	2 069	1 065	1 004
Dominica	6 796	3 451	3 345	6 845	3 511	3 334
Grenada	11 815	6 329	5 486	11 976	6 324	5 652
Guyana	74 713	41 217	33 496	73 699	40 274	33 425
Jamaica	275 878	139 372	136 506	262 018	136 506	125 512
Montserrat	296	148	148	257	133	124
St. Kitts and Nevis	4 560	2 436	2 124	4 534	2 322	2 212
St. Lucia	16 608	8 281	8 327	16 735	8 298	8 437
St. Vincent and the Grenadines	11 309	5 631	5 678	11 082	5 471	5 611
Trinidad and Tobago	119 742	58 012	61 730	118 024	56 903	61 121
Turks and Caicos	1 469	833	636	1 455	804	651
United States Virgin Islands	9 024	4 771	4 253	9 874	5 221	4 653
French	**81 372**	**42 506**	**38 866**	**79 391**	**41 359**	**38 032**
French Guiana	15 725	8 410	7 315	15 395	8 123	7 272
Guadeloupe	35 176	18 046	17 130	34 417	17 492	16 925
Martinique	30 014	15 826	14 188	29 151	15 530	13 621
St. Pierre and Miquelon	457	224	233	428	214	214
Dutch	**66 445**	**33 614**	**32 831**	**65 397**	**32 843**	**32 554**
Aruba	6 443	3 385	3 058	6 444	3 373	3 071
Curacao	10 428	5 439	4 989	45 281	22 246	23 035
Sint Maarten	2 177	1 274	903	10 390	5 358	5 032
Suriname	46 336	22 880	23 456	2 237	1 250	987
Other Dutch	1 061	636	425	1 045	616	429

Source: http://esa.un.org/unpd/wpp/DVD/.

Annex 8: Adolescent population of study area by age and sex: 2010

Country	Males			Females		
	10-19	10-14	15-19	10-19	10-14	15-19
Total	**769 956**	**380 840**	**389 116**	**745 233**	**367 424**	**377 809**
English	**611 966**	**300 385**	**311 581**	**592 540**	**289 523**	**303 017**
Anguilla	1 042	563	479	966	506	460
Antigua and Barbuda	7 244	3 690	3 554	7 157	3 638	3 519
Bahamas	31 628	15 942	15 686	31 412	15 916	15 496
Barbados	18 897	9 445	9 452	18 540	9 122	9 418
Belize	36 196	18 864	17 332	36 143	18 826	17 317
Bermuda	3 388	1 706	1 682	3 524	1 775	1 749
British Virgin Islands	2 006	960	1 046	2 175	1 026	1 149
Cayman Islands	2 952	1 552	1 400	2 757	1 395	1 362
Dominica	6 371	2 876	3 495	5 895	2 721	3 174
Grenada	9 432	4 581	4 851	9 393	4 485	4 908
Guyana	83 465	39 978	43 487	79 461	37 943	41 518
Jamaica	275 960	136 183	139 777	265 284	130 403	134 881
Montserrat	366	187	179	312	172	140
St. Kitts and Nevis	3 678	1 896	1 782	3 793	1 955	1 838
St. Lucia	15 683	7 520	8 163	15 144	7 393	7 751
St. Vincent and the Grenadines	10 095	5 042	5 053	9 577	4 718	4 859
Trinidad and Tobago	94 582	44 915	49 667	91 669	43 005	48 664
Turks and Caicos	2 116	1027	1089	2 228	1 080	1 148
United States Virgin Islands	6 865	3 458	3 407	7 110	3 444	3 666
French	**85 037**	**43 240**	**41 797**	**82 471**	**42 287**	**40 184**
French Guiana	20 646	11 161	9 485	20 436	11 044	9 392
Guadeloupe	32 727	16 649	16 078	31 220	15 968	15 252
Martinique	31 239	15193	16046	30 413	15051	15362
St. Pierre and Miquelon	425	237	188	402	224	178
Dutch	**72 953**	**37 215**	**35 738**	**70 222**	**35 614**	**34 608**
Aruba	7 574	3 799	3 775	7 220	3 698	3 522
Curacao	11 329	5 577	5 752	10 777	5 126	5 651
Sint Maarten	2 371	1 231	1 140	2 496	1 308	1 188
Suriname	50 460	25 950	24 510	48 520	24 850	23 670
Other Dutch	1 219	658	561	1 209	632	577

Source: http://esa.un.org/unpd/wpp/DVD/.

Annex 9: Absolute values for mothers and childless women for selected Caribbean countries: 1990, 2000, 2010

Country	Date and Category	Age								
		14	15	16	17	18	19	15-17	18-19	15-19	20-49
Antigua & Barbuda	1990										
	Total Women		554	503	498	526	547	1 555	1 073	2 628	13 526
	Mothers		19	28	46	82	136	93	218	311	9 931
	Childless Women		535	475	452	444	411	1 462	855	2 317	3 595
	2000										
	Total Women		565	594	530	569	530	1 689	1 099	2 788	16 026
	Mothers		9	19	44	72	95	72	167	239	11 945
	Childless Women		556	575	486	497	435	1 617	932	2 549	4 081
Barbados	1990										
	Total Women		2 176	2 150	2 398	2 251	2 223	6 724	4 474	11 198	55 991
	Mothers		28	65	167	278	420	260	698	958	38 766
	Childless Women		2 148	2 085	2 231	1 973	1 803	6 464	3 776	10 240	17 225
	2000										
	Total Women		1 914	1 930	1 920	1 772	1 666	5 764	3 438	9 202	59 264
	Mothers		31	54	120	225	356	205	581	786	41 174
	Childless Women		1 883	1 876	1 800	1 547	1 310	5 559	2 857	8 416	18 000
Belize	1990										
	Total Women		4 467	2 104	1 943	2 020	1 963	8 514	3 983	12 497	31 677
	Mothers		53	162	300	529	687	515	1 216	1 731	25 805
	Childless Women		4 414	1 942	1 643	1 491	1 276	7 999	2 767	10 766	5 872
	2010										
	Total Women		3 582	3 529	3 570	3 387	3 250	10 681	6 637	17 318	67 610
	Mothers		49	137	334	613	886	520	1 499	2 019	49 770
	Childless Women		3 553	3 392	3 236	2 774	2 364	10 161	5 138	15 299	17 840
Grenada	1990										
	Total Women		866	834	814	794	750	2 514	1 544	4 058	14 632
	Mothers		25	50	112	158	199	187	357	544	11 275
	Childless Women		841	784	702	636	551	2 327	1 187	3 514	3 357
	2010										
	Total Women		959	958	997	992	959	2 914	1 951	4 865	22 226
	Mothers		12	20	55	88	144	87	232	319	14 286
	Childless Women		947	938	942	904	815	2 827	1 719	4 546	7 940

Country	Date and Category	Age									
		14	15	16	17	18	19	15-17	18-19	15-19	20-49
Jamaica	1990										
	Total Women	25 923	25 809	24 732	24 311	25 638	24 324	74 852	49 962	124 814	458 539
	Mothers	220	653	1 746	3 591	6 161	8 169	5 990	14 330	20 320	340 527
	Childless Women	25 703	25 156	22 986	20 720	19 477	16 155	68 862	35 632	104 494	118 012
	2010										
	Total Women		28 608	29 056	27 329	24 719	23 752	84 993	48 471	133 464	599 138
	Mothers		405	1 132	2 134	3 751	5 568	3 761	9 319	12 990	438 061
	Childless Women		28 203	27 924	25 195	20 968	18 184	81 322	39 152	120 474	161 077
St. Lucia	1990										
	Total Women		1 512	1 530	1 477	1 476	1 482	4 519	2 958	7 477	26 201
	Mothers		33	73	160	278	403	266	681	947	19 201
	Childless Women		1 479	1 457	1 317	1 198	1 079	4 253	2 277	6 530	6 330
	2010										
	Total Women		1 665	1 500	1 526	1 534	1 527	4 691	3 061	7 752	37 615
	Mothers		13	29	64	140	229	106	369	475	25 170
	Childless Women		1 652	1 471	1 462	1 394	1 298	4 585	2 692	7 277	12 445
St. Vincent & the Grenadines	1990										
	Total Women		1 314	1 236	1 184	1 198	1 139	3 734	2 337	6 071	23 664
	Mothers		32	82	166	284	357	280	641	921	19 283
	Childless Women		1 282	1 154	1 018	914	782	3 454	1 696	5 150	4 381
	2010										
	Total Women		1 119	1 108	1 158	1 228	997	3 385	2 225	5 610	30 976
	Mothers		28	79	132	236	244	239	480	719	25 116
	Childless Women		1 091	1 029	1 026	992	753	3 146	1 745	4 891	5 860
Trinidad & Tobago	1990										
	Total Women	10 896	10 643	10 734	10 892	10 242	9 400	32 269	19 642	51 911	235 472
	Mothers	23	111	344	669	1 256	1 778	1 124	3 034	4 158	173 612
	Childless Women	10 873	10 532	10 390	10 223	8 986	7 622	31 145	16 608	47 753	61 860
	2010										
	Total Women	8 462	9 088	9 159	9 733	10 657	9 904	27 980	20 561	48 541	305 632
	Mothers	13	58	159	361	868	1 274	578	2 142	2 720	178 212
	Childless Women	8 449	9 030	9 000	9 372	9 789	8 630	27 402	18 419	45 821	127 420

Source: http://esa.un.org/unpd/wpp/DVD/.

Annex 10: Absolute values for women and mothers by educational level for selected Caribbean countries: 2000 and 2010

Country	Date and Category	Age							
		15	16	17	18	19	15-17	18-19	15-19
Antigua and Barbuda	2000								
	Total Women	565	594	530	569	530	1 689	1 099	2 788
	None	7	7	4	4	3	18	7	25
	Primary	87	71	59	64	33	217	97	314
	Secondary	378	446	398	422	414	1 222	836	2 058
	Post Secondary	0	0	0	4	16	0	20	20
	Other	31	17	20	24	23	68	47	115
	Not Stated	62	53	49	51	41	164	92	256
	Total Mothers	9	19	44	72	95	72	167	239
	None	0	0	0	1	1	0	2	2
	Primary	1	8	8	14	11	17	25	42
	Secondary	7	7	24	47	67	38	114	152
	Post Secondary	0	0	0	0	1	0	1	1
	Other	1	4	6	7	13	11	20	31
	Not Stated	0	0	6	3	2	6	5	11
Bahamas	2000								
	Total Women	2 644	2 775	2 587	2 480	2 598	8 006	5 078	13 084
	None	0	0	9	1	4	9	5	14
	Primary	0	0	6	17	34	6	51	57
	Secondary	2 644	2 775	2 507	1 910	1 915	7 926	3 825	11 751
	Post Secondary	0	0	53	537	627	53	1 164	1 217
	Other	0	0	10	11	11	10	22	32
	Not Stated	0	0	2	4	7	2	11	13
	Total Mothers	28	109	188	364	578	325	942	1 267
	None	0	0	0	0	3	0	3	3
	Primary	0	0	3	6	12	3	18	21
	Secondary	28	109	178	338	529	315	867	1 182
	Post Secondary	0	0	4	19	30	4	49	53
	Other	0	0	3	0	0	3	0	3
	Not Stated	0	0	0	1	4	0	5	5

Country	Date and Category	Age							
		15	16	17	18	19	15-17	18-19	15-19
Barbados	2000								
	Total Women	1 914	1 930	1 920	1 772	1 666	5 764	3 438	9 202
	None	0	0	0	4	1	0	5	5
	Primary	1	3	2	8	12	6	20	26
	Secondary	1 878	1 898	1 561	1 250	1 116	5 337	2 366	7 703
	Post Secondary	0	1	307	458	484	308	942	1 250
	Other	1	1	21	26	27	23	53	76
	Not Stated	34	27	29	26	26	90	52	142
	Total Mothers	31	54	120	225	356	205	581	786
	None	0	0	0	0	0	0	0	0
	Primary	0	1	1	2	6	2	8	10
	Secondary	30	51	116	200	321	197	521	718
	Post Secondary	0	0	3	14	25	3	39	42
	Other	0	0	0	4	4	0	8	8
	Not Stated	1	2	0	5	0	3	5	8
Jamaica	2000								
	Total Women	24 598	26 412	24 598	25 982	23 448	75 608	49 430	125 038
	None	0	33	45	77	67	78	144	222
	Primary	294	493	712	950	925	1 499	1 875	3 374
	Secondary	23 855	25 191	20 791	20 188	17 460	69 837	37 648	107 485
	Post Secondary	0	0	236	807	1 246	236	2 053	2 289
	Other	0	0	1 363	2 467	2 486	1 363	4 953	6 316
	Not Stated	449	695	1 451	1 493	1 264	2 595	2 757	5 352
	Total Mothers	713	1 439	3 153	5 858	8 042	5 305	13 900	19 205
	None	0	22	16	0	29	38	29	67
	Primary	121	179	253	503	577	553	1 080	1 633
	Secondary	580	1 160	2 660	4 928	6 783	4 400	11 711	16 111
	Post Secondary	0	0	0	14	30	0	44	44
	Other	0	0	89	184	274	89	458	547
	Not Stated	12	78	135	229	349	225	578	803
St. Lucia	2000								
	Total Women	1 653	1 797	1 736	1 676	1 554	5 186	3 230	8 415
	None	22	11	9	9	20	41	29	70
	Primary	812	870	735	438	294	2 417	732	3 149
	Secondary	631	733	803	992	951	2 166	1 944	4 110
	Post Secondary	3	2	47	124	179	52	304	355
	Other	10	22	40	30	58	72	88	159

Country	Date and Category	Age							
		15	16	17	18	19	15-17	18-19	15-19
St. Lucia	Not Stated	176	159	103	82	52	438	134	572
	Total Mothers	13	58	106	201	315	176	516	692
	None	0	0	1	2	4	1	6	7
	Primary	8	34	50	93	102	93	195	287
	Secondary	4	24	45	89	176	72	265	337
	Post Secondary	0	0	0	6	6	0	12	12
	Other	1	0	9	8	22	10	29	39
	Not Stated	0	0	1	2	6	1	8	9
St. Vincent & the Grenadines	2000								
	Total Women	1 119	1 108	1 158	1 228	997	3 385	2 225	5 610
	None	6	8	2	8	4	16	12	28
	Primary	287	259	287	323	272	833	595	1 428
	Secondary	796	808	837	869	685	2 441	1 554	3 995
	Post Secondary	0	0	2	5	15	2	20	22
	Other	2	3	4	10	5	9	15	24
	Not Stated	28	30	26	13	16	84	29	113
	Total Mothers	34	85	134	244	248	253	492	745
	None	6	7	2	8	4	15	12	27
	Primary	15	53	73	128	130	141	258	399
	Secondary	12	25	57	104	112	94	216	310
	Post Secondary	0	0	0	0	0	0	0	0
	Other	1	0	1	2	0	2	2	4
	Not Stated	0	0	1	2	2	1	4	5
Grenada	2010								
	Total Women	958	958	997	991	959	2 913	1 950	4 863
	None	11	10	13	7	9	34	16	50
	Primary	569	437	285	158	105	1 291	263	1 554
	Secondary	366	503	656	716	585	1 525	1 301	2 826
	Post Secondary	0	0	26	98	244	26	342	368
	Other	1	0	4	5	14	5	19	24
	Not Stated	11	8	13	7	2	32	9	41
	Total Mothers	12	20	55	88	144	87	232	319

Country	Date and Category	Age							
		15	16	17	18	19	15-17	18-19	15-19
Grenada	None	0	0	0	0	0	0	0	0
	Primary	2	10	10	8	20	22	28	50
	Secondary	10	10	43	75	103	63	178	241
	Post Secondary	0	0	1	5	15	1	20	21
	Other	0	0	1	0	6	1	6	7
	Not Stated	0	0	0	0	0	0	0	0
Jamaica	2010								
	Total Women	28 606	29 055	27 327	24 718	23 755	84 988	48 473	133 461
	None	39	45	49	35	50	133	85	218
	Primary	211	370	538	573	643	1 119	1 216	2 335
	Secondary	28 107	22 160	22 501	19 131	17 059	72 768	36 190	108 958
	Post Secondary	0	3	1 329	3 132	4 493	1 332	7 625	8 957
	Other	0	0	70	99	142	70	241	311
	Not Stated	249	6 477	2 840	1 748	1 368	9 566	3 116	12 682
	Total Mothers	404	1 132	2 133	3 750	5 569	3 669	9 319	12 988
	None	0	3	1	2	1	4	3	7
	Primary	45	130	178	233	307	353	540	893
	Secondary	329	673	1 833	3 256	4 730	2 835	7 986	10 821
	Post Secondary	0	0	30	121	342	30	463	493
	Other	0	0	7	17	31	7	48	55
	Not Stated	30	326	84	121	158	440	279	719
St. Lucia	2010								
	Total Women	1 665	1 499	1 525	1 534	1 529	4 689	3 063	7 752
	None	40	30	13	16	16	83	32	115
	Primary	1 081	752	389	160	112	2 222	272	2 494
	Secondary	502	686	1 071	1 176	1 067	2 259	2 243	4 502
	Post Secondary	0	4	20	132	285	24	417	441
	Other	3	5	11	15	23	19	38	57
	Not Stated	39	22	21	35	26	82	61	143
	Total Women	15	31	66	141	235	112	376	488
	None	0	0	0	0	1	0	1	1
	Primary	5	8	11	33	42	24	75	99
	Secondary	10	22	51	95	177	83	272	355
	Post Secondary	0	1	1	5	8	2	13	15
	Other	0	0	3	5	6	3	11	14
	Not Stated	0	0	0	3	1	0	4	4

Country	Date and Category	Age							
		15	16	17	18	19	15-17	18-19	15-19
Trinidad and Tobago	2010								
	Total Women	9 088	9 159	9 733	10 657	9 904	27 980	20 561	48 541
	None	100	87	65	68	59	252	128	379
	Primary	765	714	542	427	327	2 021	754	2 774
	Secondary	8 154	7 949	7 910	7 294	5 707	24 014	13 001	37 014
	Post Secondary	0	347	1 140	2 584	3 530	1 487	6 113	7 600
	Other	0	0	0	206	182	0	388	388
	Not Stated	68	63	76	79	99	207	178	385
	Total Mothers	58	159	361	868	1 274	578	2 142	2 720
	None	1	1	0	1	3	2	5	7
	Primary	7	22	30	66	75	58	141	199
	Secondary	50	130	313	719	1 040	493	1 758	2 251
	Post Secondary	0	5	15	61	123	19	184	204
	Other	0	0	0	13	17	0	30	30
	Not Stated	0	2	3	8	16	6	24	30

Source: http://esa.un.org/unpd/wpp/DVD/.

Note: for the analysis ‘other’ and ‘post secondary’ were combined as ‘post secondary’.

Annex 11: Government views on policies for selected population variables for selected Caribbean countries: 1996 and 2011

Country and Year	Population Policy Variable						
	Population Growth		Fertility Level		Adolescent Fertility		
	View	Policy	View	Policy	Concern	Policy	Government Family Planning Support
Antigua & Barbuda							
1996	Satisfactory	Maintain	Satisfactory	No Intervention	Not available	Not available	Direct
2011	Satisfactory	No Intervention	Satisfactory	No Intervention	Major	Yes	Direct
Barbados							
1996	Satisfactory	No Intervention	Satisfactory	No Intervention	Major	Yes	Direct
2011	Satisfactory	No Intervention	Too Low	Raise	Major	Yes	Direct+
Belize							
1996	Too Low	No Intervention	Too High	No Intervention	Major	Yes	Direct
2011	Too High	Lower	Too High	Lower	Major	Yes	Direct
Dominica							
1996	Too High	Lower	Too High	Lower	Not available	Not available	Direct
2011	Satisfactory	No Intervention		No Intervention	Major	Yes	Direct
Grenada							
1996	Satisfactory	Maintain	Satisfactory	Maintain	Major	Yes	Direct
2011	Satisfactory	No Intervention	Satisfactory	No Intervention	Major	Yes	Direct
Guyana							
1996	Satisfactory	No Intervention	Satisfactory	No Intervention	Not available	Not available	Direct
2011	Satisfactory	No Intervention	Satisfactory	No Intervention	Major	Yes	Direct
Jamaica							
1996	Too High	Lower	Too High	Lower	Major	Yes	Direct
2011	Satisfactory	Maintain	Too High	Lower	Major	Yes	Direct
St. Kitts and Nevis							
1996	Too High	Lower	Too High	Lower	Not available	Not available	Direct
2011	Satisfactory	No Intervention	Satisfactory	No Intervention	Major	Yes	Direct
St. Lucia							
1996	Too High	Lower	Too High	Lower	Major	Yes	Direct
2011	Satisfactory	Maintain	Satisfactory	Maintain	Major	Yes	Direct
St. Vincent and the Grenadines							
1996	Too High	Lower	Too High	Lower	Major	Yes	Direct
2011	Satisfactory	Maintain	Satisfactory	Maintain	Major	Yes	Direct

Country and Year	Population Policy Variable						
	Population Growth		Fertility Level		Adolescent Fertility		
	View	Policy	View	Policy	Concern	Policy	Government Family Planning Support
Suriname							
1996	Satisfactory	No Intervention	Satisfactory	No Intervention	Major	No	Direct
2011	Satisfactory	Maintain	Satisfactory	Maintain	Major	Yes	Indirect
Trinidad and Tobago							
1996	Too High	Lower	Satisfactory	No Intervention	Major	No	Direct
2011	Satisfactory	Maintain	Satisfactory	Maintain	Major	Yes	Indirect

Source: United Nations. Department of Social and Economic Affairs. Population Division. 2013. World Population Policies. 2013. United Nations. New York. http://www.un.org/en/development/desa/population/publications/policy/world-population-policies-2013.shtml.

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