Living Conditions in Grenada

Poverty and Equity Update

WORLD BANK GROUP

Acknowledgments

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Executive Summary

This poverty and equity report provides updated poverty and inequality statistics from the Grenada Survey of Living Conditions and Household Budget Survey (SLCHBS) conducted between 2018 and 2019 by the Central Statistical Office of Grenada. The SLCHBS 2018–2019 is the third in a series of household surveys. The previous SLCHBS was done in 2008–2009 and is used in this report as a benchmark for trends comparison. The objective of these surveys is to assess the state of living conditions in Grenada, examine poverty and inequality trends, and develop a basket of goods and services that can be used to estimate the Consumer Price Index (CPI) for the country. The survey contains information on household expenditures, housing conditions, demographics, education, health, food security, safety and crime, persons with disabilities, and labor market indicators.

Key Findings

- Along with a positive economic growth, Grenada's poverty rate decreased significantly from 37.7 percent in 2008/09 to 25.0 percent in 2018/19. However, extreme poverty increased from 2.4 percent in 2008/09 to 3.5 percent in 2018/19. As for inequality, it increased slightly for 2018/19 in relation to 2008/09, with the Gini index moving from 0.37 to 0.40 at the national level. Other inequality measures show similar trends: for example, in 2008 a person in the top 10 percent of the national population consumed 5 times more than a person in the other 90 percent and, in 2018, almost 7 times more, exposing an increase in inequality.

- Since 2008, the maternal mortality ratio decreased from 30 to 25 deaths per 100,000 births and notable improvements have been made in terms of access to improved water sources and access to electricity. Progress has also been made in school enrollment, both for primary and secondary.

- Poverty would have declined to 16.9 percent in 2018/19 if inequality had not risen during this period, as shown by the Datt-Ravallion decomposition of poverty. Thus, distribution-improving policies may be needed to promote an equitable growth path.

- Nonmonetary poverty measures, such as the multidimensional poverty index, show that 34.3 percent of the population live in households considered multidimensionally poor.

- A poor household has almost twice the family size of a nonpoor household. Household heads from poor households have to support more members per worker in the house, as shown by the dependency rate of 1.02 for poor households and 0.70 for nonpoor household. On average, female-headed households are observed to be poorer than male-headed households.

- Nonpoor households have better-quality housing and more access to public services, such as drinking water, electricity, and a toilet, in their dwellings.

- Poverty is much higher for unemployed individuals (38.8 percent), compared to those who are employed (20.8 percent).

- Among the employed, poverty levels are higher for individuals working in human health and social work activities.

- Average school attendance rate drops earlier for the poor at age 15, versus age 17 for the non-poor, which also reflects on the low percentage of people attaining tertiary education, especially among the poor.

- Around 23.3 percent of households reported that they ate less than they should in the past 12 months; this proportion rose to 49 percent for poor households. Moreover, 27 percent of all surveyed households reported they were worried they would run out of food in subsequent months, with 52 percent of poor households reporting this concern.

1 Introduction

This report provides a basic understanding of the poverty situation in Grenada. The country's government, as opposed to most of the governments in the Latin America and the Caribbean region, only collects poverty data every 10 years; thus, this report is based on the latest available Survey of Living Conditions and Household Budget Survey (SLCHBS), carried out by the country's Central Statistical Office (CSO) between April to May of 2018–19. The report is a collaboration between the CSO and the World Bank's Poverty and Equity Global Practice, motivated by the need to strengthen poverty monitoring to assess progress in poverty reduction and, at the same time, contribute to evidence-based policy making in Grenada.

The report provides updated poverty statistics using the survey mentioned above. As in other Caribbean countries, poverty in Grenada is measured through a consumption aggregate constructed by the CSO,[1] and poverty lines estimated using the minimum food intake methodology in 2008. To compare results from previous years, the poverty line for 2018 was determined by updating the poverty line calculated in 2008 considering inflation.[2] After briefly presenting the country context, section 2 presents an overview of poverty and how it is measured and the changes observed in poverty levels over the 10 years between 2007/08 and 2018/19 as well as in the consumption shares of the poor and nonpoor. Additionally, it includes other nonmonetary measures of poverty, namely the Multidimensional Poverty Index and the Human Opportunity Index, to create a comprehensive picture of people living in poverty by considering other welfare indicators. Section 3 presents an analysis of the population's socioeconomic profile and shared characteristics of poor households, including household demographics, access to basic services, labor market, education, and health.

1 In Grenada, as well as other countries in the Caribbean, poverty is measured using a consumption aggregate, and not an income aggregate as other countries in the Latin America and the Caribbean region do.

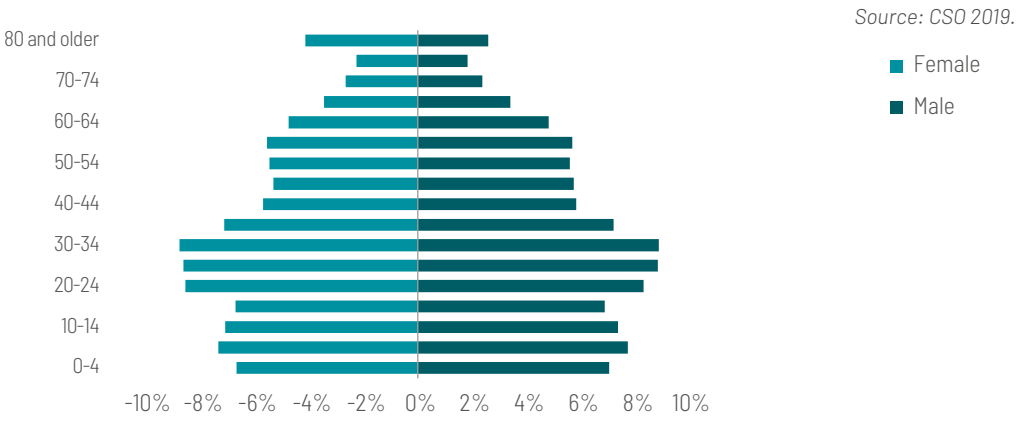
2 Annex 3 provides a detail of the construction of expenditure aggregates in the survey.

1.1 Country context

Grenada is a small island in the Caribbean region with low population density and a youthful demographic profile. Located in the southeastern Caribbean Sea, north of Trinidad and Tobago, northeast of Venezuela, and south of Saint Vincent and the Grenadines, the island is relatively small, both in area and population, with an area of 344 square kilometers and an estimated population of 112,579. The population is relatively young, with more than 47 percent below the age of 30 (Figure 1.1.1). This youthful population can be an asset for the country's development, but the benefits will only materialize if the economy can absorb them productively.

Because of its location, the country is especially vulnerable to climate events, both due to recurring damages from natural disasters and the effect of rising projected temperatures. Tropical storms and hurricanes occur less frequently in Grenada due to its proximity to the equator. However, hurricanes, such as Ivan in 2004, Emily in 2005, and several tropical storms in recent years have hit the islands, destroying ecosystems and infrastructure and resulting in economic decline.[3] Like other small islands in the Caribbean, most of the country's settlements and infrastructure are located on or near the coast, including government, health, commercial, and transportation facilities, and thus are particularly vulnerable to the adverse effects of natural disasters and human activity. Moreover, the impacts of climate change could magnify and accelerate coastal erosion.

Figure 1.1.1 Population Pyramid



Source: CSO 2019.

3 Government of Grenada, 2017. Second National Communication to the United Nations Framework Convention on Climate Change.

In the past years, growth in Grenada has been vigorous but uneven across sectors. Construction in FDI-financed tourism-related projects led the boom in recent years. Tourism-related industries, including hotels and restaurants, and transportation grew by about 10 percent in 2018, with activity in these sectors being further boosted temporarily by cruise passenger traffic and port storage demand diverted from countries elsewhere in the region that had been struck by hurricanes at the turn of 2017/18 (IMF 2019). Moreover, the wholesale and retail trade sector grew by more than 10 percent, and agriculture, fishing, and utility services sectors all grew by around 2 percent in 2018.

Historically, Grenada's labor market has been hampered by structural unemployment problems, primarily tied to skills mismatches, high reservation wages due to remittances, and workers' widespread unionization. Furthermore, unemployment is highly concentrated among the unskilled and the young population. As with other small islands, Grenada's economy is heavily dependent on the tourism sector, which poses a threat to the country's resilience in the face of external shocks and to the capacity to implement long-term reforms. The demand for tourism in the region is also highly correlated with the business cycle in advanced countries, especially the United States and Europe, Grenada's main tourist source countries. Furthermore, the tourism sector is especially vulnerable to natural disasters and other climate change impacts, including rising sea levels, drought, and changing weather patterns, which pose an acute risk to the population and their livelihoods. These effects are already exacerbating Grenada's development challenges and call for a strengthened institutional approach to disaster risk management and natural resources protection (World Bank 2020).

2

Economic Growth, Poverty, and Inequality

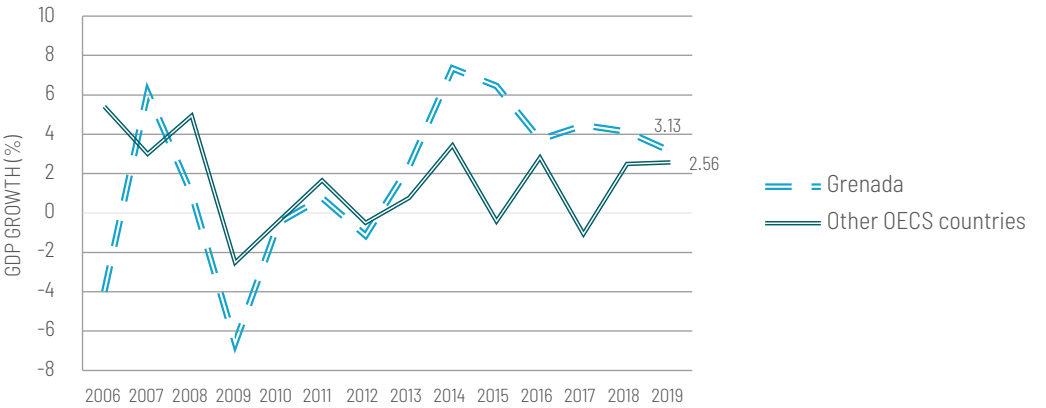
2.1 Economic Growth

Since 2001, Grenada's economic experience has been similar to that of its peer nations in the Organization of Eastern Caribbean States (OECS); however, Hurricanes Ivan (2004) and Emily (2005) obliterated its economy and exacerbated its debt situation to a far greater extent than was the case with the others. Following a significant decline in real GDP due to the devastation and loss of tourism revenues, real GDP growth increased to above trend, reflecting the rebuilding efforts. However, the global oil price spike in 2007, followed by the global financial crisis that began in 2008, caused a precipitous decline in GDP to well below the trend. This global financial crisis has had significant and long-lasting impacts on the economy, with a broad recession giving way to signs of recovery only after 2013.

In the subsequent period, Grenada experienced five consecutive years (2015–2019) of positive output growth. The gross domestic product (GDP) grew at an average annual rate of 4.3 percent over that period, leading the OECS region, which saw a 2.8 percent average annual growth rate. This average growth rate is also larger than that of the previous five years, averaging 1.75 percent over the period 2010–2014. The robust growth was supported by an economic adjustment program focusing on fiscal consolidation, expansion in the tourism sector thanks to greater marketing efforts, and increased air carrier traffic, and prudent fiscal management anchored by the Fiscal Responsibility Act. Similarly, GDP per capita grew at an average annual rate of 3.8 percent between 2015 and 2019, larger than that observed in 2010–2014 (1.16 percent). Grenada's GDP growth rate compares favorably with its neighbors at the regional level, with an annual GDP growth rate in 2019 only surpassed by Dominica and the Dominican Republic (Figure 2.1.1). Moreover, with a GDP per capita of US$17,241 in 2019 (in constant 2017 US$), Grenada comes in above the Latin American and Caribbean (LAC) average and above the GDPs per capita of other OECS countries, such as St. Lucia, St. Vincent and the

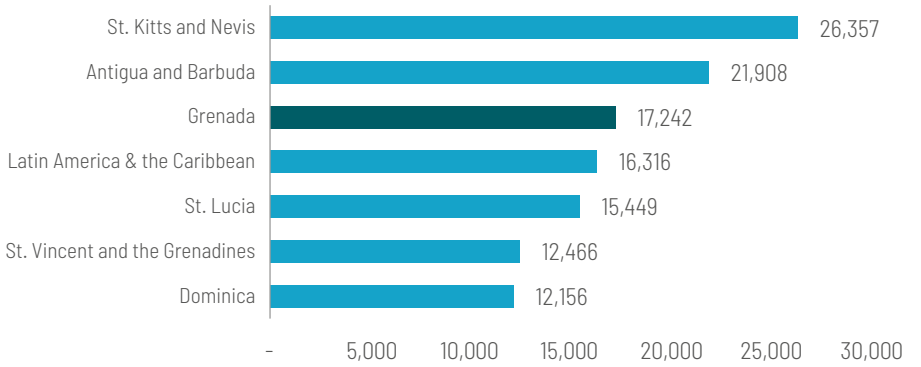
Grenadines, and Dominica, as seen in Figure 2.1.2. In Grenada, the elasticity of poverty with respect to growth is -1.71.[4] In other words, on average a 10-percentage-point increase in economic growth will produce a 17-percent decrease in the proportion of people living in poverty. In other OECS countries, the elasticities of poverty with respect to growth are -3.3 in St. Kitts and Nevis, -0.9 in Dominica, and -0.3 in St. Vincent and the Grenadines.[5]

Figure 2.1.1 GDP growth rate (annual %) for Grenada and other OECS countries



Source: World Development Indicators, World Bank.

Figure 2.1.2 GDP per capita (constant 2017 US$ PPP)



Source: World Development Indicators, World Bank.

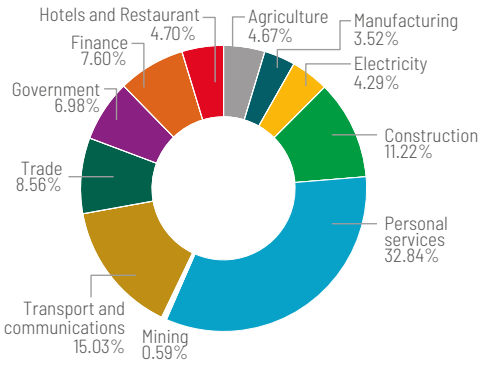
4 Own elaboration based on 2008–2018 SLCHB in Grenada.

5 World Bank staff estimates based on based on official poverty rates and GDP per capita (2011 PPP). The two periods are 1995–2002 and 2005–2008.

However, Grenada's economy is still heavily dependent on a single industry (tourism). Tourism's significance as a foreign exchange earner, employer, and catalyst for investment in Grenada is reflected in the commitments by the government, private sector, and communities. One of the six strategic objectives outlined in Grenada's Growth and Poverty Reduction Strategy, 2014–2018, is "Developing Tourism and Hospitality Industries" to help improve the country's competitiveness both regionally and globally (Antoine et al., 2014). The Government of Grenada plans to create conditions for the sustainable prosperity of the people and future generations through, amongst other things, developing "a world-class service industry especially in tourism" (Government of Grenada, 2014f). In the period 2008–2018, the contribution of this industry to the GDP grew from 4.7 to 6.43 percent, an increase of almost two percentage points, as shown in panels a and b of Figure 2.1.3. Moreover, the industry provides 42.9 percent of the country's employment directly and indirectly (World Travel and Tourism Council, 2019), which corresponds to 9,700 jobs in tourism and 24,300 jobs in all tourism-related sectors, hotels, restaurants, transportation, and retail. Increased job creation in recent years was generated by considerable public and private sector investment, especially in tourism-related investment projects. The share of tourism-related jobs in the economy has increased from 26 percent in 2005 to 42.9 percent in 2019, equivalent to an additional 12,100 jobs (World Bank 2020). The total number of stay-over visitors and the total visitors' expenditure considerably increased since 2008, as shown in Figure 2.1.4. The COVID-19 shock, while of uncertain magnitude and duration, is expected to contract this sector by 60 percent. Figures 2.1.5 and 2.1.6 show the magnitude of the crisis in the tourist arrival data, showing a massive decrease in tourist arrivals compared to the precrisis numbers.

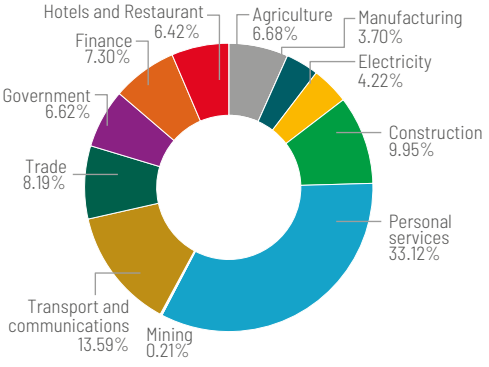
Figure 2.1.3 GDP contribution by economic activity (%)

a. 2008



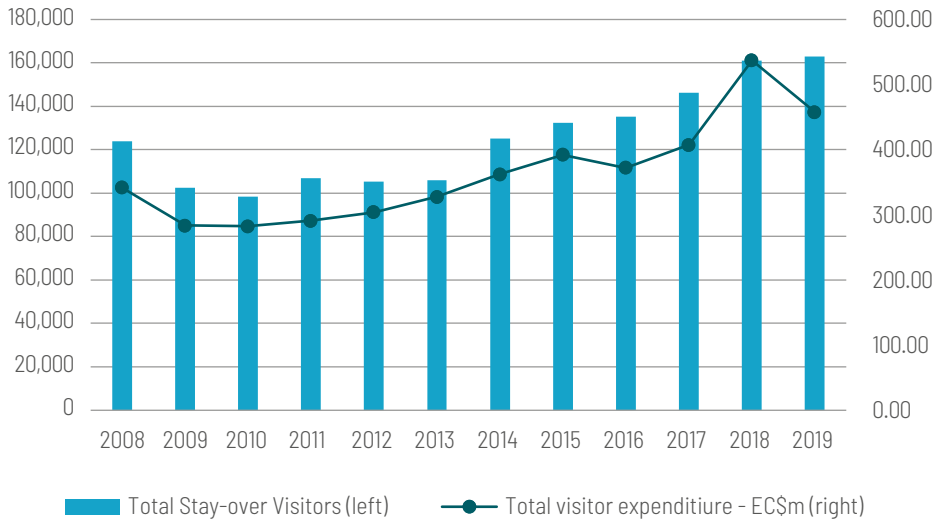
Source: Eastern Caribbean Central Bank.
Note: The tourism sector comprises hotel and restaurant activity only.

b. 2018



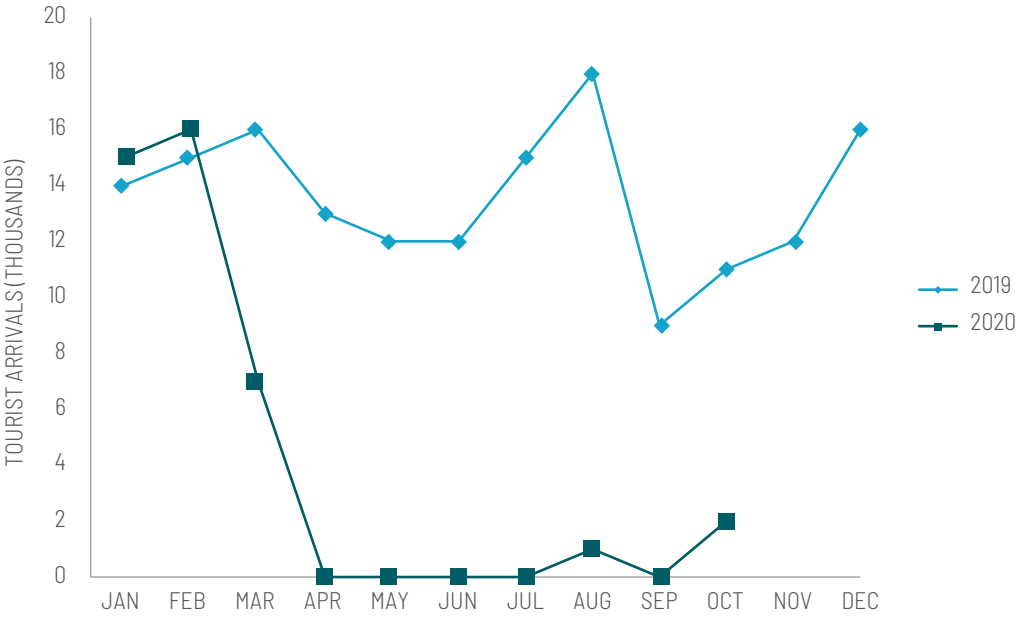
Source: Eastern Caribbean Central Bank.
Note: The tourism sector comprises hotels and restaurants activities only.

Figure 2.1.4 Total stay-over visitors and total visitors expenditure by year



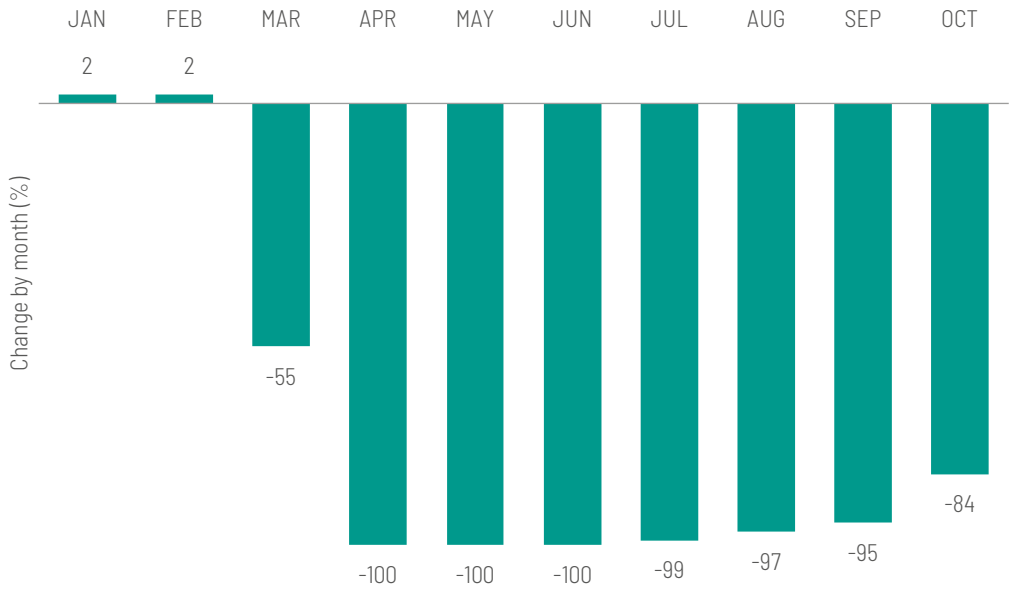
Source: Eastern Caribbean Central Bank.

Figure 2.1.5 Total tourist arrivals in 2019 and 2020 by month



Source: Eastern Caribbean Central Bank.

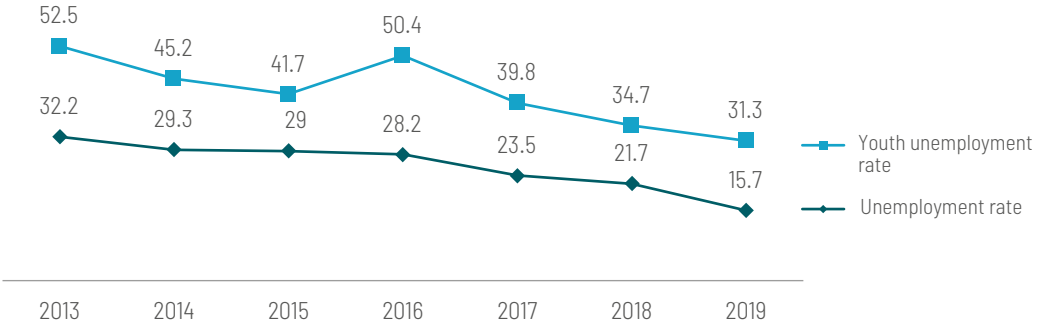
Figure 2.1.6 Percent change in international tourist arrival by month (2019–2020)



Source: Eastern Caribbean Central Bank.

In global and historical terms, recessions followed by economic recoveries in terms of GDP growth are typically accompanied by a revival in the labor market. However, some recoveries are jobless, showing persistently high unemployment and slow wage growth. Moreover, even when the labor market does recover, these gains are usually not spread equally, with the negative effects of recession lingering among some socioeconomic groups (World Bank 2018). The overall unemployment rate in Grenada declined steadily from 32.2 percent in 2013 to 23.5 percent in 2017 and 15.7 percent in 2019, and youth unemployment went down from 52.5 percent in 2013 to 39.8 percent in 2017 and 31.3 percent in 2019 (Figure 2.1.7). Following a decline in the overall labor force participation rate from 68.2 percent in 2016 to 65.8 percent in 2017, the rate kicked back up to 68.9 percent in 2018, prompted by an increase in younger workers' participation. Moreover, the recovery in Grenada was mostly associated with employment creation rather than with an increase in labor compensation. In fact, on average, real labor earnings stagnated or slightly declined, and the recovery period saw more jobs created in low-productivity sectors than in sectors with high labor productivity.

Figure 2.1.7 Unemployment and youth unemployment rates in Grenada, 2013–2019



Source: Labour Force Survey (LFS) 2013–2019.

Since 2008, the country has shown improvements in many socioeconomic indicators. For instance, the maternal mortality ratio decreased from 30 deaths per 100,000 births in 2008 to 25 in 2017 (Figure 2.1.8). Notable improvements have been made in access to improved water sources (from 85 percent of households in 2008 to 87 percent in 2017); and access to electricity, which went from 90 percent to 95 percent of the population. In terms of education, the country showed progress in the net enrollment rate for primary education, going from 93.6 percent in 2008 to 95.8 percent in 2018 and secondary school net enrollment went from 86.4 percent to 87.7 percent for the same period (World Development Indicators). Moreover, in recent years the country has seen its score and consequent ranking rise in the HDI[6], going from 0.743 in 2010 to 0.763 (#78 out of 189) in 2018, putting the country in the high human development category. However, there has been a marked increase in mortality rates for children under five (from 14.7 per 1,000 children in 2008 to 16.6 in 2018) and infants at birth, going from 12.7 deaths per 1,000 births in 2008 to 14.7 in 2019, slightly above the regional average of 13.9 and above countries like St. Kitts and Nevis (12.9) and Antigua and Barbuda (5.8), as seen in Figure 2.1.9. The infant and under five year-old mortality rates are influenced by the neonatal deaths that mostly occur in the early neonatal period. Deaths are due to prematurity and other conditions originating in the perinatal period. Capacity building, policies, and other interventions are being implemented to prevent morbidity and mortality in the country (WHO 2018). Furthermore, Grenada continues to be challenged by an upsurge in noncommunicable diseases (NCDs). Vector-borne diseases such as dengue and chikungunya were responsible for epidemics in the country from 2010 to 2016.

6 The Human Development Indicator is a composite index developed by UNDP which measures indicators such as life expectancy at birth, expected years of schooling, mean years of schooling and GNI per capita.

Figure 2.1.8 Maternal mortality ratio (per 100,000 births)

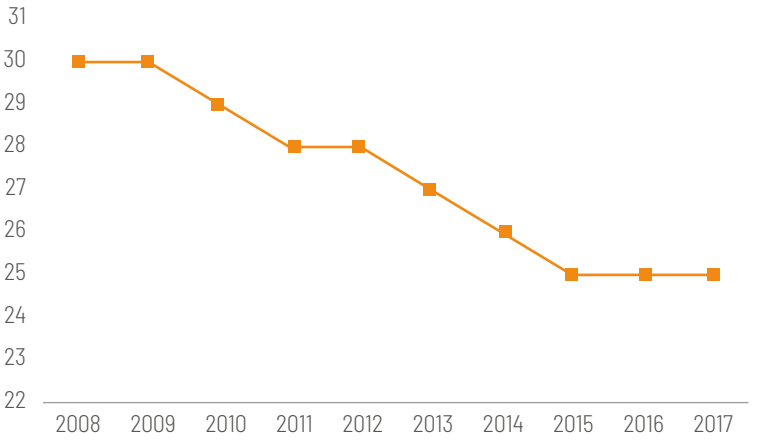
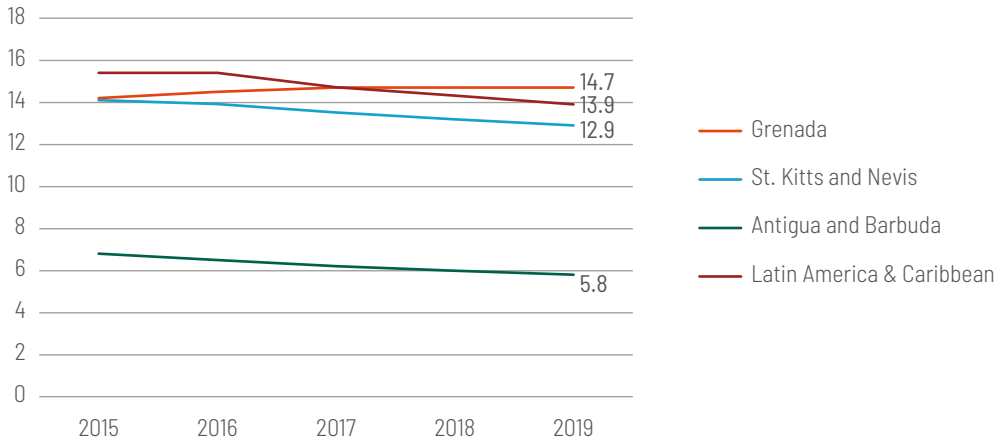


Figure 2.1.9 Infant mortality rates by country (per 1,000 births)



Source: WDI.

The improvements mentioned above go hand in hand with poverty reduction between 2008 and 2018, period in which Grenada´s poverty rate significantly decreased from 37.7 percent to 25.0 percent. The unprecedented challenges posed by the COVID-19 pandemic and the resulting economic downturn may cause the livelihoods of the most vulnerable population to deteriorate, especially considering that between 2008 and 2018 extreme poverty increased from 2.4 percent to 3.5 percent and inequality, measured by the Gini index, also increased, going from 0.37 in 2008 to 0.40 in 2018. The following chapters will discuss the possible causes behind these increases and analyze the characteristics of poor households.

2.2 Measuring Poverty and Inequality

In its most basic form, poverty measurement refers to identifying those individuals or households who live below a predefined threshold of welfare. Such a threshold is generally known as a poverty line and the welfare aggregate that ranks the population from poorest to richest is usually measured in monetary terms like income or consumption expenditures. Given that Grenada's household surveys are consumption based, the official poverty measure of the country considers this welfare aggregate.

The 2018 Grenada poverty profile presented in this report is based on an updated 2008 poverty line to better reflect changes in living standards and population spending patterns. The Central Statistical Office of Grenada (CSO) has conducted the Survey of Living Conditions and Household Budget Survey (SLCHBS) at 10-year interval since 1998. These surveys' objective is to assess the Grenadian population's living standards and generate necessary data for socioeconomic planning at the country and parish level. For instance, the SLCHBS is the primary source of official poverty and inequality figures in Grenada, and it provides critical information for monitoring progress on living conditions and poverty reduction and identifying poor and vulnerable populations, and thus provides inputs to inform the government on the effects of the social policies implemented for poverty eradication. Box 1 provides a detailed description of the SLCHBS 2018–19.

Poverty estimates for years before 2018 are based on the poverty methodology established in 2007–08, using the SLCHBS of that year. The national poverty rates computed in 2007–08 were updated with the corresponding Consumer Price Index (CPI) values for the period 2007–08 to 2018–19, taking into consideration the average value of the CPI for the months in which both surveys collected data on food and nonfood items. The new national poverty line is estimated at EC$6,782 per year per person at 2019 prices—a 16 percent increase from EC$5,842 per year per person in 2007–08 (Table 2.2.1), reflecting a higher cost of living in the country. In 2018–19, median consumption per capita was EC$8,256 per year—22 percent higher than the total poverty line. The food poverty line is set at EC$2,899 per year per person, comprising 43 percent of the poverty line. For the average Grenadian household, food constitutes approximately 21.9 percent of total consumption.

Table 2.2.1 Poverty lines by year of survey, 2007–08 and 2018–19 (EC$)

POVERTY LINES	2007–08	2018–19
Total poverty line	5,842	6,782
Nonfood poverty line	3,448	3,852
Food poverty line	2,394	2,899

Sources: SLCHBS 2007–08, SLCHBS 2018–19, and official CPI values.

Box 2.2.1 SLCHBS 2018–19

Survey design: The sample and sample frame for the SLCHBS is the 2011 Grenada Population and Housing Census. A two-stage, systematic, stratified random sample technique was used to undertake the sampling of the SLCHBS 2018–19 for Grenada, Carriacou, and Petite Martinique. Stratified random sampling is a method of picking households in a population from all strata whereby different primary sampling units (PSUs) or enumeration districts (EDs) within each strata have different (but known) chances of being selected. However, each household within the PSU has an equal chance of selection within any given enumeration district. PSUs are small geographical area units within the strata. Given that the census data was used as the sample frame, the PSUs are the enumeration areas identified and used in the census.

Once the sample selection of PSUs was completed, an exercise was carried to list all households or all housing units or dwellings in each selected PSU. The optimum number of households to be selected in each PSU depended on the data-collection cost structure and the degree of homogeneity or clustering with respect to the PSU survey variables.

A nonresponse rate of 15 percent was used based on past experience with this survey, which resulted in a target sample of 1689 households, hoping to yield approximately 1,500 households. The cluster size option used is 8 households per ED/PSU for all parishes and 10 for St. Mark's. St. Mark's was oversampled due to its size to ensure greater representation of the parish. The square root allocation in assigning the number of PSUs to parishes was also used to generate reasonable estimates at the parish level.

Survey instrument: The overall survey instrument used is the OECS harmonized Survey of Living Conditions/Household Budget Survey Questionnaire, which is part of the overall OECS Enhanced Country Poverty Assessment Project and was produced as one of the components of the OECS SLC/HBS Toolkit. As the name suggests, it is a combination of two surveys, a Survey of Living Conditions and a Household Budget Survey. Having the HBS as part of the SLC enables the collection of expenditure data in a much more detailed format than would typically be collected in an SLC, and its collection is done following the United Nations (UN) Classification of Individual Consumption according to Purpose (COICOP). The questionnaire was designed in Survey Solutions and adapted for Grenada. This questionnaire was administered through the use of CAPI and World Bank Survey Solution Software.

The SLC/HBS questionnaire comprises two main instruments: a household questionnaire and an individual questionnaire. The survey was administered using a structured format—each interview follows the same set of questions in the same order and response options. The household questionnaire was conducted with one adult in the household over the age of 18, usually the head of household, who knows the household's composition, activities, and expenditure practices. The individual questionnaire collected information on each member of the household. One questionnaire was used for each member. There are skip patterns that indicated which questions were to be asked of all members and which ones were to be asked only of the adult spenders (persons over 18 years).

Data collection: While the time required for a survey varied, based on the household's size, the SLC interview, on average, took 120 minutes to complete with the household to cover all aspects.

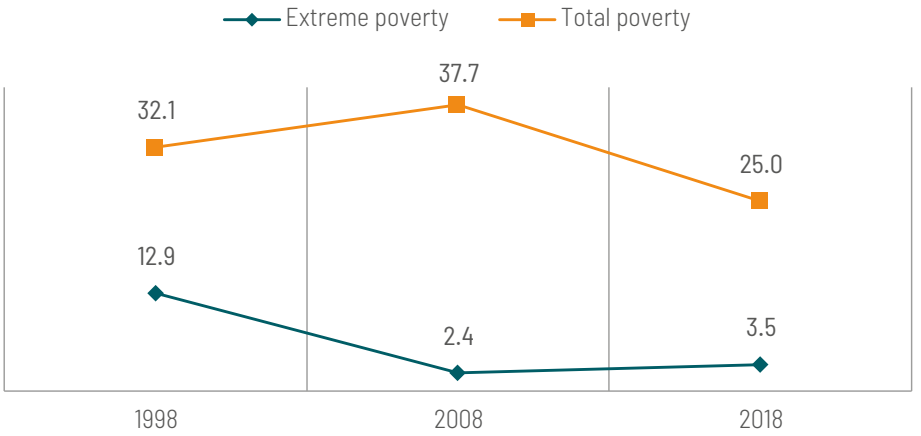
The following actions were taken to ensure the effective management of data collection:

- Supervision of interviewers and ensuring that every interview captured a GPS location with it.
- Interviewer observation through spot checks and frequent communication by supervisors for quality control.
- Frequent communication with headquarters and supervision for quality control.
- Progress report for the data collection period was constantly monitored and observed by the supervisor by logging into the supervisor login on the headquarters module and reviewing the Google Maps of the locations where the interviews were done.

In the execution of the survey, a monthly and weekly sampling workload distribution for the conduct of the SLC/HBS was completed. This work involved distributing the selected sample equally over four phases, designed to cover the 12 months from May 2018 to April 2019. Each phase consisted of three months. Each month within each phase was subdivided into workloads for enumerators weekly. Within each week, the selected household's household number within the selected ED was identified using systematic random sampling. The sample was distributed over 12 months to ensure that the seasonality of expenditure was captured in the survey.

The results show that in 2018, 25 percent of Grenadians were poor, and 3.5 percent lived in extreme poverty. Total poverty experienced a significant reduction of 12.7 percentage points over the prior 10 years (Figure 2.2.1), while extreme poverty increased by 1.1 percentage points in the same period.

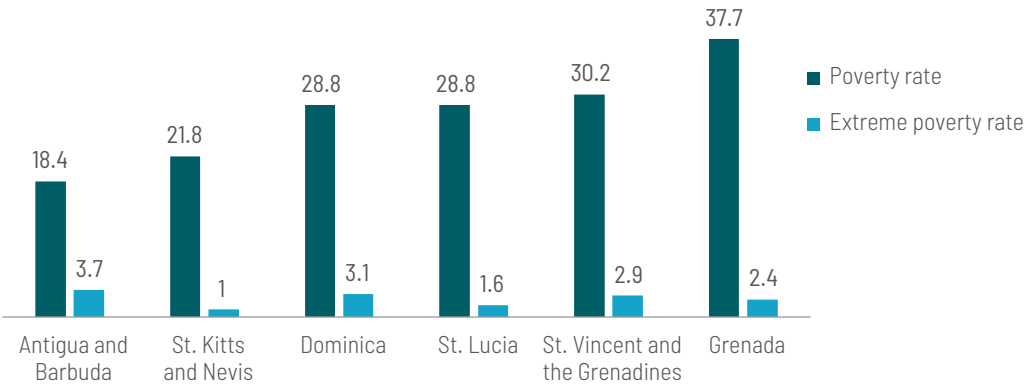
Figure 2.2.1 Poverty trends, 1998–2018



Sources: SLCHBS 1998, 2007–08, and 2018–19.

For international comparisons, ideally poverty data would be considered against international poverty lines. However, the poverty data in the region are outdated. The latest comparable poverty numbers date to 2005–2008, before the OECS economies were hit by the global financial crisis (see Annex 2 for international poverty rates). By official poverty measures, substantial heterogeneity is observed across the region. The country with the lowest poverty incidence is Antigua and Barbuda (18.4 percent) followed by St. Kitts and Nevis (21.8 percent). On the other hand, countries with the highest incidence rates are St. Vincent and the Grenadines (30.2 percent) and Grenada (37.7 percent), as seen in Figure 2.2.2.

Figure 2.2.2 Poverty and extreme poverty in OECS countries, 2005–8

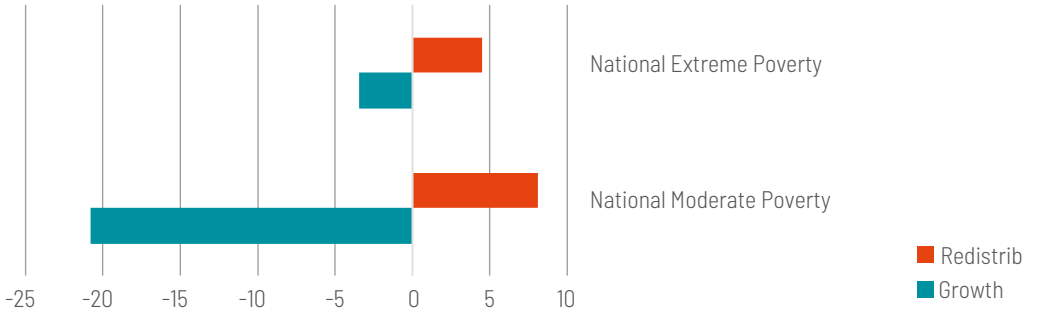


Source: Country poverty assessment reports.

Before delving into inequality measures, we perform an analysis to assess whether changes in the distribution helped or harmed the poor between 2008 and 2018. The Gini coefficient will not help answer this question, because it takes the entire distribution into account—and so a reduction in inequality as measured by this coefficient does not conclusively mean that there has been a poverty reduction. To analyze the main drivers of the poverty rate changes between 2008 and 2018, we decompose this change, following the Datt-Ravallion method. Thus, within this methodology, poverty changes have two components: (1) the income (consumption) growth component is the change in poverty due to a change in the average income (consumption) in the absence of changes in income distribution, and (2) the redistribution component is the change in poverty due to changes in the Lorenz curve while the average income (consumption) is kept constant (World Bank 2014).

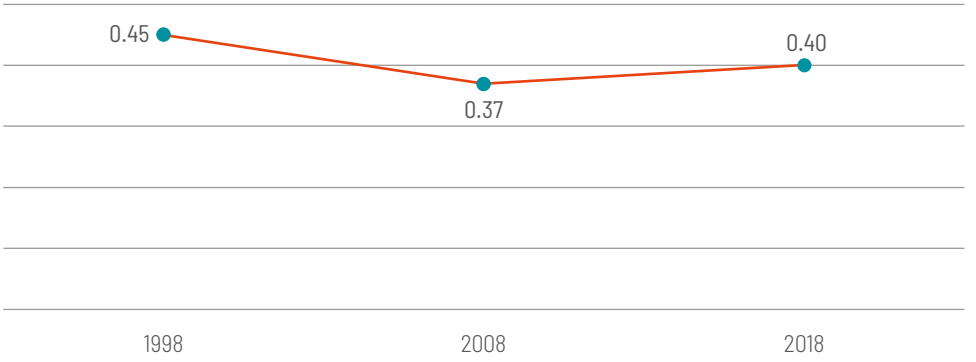
In the case of Grenada, a change in consumption between the two points in time for which data are available is considered. As seen in Figure 2.2.3, at the national level the main driver of poverty change from 2008 to 2018 in Grenada is the consumption growth effect, accounting for 20.8 percentage points of the change, while the redistribution effect accounted for 8.1 percentage points of the change. This means growth in consumption led to a reduction in poverty of 20.8 points, whereas the change in the distribution of this consumption between 2008 and 2018 led to an increase of about 8.1 points in poverty, resulting in a total poverty decrease of 12.7 points in that period. In other words, according to this decomposition, poverty would have declined by 20.8 percentage points from 37.7 percent down to 16.9 percent in 2018 if inequality in the country had not risen. On the other hand, it can be seen that the growth in consumption for the extreme poor was not enough to offset the redistribution effect. That is, while growth in consumption led to a reduction in extreme poverty of 3.4 points, higher inequality levels accounted for an increase of this index by 4.5 points.

Figure 2.2.3 Datt-Ravallion decomposition of poverty, 2008–18



Sources: SLCHBS 2007–08 and 2018–19.

Figure 2.2.4 Gini coefficient trend, 1998–2018



Sources: SLCHBS 1998, 2007–08, and 2018–19.

While poverty decreased, inequality in Grenada has slightly increased in the 10 years of available data (Figure 2.2.4). The Gini coefficient, the most comprehensive measure of inequality, increased from 0.37 in 2008 to 0.40 in 2018. This increase in inequality since 2008 may imply some degree of deterioration of conditions for the lower consumption groups, which is also shown in the increase of the extreme poverty rate in this period. This could be the product of economic development failing to improve the well-being of citizens at the very bottom of the distribution.

Moreover, the ratio of income shares between the 10th decile (highest expenditure) to the 1st decile (lowest expenditure) increased from 5.071 in 2008 to 6.828 in 2018. In other words, for each Eastern Caribbean dollar the average person in the poorest decile spent in 2018, the average person in the wealthiest decile spent EC$7, about EC$2 more than in 2008. Table 2.2.2 shows other inequality measures, such as the Theil and Atkinson indexes (which assign Grenada values of 0.285 and 0.424, respectively).

Table 2.2.2 Inequality measures for Grenada, 2008–18

MEASURE OF INEQUALITY	RATE 2008	RATE 2018
Gini coefficient	0.375	0.405
Rate 90/10	5.071	6.828
Rate 75/25	2.277	2.608
Generalized entropy, GE(-1)	0.260	0.368

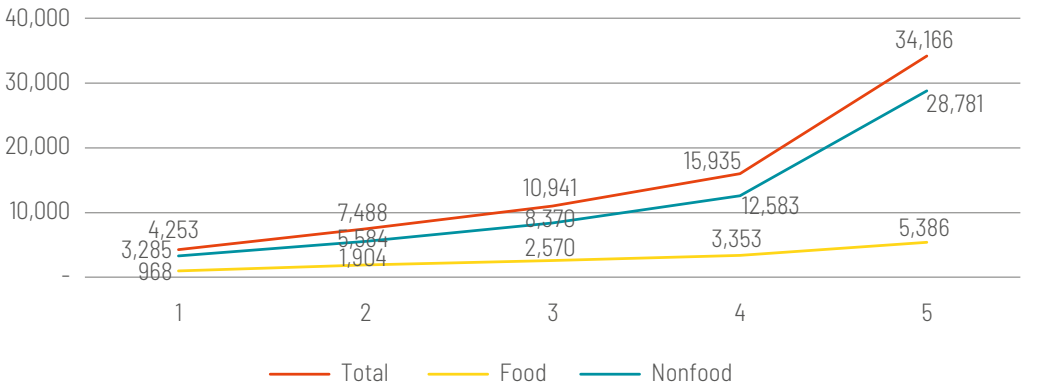
MEASURE OF INEQUALITY	RATE 2008	RATE 2018
Mean log deviation, GE(0)	0.230	0.280
Theil index, GE(1)	0.253	0.285
Generalized entropy, GE(2)	0.362	0.381
Atkinson, A(0.5)	0.114	0.132
Atkinson, A(1)	0.205	0.244
Atkinson, A(2)	0.342	0.424

Source: SLCHBS 2008-2018.

2.3 Consumption patterns

Households spend around 21.9 percent of their outgoing income on food at the national level. By consumption quintiles, Figure 2.3.1 shows that the fifth quintile spends on average almost six times more on food, however this represents only 16 percent of their total consumption, compared to those at the first (lowest) quintile, for whom food spending is 23 percent of total consumption. For nonfood items, the difference is even more apparent: the fifth quintile's nonfood consumption is almost nine times that of the first, for whom nonfood expenditures represent around 77 percent of total consumption. When analyzing consumption patterns by poverty status, it is evident that the food consumption share is higher for the poor population (23.3 percent) than for the nonpoor (21.5 percent), whereas for the nonfood consumption aggregate, a higher proportion is observed for the nonpoor (78.5 percent vs. 76.7 percent for the poor), as seen in Table 2.3.1.

Figure 2.3.1 Food, nonfood, and total expenditure by consumption quintiles (EC$)



Source: SLCHBS 2018-19.

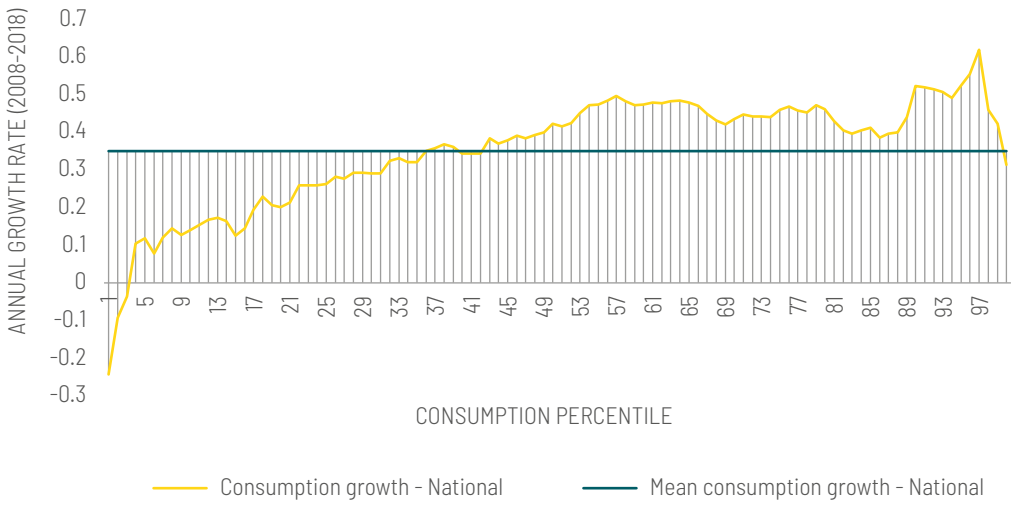
Table 2.3.1 Consumption shares by poverty status, 2018 (%)

	POOR	NONPOOR	NATIONAL
Food expenditure	23.3	21.5	21.9
Nonfood expenditure	76.7	78.5	78.1

Source: SLCHBS 2018–19.

Moreover, the consumption growth patterns between 2008 and 2018 were different at the bottom and the top of the distribution. Figure 2.3.2 shows the average annual percentage change in consumption between 2008 and 2018 for each percentile of the distribution, ranging from the poorest 1 percent to the richest 1 percent. Mean consumption growth reached 35 percent over this 10-year period. Growth in consumption has not been pro-poor, as evidenced by the fact that it was generally slower in the lowest percentiles, progressively increasing, the higher the percentile. In fact, the growth has been negative for the first 3 centiles. A rate higher than the mean starts only at percentile 36, with the peak at percentile 97 with a growth rate of 62 percent per year between 2008 and 2018. The slow growth in consumption for the bottom of the distribution may explain the increase in extreme poverty and inequality.

Figure 2.3.2 Average annual growth rate of consumption by percentile, 2008–18



Sources: SLCHBS 2007–08 and 2018–19.

2.4 Non-income measures of well-being

Poverty is a complex concept. A widespread view argues that to address poverty successfully, some important aspects of the phenomenon cannot be measured in monetary terms; we need to understand it from different dimensions and use metrics beyond the monetary. This section explores nonmonetary measures such as the Multidimensional Poverty Index (MPI), the Human Development Index (HDI), and housing infrastructure.

2.4.1 The Multidimensional Poverty Index in Grenada

To summarize household deprivation in different dimensions, the MPI for Grenada is constructed based on available information from the latest SLCHBS (2018–19). This is the first time this index has been built for the country and the government of Grenada plans to update it, based on subsequent surveys, to monitor multidimensional poverty every 10 years (or every time a new SLCHBS is available).

Grenada's multidimensional poverty measure encompasses various forms of deprivation experienced by the poor in their daily lives by capturing nonmonetary dimensions of well-being such as education, health, living standards, employment, and risk management (Table 2.4.1.1), and linking the country context to them. This is a complementary measure to official monetary poverty (based on household consumption) and will serve as a way to monitor multidimensional poverty and its indicators throughout the country while updating the measure with each subsequent survey.

The Grenadian MPI reflects simultaneous deprivations in a set of 18 indicators chosen based upon a detailed analysis of relevance and data availability.[7] To identify whether or not a household in Grenada is deprived in an indicator, a deprivation cutoff is set for each indicator. This yields a set of 18 binary variables for every household, each variable taking the value of 1 if the household is deprived in that indicator and 0 otherwise.

Once the set of binary variables is calculated, each household is assigned a deprivation score *c* that indicates the proportion of deprivations weighted by each indicator's relative importance in the structure of the MPI. This score *c* takes values

7 The MPI is constructed using the SLCHBS from 2018–19 only, because all the indicators that are part of it were constructed based on this survey. Some of the indicators included in the index are not available in the SLCHBS from 2007–08, so the construction of the index for that year is not possible. The choices of indicators and dimensions were based on the literature concerning this index and international experience, as well as the context of the country and availability of data in the SLCHBS.

between 0 (the household does not experience any weighted deprivations) and 1 (the household experiences weighted deprivations in all 18 indicators). So, to identify households in multidimensional poverty in Grenada, *c* is compared to a poverty cutoff (known as the *k*-value). In Grenada, the poverty cutoff/*k*-value was set at 40 percent, based on the reasoning that this threshold is equivalent to being deprived in two complete dimensions or the equivalent of weighted indicators. All households deprived in several weighted deprivations equal to or greater than this cutoff are identified as multidimensionally poor. Once these households are identified, the MPI is computed as the product of two component indexes: the multidimensional headcount ratio and multidimensional poverty intensity (National Statistics and Information Authority 2019).

The multidimensional headcount ratio (*H*) is the proportion of the population who are multidimensionally poor. The multidimensional intensity of poverty (*A*) measures the proportion of weighted indicators in which, on average, multidimensionally poor households are deprived. In other words, *H* measures the incidence of poverty while A measures intensity. The MPI combines these two aspects of poverty in the following way: *MPI* = *H* x *A*, thus measuring both the incidence and intensity of poverty.

Table 2.4.1.1 Dimensions of poverty in Grenada

DIMENSION	INDICATOR	DEPRIVED IF...	WEIGHT
EDUCATION	Primary education	All persons have primary or less education	1/15
	Internet in the house	There is no internet connection in the household	1/15
	Banking connectivity	Members do not have an active bank/credit union account	1/15

DIMENSION	INDICATOR	DEPRIVED IF...	WEIGHT
LIVING STANDARDS	Assets	There are five or fewer assets, such as a television, refrigerator, washing machine, stove, air conditioning, iron, telephone, computer, dryer machine, vacuum, heater, tank, and no vehicle	1/30
	Overcrowding	There are three or more persons per bedroom	1/30
	Toilet	Dwelling does not have a W.C. (flush toilet) linked to a septic tank or sewer	1/30
	Housing	Dwelling's outer walls are made of wood, plywood, or worse	1/30
	Feeling of safety	Members do not feel safe walking alone around their area of residency	1/30
	Crime	A family member was assaulted, robbed, or either they or any property owned by them was threatened outside the home	1/30
EMPLOYMENT	Long-term unemployment	All members have been unemployed for more than six months	1/15
	Youth long-term unemployment	All young family members have been unemployed for more than six months	1/15
	Formality	All members work in an informal job	1/15

DIMENSION	INDICATOR	DEPRIVED IF...	WEIGHT
HEALTH	Health facility	At least one member who was sick or injured in the past 90 days did not seek medical treatment at an official health facility	1/20
	Chronic disease	At least one person has a chronic disease but has not sought medical treatment	1/20
	Health insurance	At least one person does not have health insurance	1/20
	Food insecurity	At least one person was unable to eat because of a lack of money or resources	1/20
RISK MANAGEMENT	Disaster	The household experienced a shock due to a natural disaster and did not have a mitigation strategy to cope with it	1/15
	Dwelling insurance	Household is not covered by insurance in case of emergencies	1/15
	Water in pipe	The household has water in the pipe on average less than 4 days a week	1/15

Source: Central Statistical Office of Grenada based on SLCHBS 2018-19.

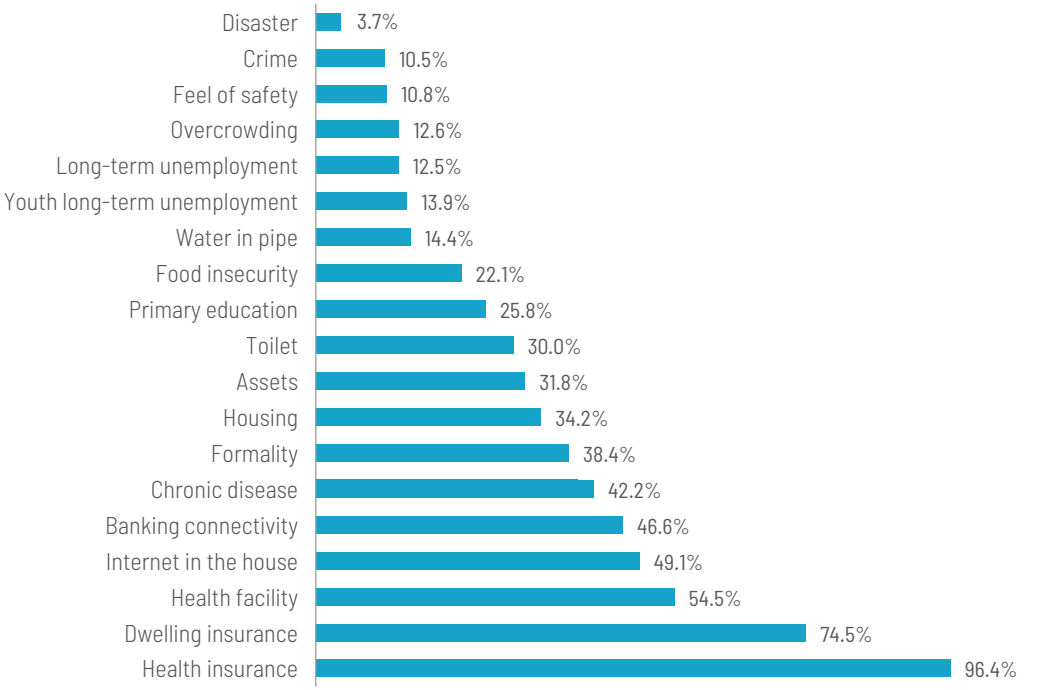
To show the proportion of the households who are deprived in each indicator that is part of the MPI, we compute the uncensored headcount ratios. These are estimated for each indicator, and taken together are a measure of deprivation regardless of each household's poverty status. As Figure 2.4.1.1 shows, the highest deprivations are for the health insurance indicator (with 96 percent of the households deprived in this indicator), dwelling insurance (74 percent), and health facility (54 percent). On

the other hand, some indicators show much lower rates of deprivation. In particular, the rate of deprivation in the disaster indicator (3 percent) is the lowest among all indicators, and relatively fewer households are deprived in crime (10 percent) and feeling of safety (11 percent).

Table 2.4.1.2 shows the results for the MPI of Grenada, including its partial indices. The incidence of poverty or multidimensional headcount ratio *H* is at 34.3 percent (percentage of the population living in households who are considered multidimensionally poor), and the multidimensional intensity of poverty *A* is 46.2 percent (average proportion of weighted indicators in which the poor are deprived). Finally, the resulting MPI for Grenada is set at 0.158. This means that multidimensionally poor people in Grenada experience 15.8 percent of the total deprivations that would be experienced if all people were deprived in all indicators. The MPI is the most important statistical measurement of multidimensional poverty used to declare whether poverty has fallen or risen over time, because it considers progress on two levels: *H* and *A*. In addition, Figure 2.4.1.3 shows the multidimensional headcount ratio and multidimensional intensity of poverty under different values of *k* (poverty cutoff) to analyze how sensitive the two indices are to the *k*-values. As the figure shows, all the three indicators (*H*, *A*, and MPI) are highly robust to a restricted plausible range of poverty cutoffs, from 5 to 60 percent.

Figure 2.4.1.2 shows the number of people in Grenada who are multidimensionally poor and monetary poor (based on consumption). In 2018, 13,300 Grenadians were considered both monetary poor and multidimensionally poor, which accounts for 12.3 percent of the total population of the country. Roughly the same number of people—13,162—are considered monetary poor, but not multidimensionally poor. Similarly, over 23,600 people are considered multidimensionally poor but not monetary poor, corresponding to 22 percent of the total population. On the other hand, around 57,600 people are considered neither multidimensionally poor nor monetary poor, which corresponds to almost 54 percent of the population.

Figure 2.4.1.1 Uncensored headcount ratios, 2018



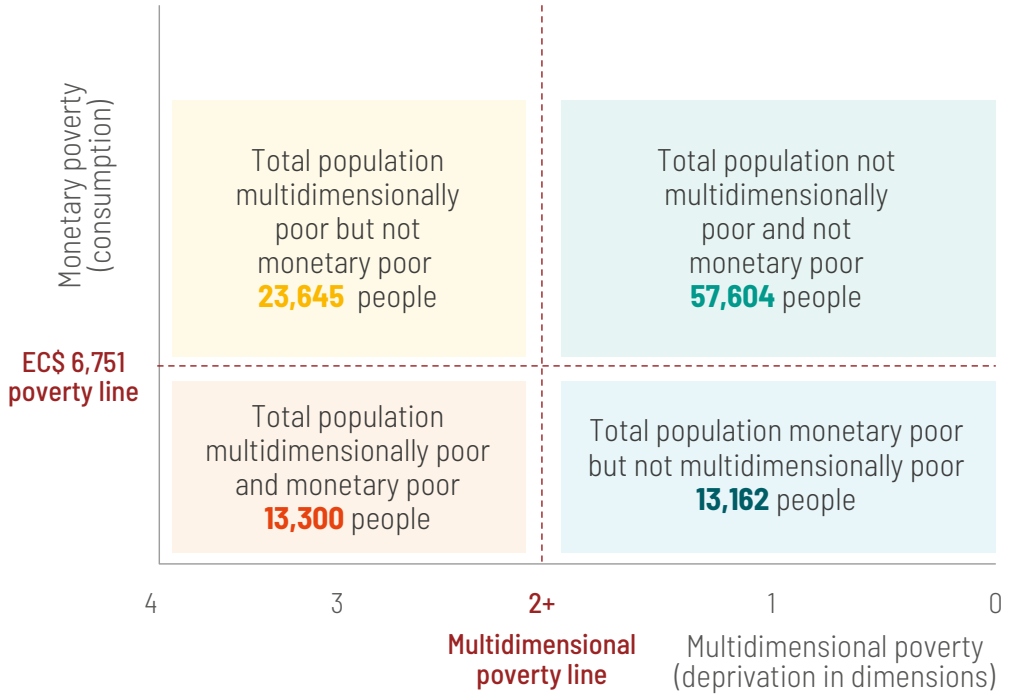
Source: Authors' elaboration based on SLCHBS 2018–19.

Table 2.4.1.2 MPI and its partial indices for Grenada, 2018

POVERTY CUTOFF (K)	INDEX	VALUE
K-VALUE = 40%	MPI	0.158
	Multidimensional headcount ratio (H, %)	34.3
	Multidimensional intensity of poverty (A, %)	46.2

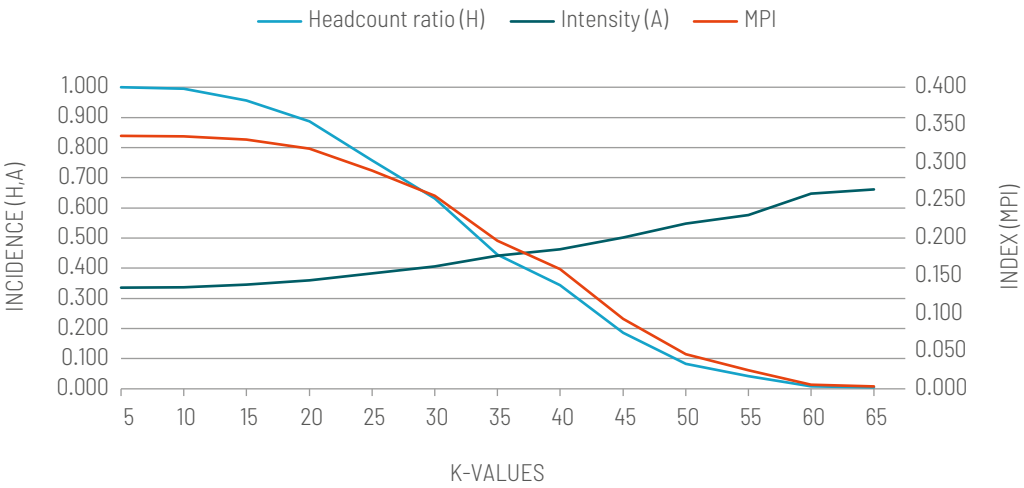
Source: Authors' elaboration based on SLCHBS 2018–19.

Figure 2.4.1.2 Total population either multidimensionally poor or monetary poor or both or neither, 2018



Source: Authors' elaboration based on SLCHBS 2018-19.

Figure 2.4.1.3 Sensitivity of MPI, H, and A to k-values



Source: Authors' elaboration based on SLCHBS 2018-19.

2.4.2 The Human Opportunity Index in Grenada

This section employs an operational measurement of equity called the Human Opportunity Index (HOI), which focuses on access of Grenadian children ages 0–18 to basic goods and services (Barros et al. 2009). We use this index to measure children's opportunities based on access to basic services considered critical for individual development; universal access to such services—by public or private provision—is a socially valid and feasible objective. Specifically, this measurement considers both average coverage and distribution of basic opportunities among circumstance groups. These groups are defined according to predetermined circumstances at birth, such as race, gender, family income, parent's education level, and place of residence, for which children cannot be considered responsible and that therefore, from the standpoint of equity of opportunity, should not affect their access to basic goods and services (Barros et al. 2009). This measure can also be seen as a synthetic measure of how far a society is from universal access to an essential good or service and how equitably access is distributed across individuals (circumstance groups). By focusing on children ages 18 and under, the HOI excludes the effect of effort and choices. So, for a given service, the difference between the HOI and its coverage reflects how circumstances affect the likelihood of accessing this service. The larger the gap between these two rates, the more unequal the access is (World Bank 2016).

In the case of Grenada, the predetermined circumstances considered in the analysis include (1) wealth quintiles based on the possession of assets in the household, (2) possession of other assets (washing machine, internet in the house, and electric kitchen appliances), (3) gender, (4) family characteristics, (5) household head's education, (6) household head's working sector, (7) parish of residence, and (8) household's expenditure decile. The opportunities considered in the analysis include (1) starts school on time (at ages 6–7), (2) attends elementary school (during ages 6–13), (3) attends secondary school (during ages 14–18), (4) finishes six years of education on time (ages 12–16), (5) dwelling has tap water, and (6) dwelling is connected to sanitation network (Table 2.4.2.1).

Table 2.4.2.1 Key outcome variables for the analysis

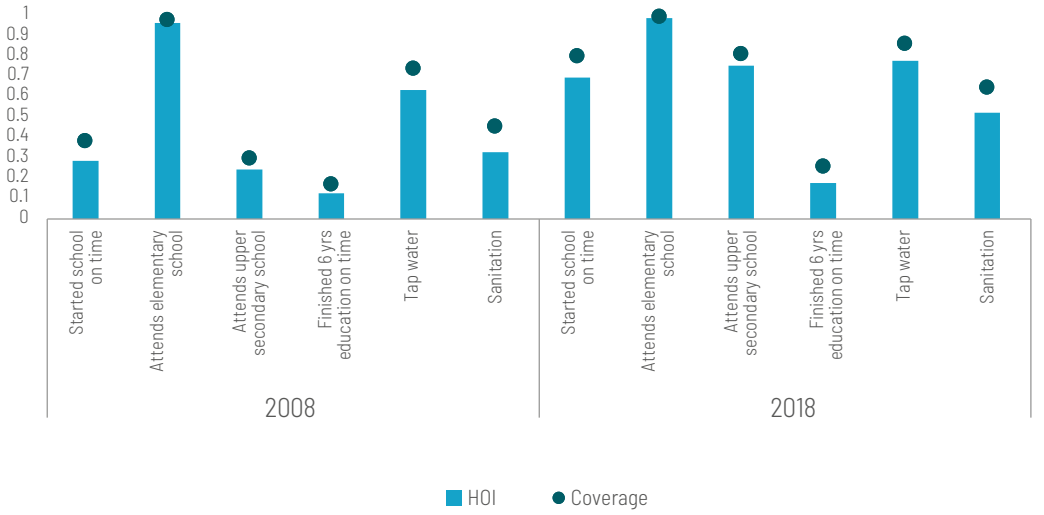
VARIABLE	DEFINITION
Age 6–7	
Starts school on time	A child ages 6–7 starts school on time.
6–13	
Attends elementary school	A child ages 6–13 is currently attending elementary school.
14–18	
Attends secondary school	A child ages 14–18 is currently attending secondary school.
12–16	
Finishes 6 years of education on time	A child ages 12–16 finishes 6 years of school on time.
0–16	
Dwelling has tap water	The house in which a child ages 0–16 lives has tap water in the dwelling.
Dwelling connected to a sanitation network	The house in which a child ages 0–16 lives has a sanitation network connected to the dwelling.

Source: Authors' calculation based on SLCHBS 2018–19.

In terms of access to services, all the opportunity indicators for the HOI in Grenada showed an improvement both in the HOI index and coverage from 2008. For instance, in 2018, sanitation in the dwelling is the lowest and most unequally distributed service in Grenada, with an HOI of 52.2 percent and coverage of 64.5 percent, but these values represented increases from 2008, when the HOI was 32.9 percent and coverage was 45.3 percent. Additionally, access to tap water in the dwelling shows an HOI of 77.9 percent and coverage of 86.2 percent in 2018, against 63.5 percent and 74.1 percent, respectively, in 2008. Access to proper education shows very heterogeneous results across the four indicators analyzed for the country. The indicator starts school on time (for children age 6–7) shows an HOI of 69.5 percent and coverage of 80 percent in 2018, more than double the values in 2008, when HOI was 28.9 percent and coverage 38.4 percent. Elementary school attendance (ages 6–13) is the highest in terms of opportunity and highest coverage in the country, with an HOI of 98.8 percent and coverage of 99.4 percent; however, these were similarly high in 2008, when the HOI was 96.4 percent and coverage 97.9 percent. The indicator that showed one of the greatest improvements in 2018 is upper secondary school attendance: the HOI of

75.5 percent and coverage of 81.2 percent were 2.5 to 3 times what they had been in 2008 (when HOI was 24.4 percent and coverage 29.8 percent). The indicator finished six years of school on time is still the lowest opportunity in the educational aspect, with an HOI of only 19 percent and coverage of 25.7 percent; nonetheless, these were 50 percent increases from 2008, when the HOI was 12.6 percent and coverage 16.9 percent (Figure 2.4.2.1).

Figure 2.4.2.1 Human Opportunity Index and coverage for Grenada, 2008–18



Source: Authors's calculation based on SLCHBS 2008-2009 and 2018-2019.

The parish of residence and family characteristics[8] are the circumstances that explain most of the inequality of access to basic opportunities in 2018 and 2008, suggesting that significant barriers remain for intergenerational mobility in Grenada. The Dissimilarity Index (D-index) enables the assessment of to what extent differences in opportunities are explained by household characteristics, including place of residence, wealth, number of siblings, education, sector of employment, and gender. A D-index of 0 indicates perfect equality (no gaps in access to services across circumstance groups), whereas a D-index of 1 indicates perfect inequality. More information on the construction of the HOI and the D-index is provided in Box 2.4.2.1. According to the results, in 2008 wealth and parish of residence were particularly strong determinants of access to tap water in the household, which was still true in 2018; parish of residence,

8 Family characteristics include age of the household head, total number of children from 0 to 15 years old and presence of elderly people in the household.

wealth, and rural area together explain a large portion of the difference in opportunity in access to sanitation in the household in 2018, whereas in 2008, the wealth of the household was the most important determinant for this indicator. For the education indicators, the parish of residence is the most important circumstance that determines inequality (especially for the indicators finishes six years of education and upper secondary attendance), followed by family characteristics and, to a lesser extent, wealth of the family (Figure 2.4.2.2). However, with respect to 2008, gender became a much more important determinant of inequality in the education indicators in 2018.

Box 2.4.2.1 Constructing the HOI and the D-Index

The central question behind the HOI is to what extent circumstances beyond one's control influence one's access to a set of crucial basic services. Simply put, the HOI takes the coverage level of a basic service or "opportunity" (for example, whether a child is enrolled in primary education) and combines this with the extent to which that opportunity is determined to be beyond the control of the child (for example, being born in a rural rather than an urban area or being a girl rather than a boy). Ideally, random circumstances should play no role in determining access to opportunities.

The D-index measures dissimilar access rates to a given basic opportunity for groups of children, where groups are defined by circumstance characteristics (for example, area of residence or gender) compared to the average access rate to the same service for the population as a whole. To formulate groups, the sample is stratified into groups or "cells," so that all individuals in any given cell have the same combination of circumstances. The resulting subgroups are known in the literature as "types" (Barros et al. 2008). These cells are then compared to one another. The difference in outcomes between cells can be attributed to inequality of opportunity, while the differences within cells can be considered the result of effort or luck.

The D-index summarizes all the gaps into a single measure by weighting them according to the population share in each circumstance group. The D-index generates a value between 0 and 1. In a society in which there is no inequality of access, the D-index is 0. If average access is denoted by p, the specific access rate of group i is ρ_i, and the share of group i in the population is given by β_i, then the D-index score is

$$D = \frac{1}{2\bar{\rho}} \sum_{i=1}^{n} \beta_i |\rho_i - \bar{\rho}|$$

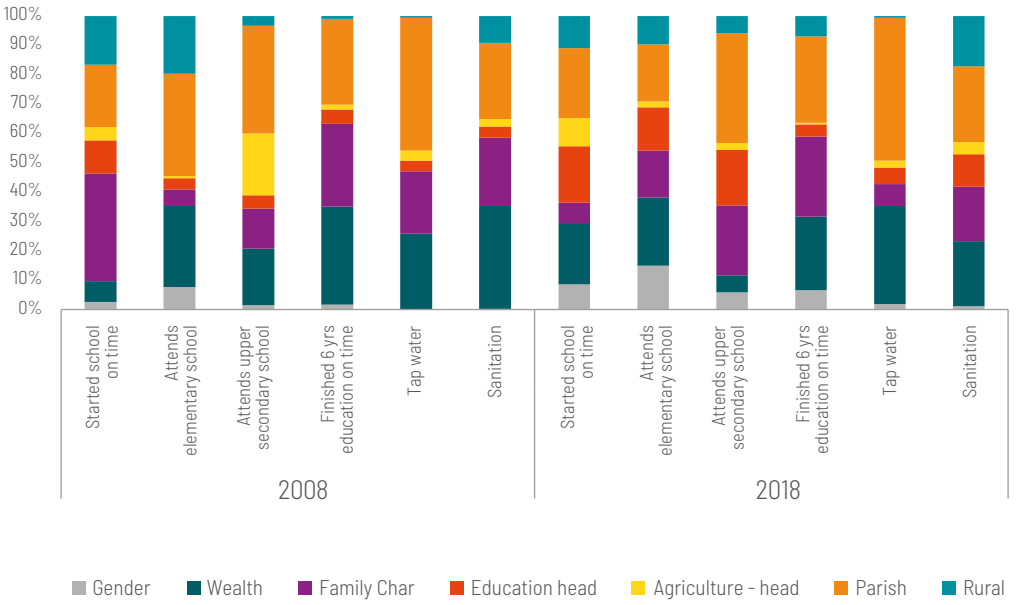
The *HOI* can then be calculated as

$$HOI = \bar{\rho}(1 - D)$$

The measure is also decomposable, so that the extent to which specific opportunity sets contribute to the dissimilarity can be assessed. This means that the contribution of different circumstances to overall inequality of opportunity can be determined.

Source: World Bank 2020.

Figure 2.4.2.2 Circumstances that affect access to opportunities in Grenada



Source: Author's elaboration based on SLCHBS 2008-2009 and 2018-2019.

2.4.3 Housing Infrastructure

Household infrastructure characteristics are another good indicator of people's socioeconomic status and tend to be more stable, reflecting a longer-term condition than either income or consumption alone. This section analyzes households' characteristics in terms of the materials out of which their houses are constructed and access to public services such as a sewer system. The former reflects a condition controlled almost entirely by the household members, their potential, resources, priorities, and finally, their actual decisions. The latter reflects government-provided services (supply side) and the desire or ability of the household to access such services (demand side) (World Bank 2010).

Since 2008—the last year the SLCHBS was conducted, prior to 2018—there have been minor improvements in the quality of residential buildings, as measured by the typical materials used for construction in Grenada. The proportion of households with wood/timber as the main material of the outer house decreased from 32.6 percent in 2008 to 24.9 percent in 2018. In the same period, the proportion of houses with concrete walls increased from 38.9 percent to 43.26 percent. However, analysis of the

proportion of families who own their dwellings shows that there has been a notable decrease in the same period, going from 83.2 percent to 78 percent. Surprisingly, data show an increase in the proportion of families living in a rent-free house from 2008 to 2018 (5.7 and 11.46 percent, respectively). Moreover, data also show improvements in access to safe toilet facilities, with an increase in the proportion of families who have a W.C. linked to a septic tank or soak away, which went from 53.1 percent in 2008 to 66 percent in 2018, and simultaneously the proportion of dwellings with pit latrines went down from 36.3 percent in 2008 to 25.9 in 2018 (Table 2.4.3.1).

Table 2.4.3.1 Quality of dwelling by year of survey (%)

	2008	2018
TENURE OF DWELLING		
Owned with/without a mortgage	83.2	78.0
Rented-furnished/unfurnished/private/govt	9.9	8.7
Rent-free	5.7	11.5
Squatted	0.3	1.3
Other	0.9	0.5
TYPE OF TOILET FACILITY		
W.C. linked to sewer	8.2	4.1
W.C. linked to septic tank/soak away	53.1	66.1
Pit latrine/ventilated pit latrine	36.3	25.9
Other/none	2.4	3.8
MATERIAL OF OUTER WALLS		
Wood/timber	32.6	24.9
Concrete/concrete blocks	38.9	43.3
Wood and concrete	22.7	20.8
Stone	0.1	0.2
Plywood	4.2	8.9
Makeshift	0.3	0.7
Other/do not know	1.3	1.2

Sources: SLCHBS 2008 and 2018.

3 Characteristics of the poor

3.1 Who are the poor? Differences between the poor and the nonpoor

It is common to have some preconceived ideas about who the poor are and their location. However, some more information is needed to understand what other characteristics are shared by poor people or households. In order to have a better idea of the differences between poor and nonpoor households, the average values for several characteristics of the household head and other demographics were computed for Grenada in 2018. The results, including the average for the country, are presented in Tables 3.1.1 and 3.1.2. Additional characteristics in terms of education, health, and household composition are presented in the next three subsections. These numbers simply describe the characteristics of the poor and nonpoor populations of the country—they do not consider the relationship between the variables, nor do they establish any causality between the variable values and the expenditure levels of the households.

On average, poor household heads are almost 5 years younger than their nonpoor counterparts. A higher proportion of poor households are female headed, compared to nonpoor households. There is, in fact, a difference of nearly 12 percentage points in the proportion of female-headed households across poor and nonpoor households. In terms of the household head's education attainment, nonpoor household heads have higher primary and tertiary education, while the proportion of poor household heads with secondary education is 6 percentage points higher than that of nonpoor household heads.

In regard to job characteristics, nonpoor household heads tend to have more formal types of jobs than their poor counterpart. Poor household heads have to support more household members per worker, as evidenced by a much higher dependency rate, 1.024, compared to 0.702 in nonpoor households. At the national level, only 25.6

percent of household heads are formal workers, measured by employment-related insurance benefits, the type of financial accounts kept by the activity/business, and the contract between the worker and the employer.

The poor live in larger households with more children. As a matter of fact, poor households have on average 2.1 more members than the nonpoor, and most of the difference between the two sets of households comes from the average number of children from 0 to 13 years old and youth between 14 and 24 years old. On average, non-poor households surpass poor households slightly only in the number of adults 66 years old and older, as shown in Table 3.1.1. Moreover, household composition analysis shows that poverty rates are higher in households with children, as shown in Figure 3.1.1. The lowest poverty rate, 2.4 percent, is observed among women living alone, representing 2 percent of households. The highest poverty rate, 43.2 percent, is seen in the most common household composition (17 percent of the population), which includes a combination of adults (e.g., parents as couple plus other adults) and children.

Table 3.1.1 Distribution of the population by household head's characteristics and household composition and poverty status, 2018

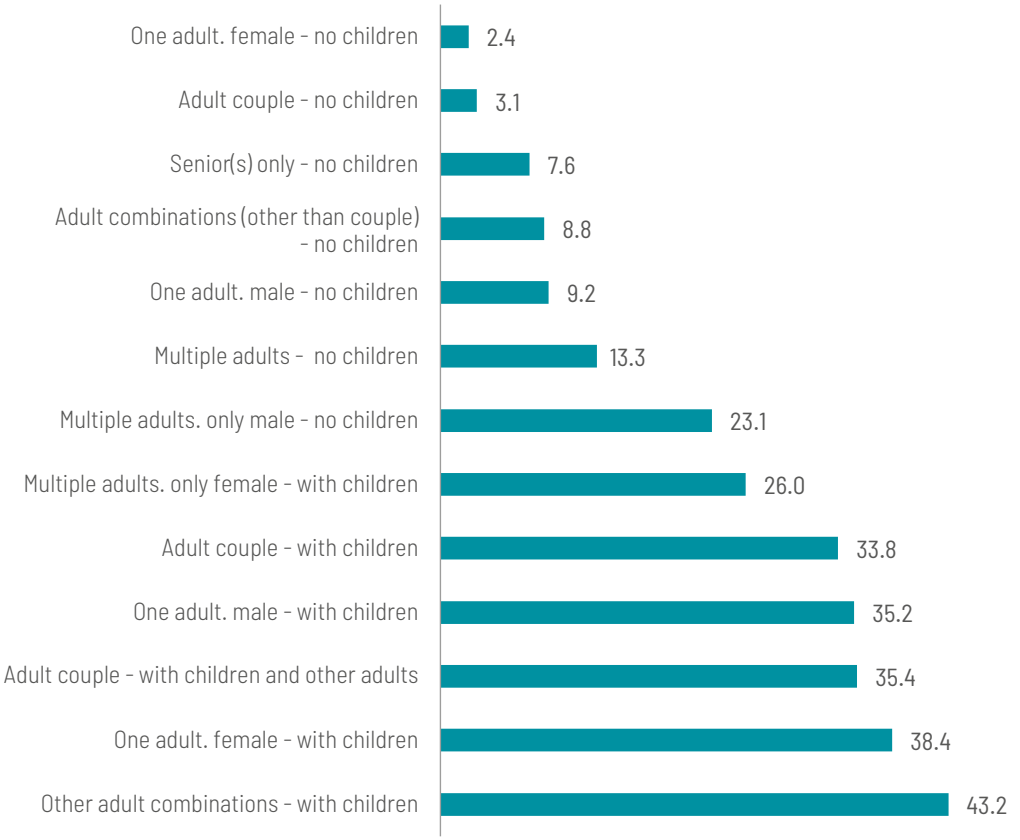
	POOR	NONPOOR	NATIONAL
CHARACTERISTICS OF HOUSEHOLD HEAD			
Age	51.60	56.37	55.77
Female	54%	42.2%	44.6%
Male	46%	57.8%	55.4%
EDUCATION OF HOUSEHOLD HEAD			
No education	0.2%	0.5%	0.4%
Primary	67.4%	72.0%	70.7%
Secondary	28.0%	22.0%	23.5%
Tertiary	4.5%	5.6%	5.4%
JOB CHARACTERISTICS OF HOUSEHOLD HEAD			
Formal worker	25.7%	26.3%	25.6%
Dependency rate	1.024	0.702	0.769
HOUSEHOLD COMPOSITION*			
Children 0 to 5 years old	0.843	0.352	0.456

	POOR	NONPOOR	NATIONAL
Children 6 to 13 years old	1.127	0.494	0.648
Youth 14 to 24 years old	1.312	0.588	0.786
Adults 25 to 65 years old	2.120	1.686	1.803
Adults 66 years old and older	0.256	0.404	0.378
Average number of members	5.65	3.52	3.81

Source: SLCHBS 2018–19.

Note: For the household composition groups, the data show the average number of people in each category at each household.

Figure 3.1.1 Poverty rates by household composition



Source: SLCHBS 2018–19.

Another set of characteristics analyzed to compare poor and nonpoor households is composed of material assets, services, equipment, infrastructure, and land ownership. In general, and as expected, nonpoor households have better-quality housing and more access to public services. A higher proportion of nonpoor households own their dwellings, compared to poor households. In terms of quality of the dwelling materials, 17.7 percent of poor households have poor-quality materials on the outer walls, compared to 6.9 percent of the nonpoor. Additionally, poor households have on average more persons per bedroom than nonpoor households. Differences are also found in the access to services: nonpoor households have drinking water and electricity in the dwelling in a higher proportion than poor households. The difference is even larger for the toilet in the dwelling indicator, as 78.5 percent of nonpoor households have a toilet inside the house, compared to only 47.8 percent of poor households. Moreover, ownership of assets remains higher among nonpoor household. (Table 3.1.2).

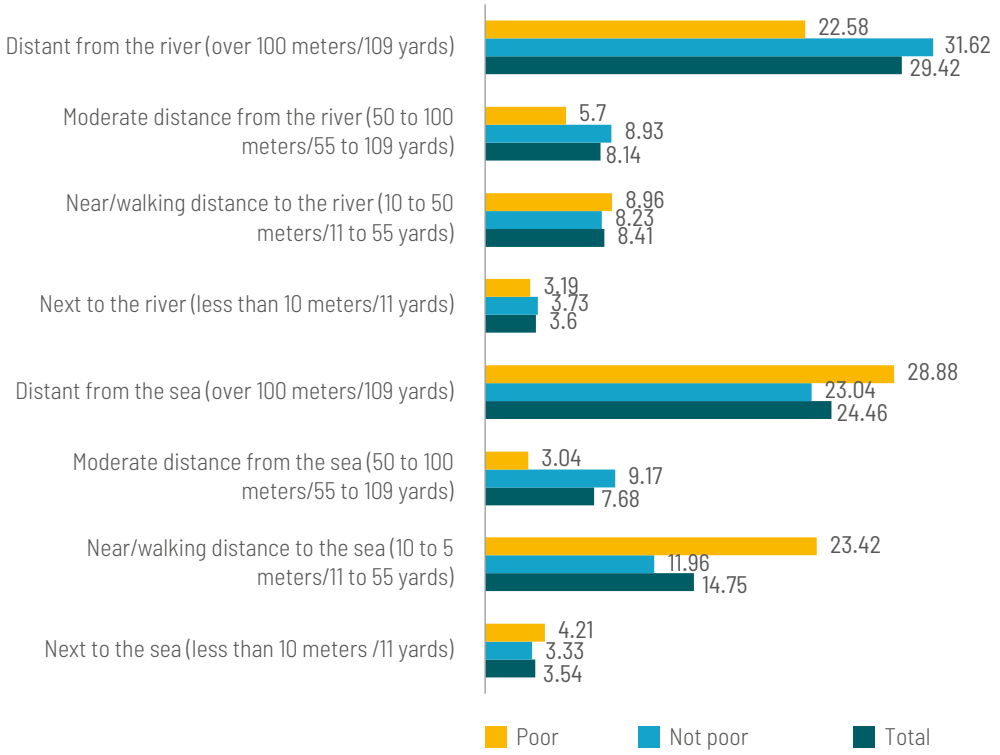
Table 3.1.2 Distribution of households by characteristics and poverty status, 2018

	POOR	NONPOOR	NATIONAL
DWELLING CHARACTERISTICS			
Own the dwelling	80.7%	83.0%	82.8%
Poor-quality materials on outer walls	17.7%	6.9%	9.9%
Number of persons per bedroom	2.55	1.42	1.61
Biomass for cooking	3.3%	0.6%	1.3%
ACCESS TO SERVICES			
Drinking water in the house	80.3%	83.6%	84.0%
Electricity in the dwelling	84.8%	94.9%	92.3%
Toilet in the dwelling	47.8%	78.5%	70.0%
HOUSEHOLD ASSETS			
Refrigerator	65.4%	86.2%	80.8%
Air conditioning	0.0%	5.1%	3.8%
Washing machine	48.5%	62.5%	58.5%
Computer	17.5%	31.4%	27.5%
ACCESS TO LAND			
Own land	50.9%	45.3%	49.3%

Source: SLCHBS 2018–19.

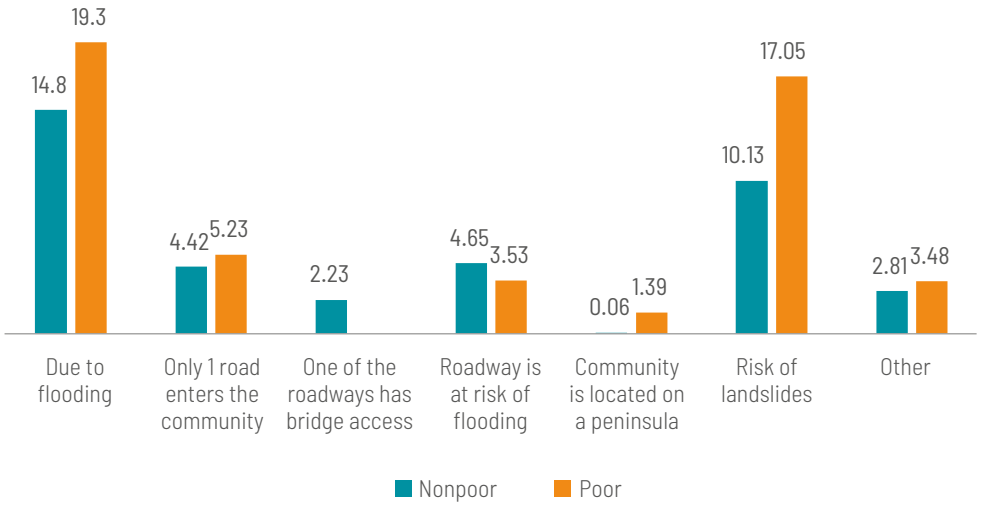
Given its location, Grenada has always been vulnerable to natural disasters in the form of hurricanes, floods, and sea-level rise, and with this, households are very exposed to the negative shocks associated with these events that often have heavy consequences for household welfare. Households near the coastline are even further exposed to the negative effects of natural disasters, and in Grenada, a higher proportion of poor households are located in high-risk locations compared to nonpoor households. In 2018, 4.2 percent of poor households were living right next to the sea (less than 10 meters/33 feet), and 3.2 percent were living right next to a river (less than 10 meters/33 feet), compared to 3.3 and 3.7 percent of nonpoor households, respectively (Figure 3.1.2). Moreover, the survey also inquiries about people's perception about their dwelling being at risk of becoming isolated from a natural hazard event. In this regard, a higher proportion of poor households are concerned with being isolated due to landslides (17.0 percent vs. 10.1 percent of non-poor households). A very high percentage of both poor and non-poor households reported being concerned with a potential flooding that may leave them isolated, as seen in figure 3.1.3.

Figure 3.1.2 Household distance from coastlines by poverty status (%)



Source: SLCHBS 2018-19.

Figure 3.1.3 Households concerned with risk of becoming isolated due to natural hazards by poverty status (%)



Source: SLCHBS 2018–19.

3.2 Education and the poor

The poverty headcount rate reaches almost 44 percent for people with junior secondary education completed, which is a similar rate for those who only completed Preschool, at 45 percent. The poverty headcount rate for people with primary education completed is around 24 percent. The lowest poverty rate is observed among people with university tertiary education, at levels below 2 percent, which is lower than those who obtained non-university tertiary education (12 percent).

When analyzing school attendance at the national level for people from 3 to 25 years old, it can be seen that school attendance for children aged 5–14 is almost universal in the country, with more than 99 percent attending school. After age 15 and up to 17, the rate drops slightly to just under 81 percent, and after 17, it drops substantially to 1 percent at the age of 25 (Figure 3.2.1, panel a). When looking at this indicator by poverty status, there are some differences in school attendance by age. Panel b of Figure 3.2.1 shows that school attendance for younger children is still universal for both groups, but that attendance rate starts to drop earlier at age 15 for the poor, where differences become more noticeable between the poor and non-poor, especially at age 17, when attendance rate is only 51 percent for the poor, compared to 88 percent

for the non-poor. Additionally, Figure 3.2.2 shows that that the percentage of poor people attending tertiary educational institutions decreases significantly, going below the percentage of non-poor, compared to other levels of education.

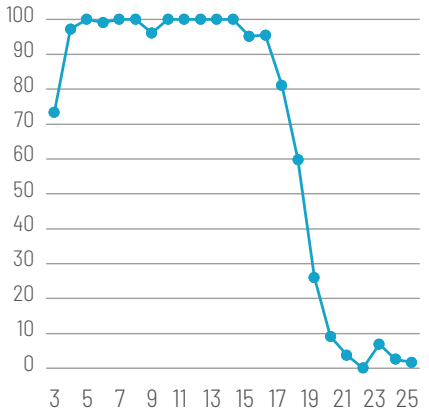
Table 3.2.1 Poverty by education level (%)

	POVERTY HEADCOUNT RATE	DISTRIBUTION OF THE POOR	DISTRIBUTION OF ENTIRE POPULATION
MODERATE POVERTY			
EDUCATION FOR ALL PERSONS			
None	41.4	5.0	2.9
Preschool	45.1	13.3	7.3
Primary	24.2	41.4	42.4
Lower/junior secondary (Forms 1–3)	43.7	13.7	8.0
Upper secondary (Forms 4–5)	21.5	17.6	20.4
Technical / vocational	24.7	4.7	4.8
Postsecondary, nontertiary (diploma or associate's degree)	5.4	0.5	2.2
Tertiary (non-university)	12.1	3.6	7.8
Tertiary (university)	1.8	0.3	4.1
Other	0.0	0.0	0.1
Total	**25.0**	**100.0**	**100.0**

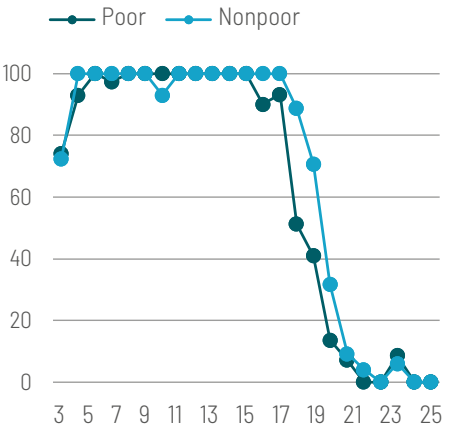
Source: SLCHBS 2018–19.

Figure 3.2.1 National school attendance

a. By age (%)

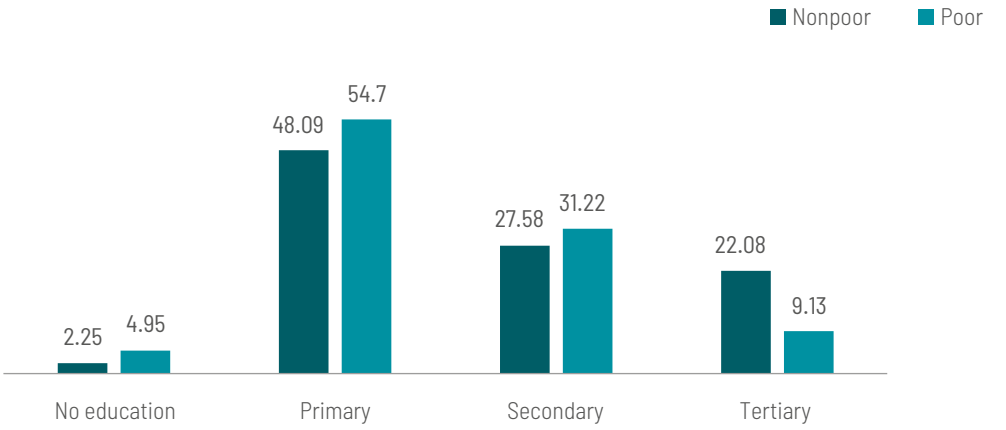


b. By age and poverty status



Source: SLCHBS 2018-19.

Figure 3.2.2 Current attendance of an educational institution, by poverty status

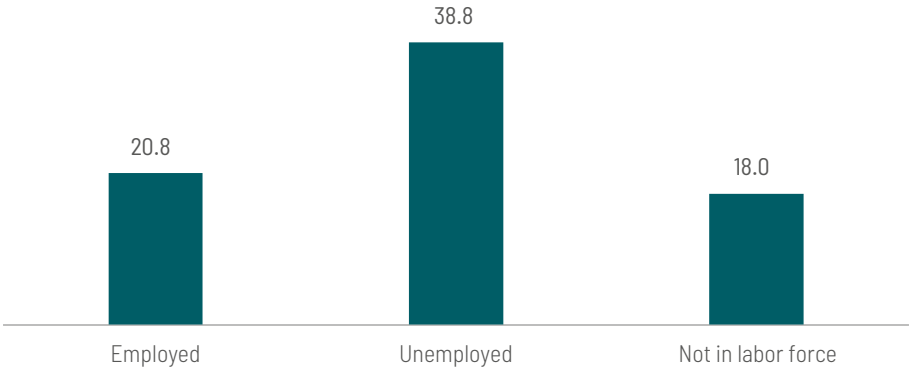


Source: SLCHBS 2018-19.

In terms of labor market indicators, not surprisingly poverty is considerably higher for those unemployed (38.8 percent), compared to those employed (20.8 percent), as seen in figure 3.2.3. Moreover, of those individuals currently employed, central government employees—who represent 21 percent of all workers—are among the group with the highest poverty rate (24.5 percent), followed by private workers and

self-employed people without employees, with a poverty rate of 20.8 percent and 19.9 percent, respectively (Figure 3.2.4). By sector of employment, the poverty rate is highest among human health and social workers, followed by agriculture, forestry, and fishing workers. The lowest poverty rates are observed among the transportation, information and communication sector workers, followed by professionals working in scientific and technical activities, along with Education workers (Figure 3.2.5).

Figure 3.2.3 Poverty by economic status, 2018

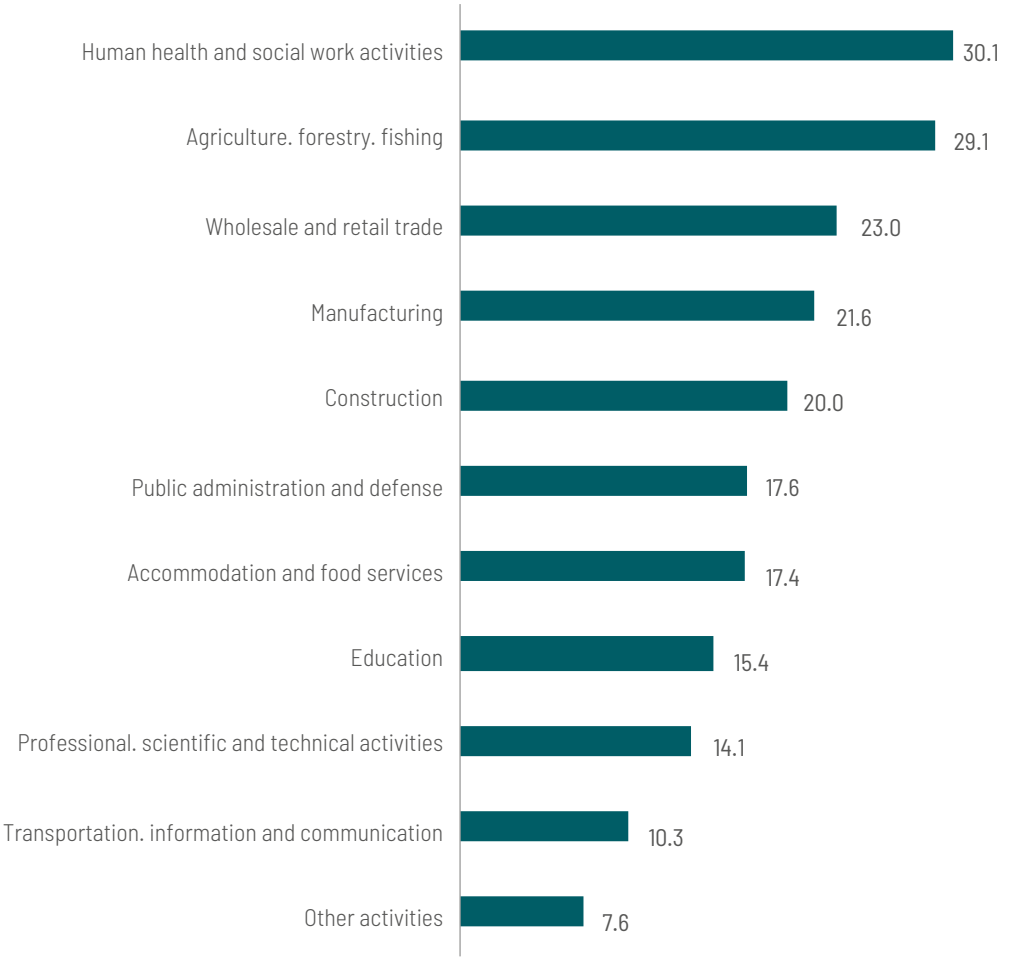


Source: SLCHBS 2018-19.

Figure 3.2.4 Poverty by primary occupation, 2018

Source: SLCHBS 2018-19.

Figure 3.2.5 Poverty by sector of employment, 2018

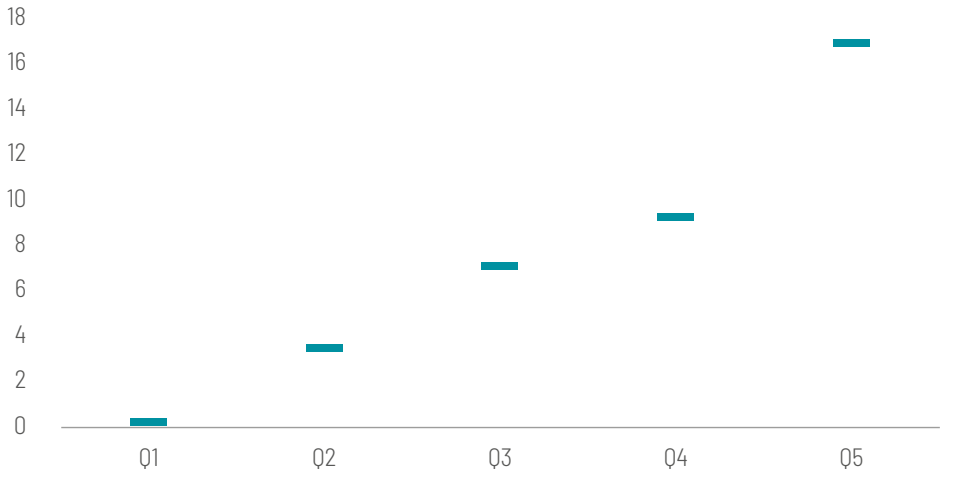


Source: SLCHBS 2018–19.

3.3 Health and the poor

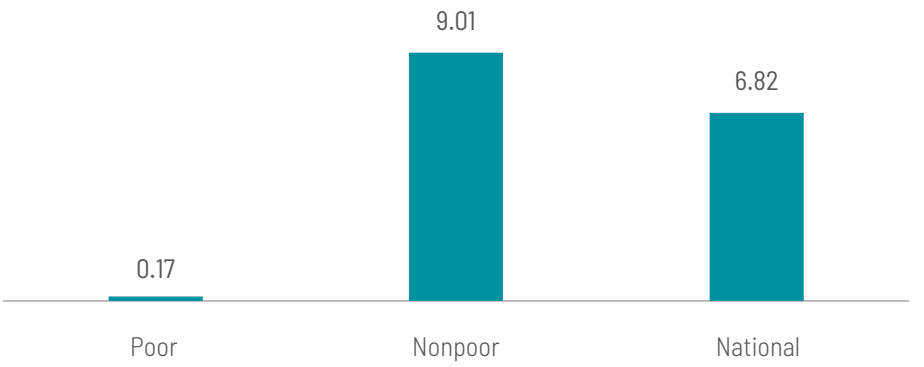
In Grenada, only 6.8 percent of the population is covered by some type of health insurance: of this group, 60 percent are covered by a private health insurance provider, some other type of provider covers 31 percent, and 9 percent are covered by an employer insurance plan. By analyzing health insurance by consumption quintiles, we observe that coverage is higher among the highest quintiles and lower among the lowest quintiles of the distribution, with coverage in the first quintile being less than 1 percent compared to 17 percent in the fifth quintile (Figure 3.3.1). The proportion of poor people covered by health insurance reaches only 0.2 percent compared to 9 percent among the nonpoor. (Figure 3.3.2).

Figure 3.3.1 Health insurance coverage by consumption quintile



Source: SLCHBS 2018-19.

Figure 3.3.2 Health insurance coverage by poverty status

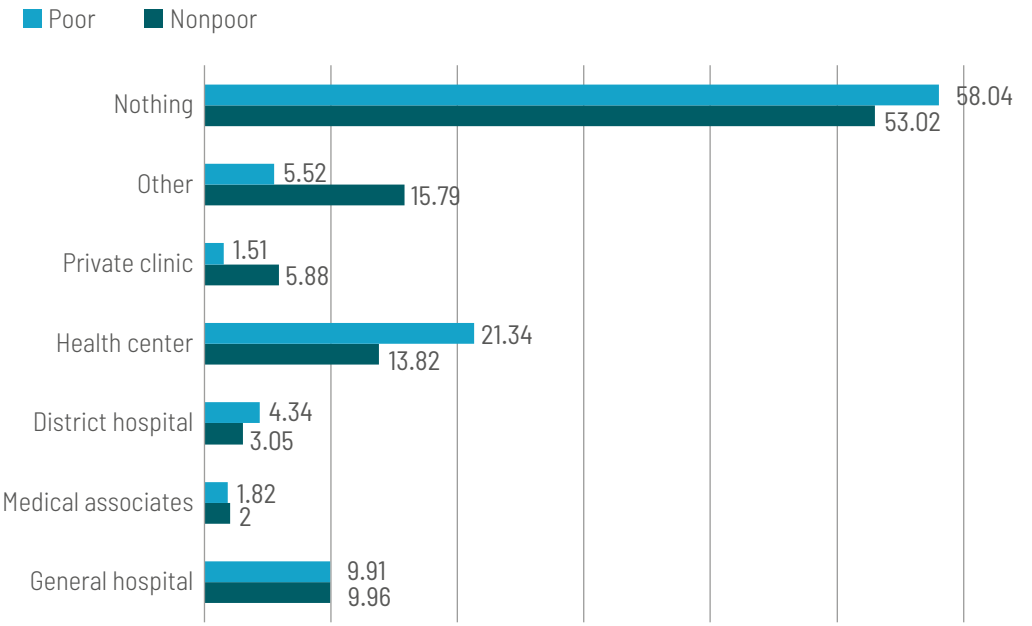


Source: SLCHBS 2018-19.

Additionally, of those people who have had an illness or suffered an injury in the past year, more poor people sought medical assistance in health centers and district hospitals than did nonpoor people. Nonpoor people, on the contrary, tended to seek assistance in private clinics, associated with higher access and more resources to bear the costs associated with the visit compared to poor people (Figure 3.3.3). Smaller health centers closer to the poor have proven to be one of the best investments in public health a government can make because (1) proximity to the user increases use

and substantially reduces out-of-pocket transport expenses and time spent by patients, (2) smaller centers are more efficient in treating minor medical problems (compared to hospitals), and (3) they promote the use of preventive medicine, by far the cheapest way to improve a population's health condition (World Bank 2010). Additionally, a high proportion of people did not seek medical assistance when needed, with a higher incidence among poor people (58 percent).

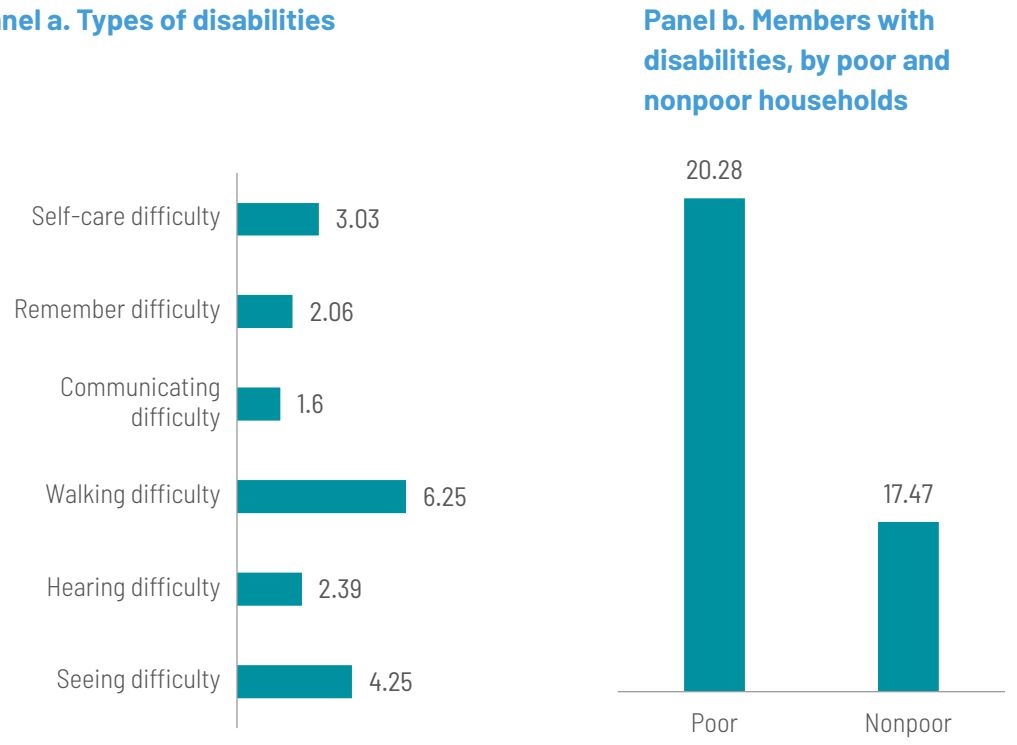
Figure 3.3.3 Medical assistance in case of injury or illness in the past year by poverty status



Source: SLCHBS 2018–19.

Moreover, the SLCHBS of 2018–19 enables the analysis of disabilities for each household member, including seeing, hearing, communicating, walking, remembering, and self-care difficulties. In Grenada, 6.3 percent of the population report having some sort of difficulty walking, 4.3 percent report having some difficulty with their vision, 3 percent report having difficulty with self-care, 2.4 percent report having some difficulty with their hearing, about 2 percent said they had difficulties remembering things, and 1.6 percent reported having communication difficulties (Figure 3.3.4, panel a). Furthermore, as seen in panel b of Figure 3.3.4, 20.3 percent of poor households have members with some disability, compared to 17.5 percent of nonpoor households.

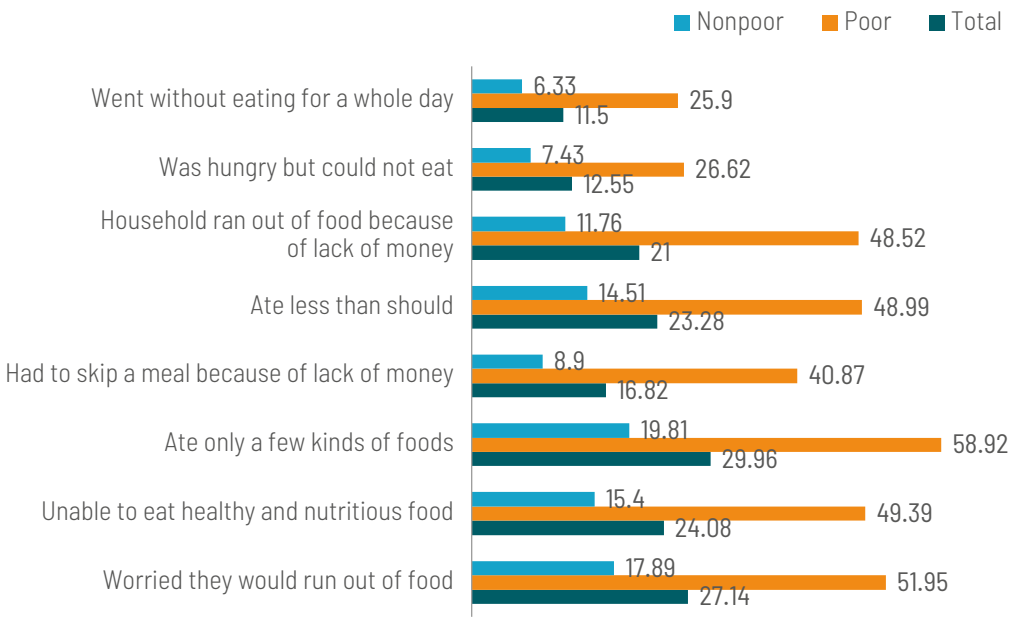
Figure 3.3.4 Persons reporting disabilities, by type and poor/nonpoor household



Source: SLCHBS 2018–19.

Finally, the survey allows for the analysis of different food insecurity indicators, which could have negative consequences for the nutrition and health of households in the long term. Many households reported experiencing high food stress in the prior 12 months, particularly poor households who have more difficulties with adequately and regularly feeding themselves, as shown in Figure 3.3.5. The perception of food security by households reveals that 27 percent are worried they will run out of food; for poor households, this increases to 52 percent. In total, 21 percent of all households and 49 percent of poor households ran out of food because they lacked money, and almost 30 percent of households ate only a few kinds of food – again, this stress is much higher among poor households (59 percent, vs. 20 percent for nonpoor households). Another worrisome indicator of food insecurity is that 12 percent of households went without eating for a whole day, which is true for almost 26 percent of poor households.

Figure 3.3.5 Food security in the past 12 months, 2018 (% of households)



Source: SLCHBS 2018–19.

4

Conclusion

Over a period of ten years, between 2008 and 2018, Grenada experienced significant economic expansion, which propelled growth in consumption. This, in turn, led to a considerable reduction in poverty, which decreased from 37.7 percent in 2008 to 25.0 percent in 2018. However, this trend was slower for the lowest part of the expenditure distribution, causing extreme poverty rate to rise from 2.4 percent in 2008 to 3.5 percent in 2018. This potentially explains the slight increase in inequality during this period, with a Gini index moving from 0.37 to 0.40 at the national level. In this sense, the country should implement more distribution-improving policies to promote a more equitable growth path.

The decrease in poverty allowed for improvements in indices that denote vulnerability, such as maternal mortality ratio, access to water sources and electricity, as well as overall school enrollment. In that sense, the multidimensional poverty index, measured for year 2018 for the first time in this report, exposes that 34.3 percent of the population live in households considered multidimensionally poor, including 22 percent of the population that are living above the monetary poverty line.

On average, poor households look different from their non-poor counterparts in several aspects. One of them is the number of household members, which is twice as large for the poor than for the non-poor. In that context, the dependency rate in poor household is higher than in non-poor households, meaning the former has more members to support per worker than the latter. Additionally, female-headed households tend to be poorer than male-headed households. As for housing and public services, access and quality are, as expected, higher for nonpoor households. As regards education, specifically school attendance, it seems to follow a similar pattern for both poor and nonpoor up to age 15, where differences between the two groups begin to be apparent. Moreover, poverty is significantly higher among unemployed people, compared to those employed or even people not in the labor force. In terms of health and food security, poor households are in general more vulnerable than non-poor households, in terms of access and resources.

Annex 1. Statistical Appendix

Table 1A.1 Poverty by Education Level (%)

POVERTY BY EDUCATION LEVEL (%)			
	POVERTY HEADCOUNT RATE	DISTRIBUTION OF THE POOR	DISTRIBUTION ACROSS ENTIRE POPULATION
Moderate poverty			
Education for all persons			
None	41.4	5.0	3.0
Preschool	45.1	13.3	6.9
Primary	24.2	41.4	42.7
Lower/Junior secondary (Forms 1–3)	43.7	13.7	8.3
Upper secondary (Forms 4–5)	21.5	17.6	20.2
Technical/Vocational	24.7	4.7	4.9
Postsecondary, Nontertiary (diploma or associate's degree)	5.4	0.5	2.3
Tertiary (Nonuniversity)	12.1	3.6	7.4
Tertiary (University)	1.8	0.3	4.2
Other	0.0	0.0	0.1
Total	**25.0**	**100.0**	**100.0**

	POVERTY HEADCOUNT RATE	DISTRIBUTION OF THE POOR	DISTRIBUTION ACROSS ENTIRE POPULATION
Extreme poverty			
Education for all persons			
None	4.6	4.0	3.0
Preschool	5.4	11.7	6.9
Primary	3.7	46.2	42.7
Lower/Junior secondary (Forms 1–3)	6.8	15.5	8.3
Upper secondary (Forms 4–5)	2.0	11.7	20.2
Technical/Vocational	3.9	5.5	4.9
Postsecondary, Nontertiary (diploma or associate's degree)	0.0	0.0	2.3
Tertiary (Nonuniversity)	2.4	5.3	7.4
Tertiary (University)	0.0	0.0	4.2
Other	0.0	0.0	0.1
Total	**3.5**	**100**	**100**

Table 1A.2 Poverty by Status of Employment (%)

POVERTY BY STATUS OF EMPLOYMENT (%)			
	POVERTY HEADCOUNT RATE	DISTRIBUTION OF THE POOR	DISTRIBUTION ACROSS ENTIRE POPULATION
Moderate poverty			
Economic Activity Status			
Employed	20.8	31.0	37.4
Unemployed	38.8	11.5	7.5
Not in labor force	18.0	23.3	33.1
Not applicable	37.5	34.2	21.9
Total	**25**	**100**	**100**

	POVERTY HEADCOUNT RATE	DISTRIBUTION OF THE POOR	DISTRIBUTION ACROSS ENTIRE POPULATION
Extreme poverty			
Economic Activity Status			
Employed	2.0	21.6	37.4
Unemployed	9.7	20.5	7.5
Not in labor force	2.6	24.3	33.1
Not applicable	5.2	33.7	21.9
Total	**3.5**	**100**	**100**

Table 1A.3 Poverty by Demographic Composition (%)

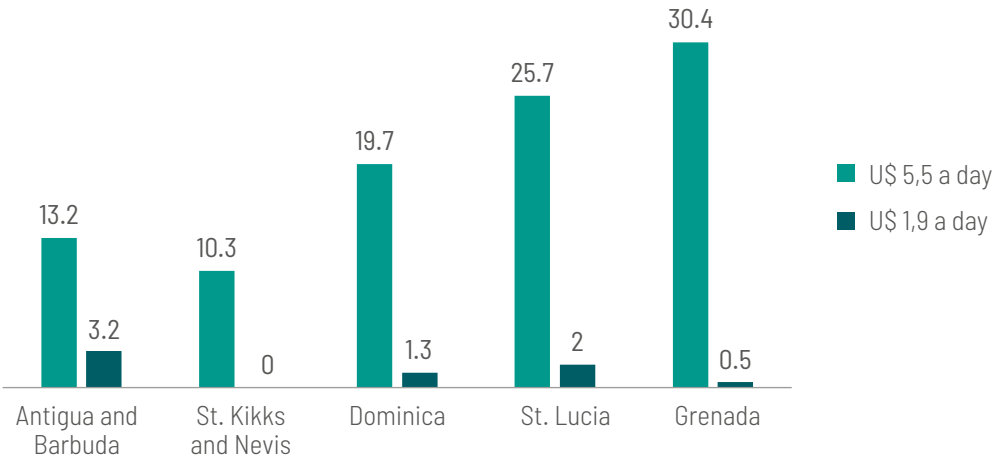
POVERTY BY DEMOGRAPHIC COMPOSITION (%)			
	POVERTY HEADCOUNT RATE	DISTRIBUTION OF THE POOR	DISTRIBUTION ACROSS ENTIRE POPULATION
Moderate poverty			
Number of children 0–6 years old			
0 children	16.4	41.7	64.9
1 child	36.4	32.4	22.4
2 children	37.2	15.4	8.9
3 or more children	69.3	10.5	3.8
Household size			
1	8.4	4.5	13.6
2	6.9	4.3	15.1
3	11.7	8.0	17.5
4	27.5	20.8	18.8
5	35.8	20.4	14.5
6	36.4	10.0	6.4
7 or more members	57.2	32.0	14.2
Total	**25**	**100**	**100**

	POVERTY HEADCOUNT RATE	DISTRIBUTION OF THE POOR	DISTRIBUTION ACROSS ENTIRE POPULATION
Extreme poverty			
Number of children 0–6 years old			
0 children	2.6	48.1	64.9
1 child	1.5	9.6	22.4
2 children	10.4	30.7	8.9
3 or more children	10.7	11.6	3.8
Household size			
1	2.1	8.2	13.6
2	1.3	5.9	15.1
3	0.8	3.9	17.5
4	4.3	23.5	18.8
5	5.5	22.4	14.5
6	6.2	12.3	6.4
7 or more members	6.0	23.9	14.2
Total	**3.5**	**100**	**100**

Annex 2. International Poverty Rates

In terms of international poverty (defined as the proportion of individuals with household level per-capita consumption lower than the international poverty line of US$5.50 a day in 2011 PPP and US$1.90 a day in 2011 PP), St. Kitts and Nevis and Antigua and Barbuda, which are classified as high-income countries, had relatively low levels of poverty at 10.3 per cent and 13.2 per cent, respectively. Poverty rates in Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines were more pronounced, ranging between 20 and 30 percent. Conversely, extreme poverty was most pronounced in Antigua and Barbuda, despite its second lowest poverty rate (Figure 2A.1). The significant disparity between high poverty and low extreme poverty in Grenada suggests that Hurricane Ivan, which hit the country in 2004, saw much of the vulnerable population slip back into poverty (World Bank 2018).

Figure 2A.1 International poverty in OECS countries (2005–2008)



Source: World Bank estimates based on per-capita consumption from the OECS Survey of Living Conditions/ Household Budget Survey (SLC-HBS), consumer price index, and purchasing power parity conversion factor for private consumption.

Annex 3. Consumption Aggregates

3A.1 Welfare and monetary poverty measurement

Monetary poverty is most often derived using either household income or household consumption. In Grenada, estimations are based on consumption, which is an aggregate of food and non-food expenditures.

The sources of expenditure data are the modules from the Survey of Living Conditions and Household Budgets (SLCHB-2018/2019), with the welfare aggregate calculated in annualized terms.

3A.1.1 Food expenditure

Food purchases are recorded based on the last-week recall period. For food items, the expenditures recorded in the survey are divided into subgroups:

1. Bakery products
2. Cereals and cereal products
3. Beef, Pork, Mutton, and other meats
4. Chicken, fresh and frozen
5. Fish and seafood
6. Milk, cheese, eggs, butter, oils

7. Fruits, fresh or frozen

8. Vegetables, fresh or roots

9. Sugar, snacks, sugar confectionery, and other

10. Meals and snacks bought out

11. Non-alcoholic beverages

12. Alcoholic beverages and Tobacco

The SLCHB-2018/2019 also records food and beverages received as gifts in the past week. In order to value gifts, median prices by product and unit of measurement (based on the same survey) were used. Since there are no additional criteria, it is assumed that the gifts are recurring throughout the year.

Two questions about meals and snacks were analyzed in the questionnaire: (1) (c01194) Meals and snacks bought out by all household members, and (2) *(p2_7) Did you purchase meals outside the home in the last week?* Because the correlation between both variables is very high, it was decided to use the former for the analysis in order to avoid duplicating household expenses.

While the SLCHB-2018/2019 contains information about home-grown produce consumption, they were not considered for the analysis as the reported numbers are deemed an overestimation of actual consumption.

3A.1.2 Non-food expenditure

Through the survey questionnaire, products purchased in different reference periods are identified. According to the survey, the expenditure items are classified as follows:

1. Household utilities

2. Household services

3. Furniture, furnishing, and household equipment

4. Other non-food expenses

5. Transportation, vehicle operation costs

6. Clothing and shoes

7. Other expenses (medical, educational, transportation by air, and others)

3A.1.3 Imputed housing rent

To measure housing rent, a mixed measurement approach was used. For this, the actual expenditures of the tenants are estimated, as well as the imputed income of the owners. For the latter, the net income was calculated after deducting the maintenance expenses of the house.

3A.1.4 Consumption durable goods: estimated vehicle consumption

The appropriate measure of a durable good is the value of the service that households receive from durable goods in their possession (such as vehicles) over a relevant period.[9] In order to simplify the calculation, this approach considers the difference between initial purchase value and current value over the age of the vehicle.[10]

3A.1.5 Caps placed on certain expenditures

Caps are placed to restrict the effects of outliers, which are believed to exist due to potential under or over reporting of certain expenditures. In the case of Grenada, the following caps were applied:

9 Deaton, A. & Zaidi, S. (1999) Guidelines for Constructing Consumption Aggregates for Welfare Analysis. Working papers 217, Princeton University, Woodrow Wilson School of Public and International Affairs, Research Program in Development Studies.

10 Only the positive values of this difference are considered.

Caps on food consumption

Grenada's parishes exhibit diverging sensitivity food consumption outliers. With that into consideration:

- A cap of the 90th percentile value is placed on food expenditures surpassing EC$20,000 in Carriacou & Petite Martinique.
- A cap of the 75th percentile value is placed on food expenditures surpassing EC$20,000 in St. Patrick.
- In the rest of the parishes, a cap of the 50th percentile value is placed on food expenditures surpassing EC$15,000.

Cap nonfood consumption

Consumption under the category of "other type" tend to be overreported, which is why a cap of the 90th percentile is placed on other expenses surpassing EC$4,000.

Cap on rent at the lowest part of the distribution

Outliers in the mixed-housing rent variable are believed to exist due to over reporting of rent values in the lower part of the distribution, which leads to an underestimation of extreme poverty. In the case of Grenada, a cap equal to the total food consumption is placed on housing rent of the poorest (1st quintile), if the initially estimated housing rent value for this group is higher than that of their food consumption. Consumption percentiles are estimated from the consumption aggregate, excluding rent.

3A.1.6 Adult equivalence weights

Like in 2008, the measurement of monetary poverty in Grenada considers household consumption per adult-equivalent, rather than per capita consumption, as a measure of welfare. The statistical authorities of Grenada (same of Carriacou and Martinique) adopted an approach of fixed adult-equivalent weights for the population by age and sex, according the follow table:

Table 3A.1.1 Adult equivalence

AGE RANGE	MALE	FEMALE
Less than 1	0.270	0.270
1 to 3	0.468	0.436
4 to 6	0.606	0.547
7 to 9	0.697	0.614
10 to 14	0.825	0.695
15 to 18	0.915	0.737
19 to 29	1.000	0.741
30 to 60	0.966	0.727
61+	0.773	0.618

Source: CDB – Country Poverty Assessment: Grenada Carricou, Martinique 2007/2008

3A.1.7 Per adult equivalent household expenditure

Finally, the welfare aggregate is constructed as the household consumption (food, non-food, mixed housing rent, and durable goods) divided by the sum of all the adult-equivalent weights within a household.

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