

11 SUSTAINABLE CITIES AND COMMUNITIES



GOAL 11

Make cities inclusive, safe, resilient and sustainable

Context

There is an intersectionality of issues affecting internal migration, and the settlement of people in Jamaica, which includes, among other things, access to opportunities, security and infrastructure. Policymakers are therefore faced with addressing the concerns of more than half the population living in urban areas while ensuring equitable distribution of resources to maintain livelihoods in all areas. The complexities of developing safe and sustainable human settlements further raises concerns of public health, safety and natural disaster risk mitigation due to the threat of hydro-meteorological events including storms and hurricanes and man-made events like illegal dumping, air pollution and informal settlements. The progress on this goal has been supported by efforts to improve access to affordable housing, integrate sustainable development planning into local development, and improve connectivity and inclusivity through infrastructure development that has narrowed the rural-urban divide.

The review for the period 2018-2022 summarizes key achievements, issues and challenges concerning sustainable cities and communities.

Sustainable Cities and Communities Highlights 2018-2022



Housing

Increase in value of residential mortgages since 2018

FIGURE 62 HIGHLIGHTS, SUSTAINABLE CITIES AND COMMUNITIES (2018-2022)

Discussion

Data available locally to measure progress on the targets and indicators For SDG 11, are related to access to housing and transport, the impact of hazards on lives and the economy and environmental issues such as waste management and air quality monitoring. Gaps remain in the ability to measure the cultural and natural heritage spending and coverage of green space for public use. The 2018 VNR captured updates and progress on housing, transport, waste management, disaster risk reduction, and sustainable planning, highlighting:

- The increase in housing starts and completions and lower mortgage rates from the National Housing Trust for persons with disabilities and low-income earners.
- Greater access for PWDs to public transport and passage of the Road Traffic Act to address road safety.
- Development of a Draft Emissions Policy Framework to monitor and regulate the output from industries
- Integration of the Sendai Framework into disaster risk reduction plans, passage of the Building Act, 2018 to improve resilience of infrastructure, along with hazard risk reduction made available through increased insurance coverage and convening of monitoring committees.

Target 11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

Discussion around housing and its importance in the community and national development involves quality of infrastructure, accessibility, tenure of occupants and security.

Quality and Tenure

Through alignment of the national development plan and the SDGs, prevalence of adequate housing is measured through the housing quality index (HQI) and the proportion of households with access to secure tenure through household data from the Jamaica Survey of Living Conditions. The quantity of quality housing has increased slightly over the period 2017 to 2019 as measured by the HQI.¹²⁹ In 2019, the HQI score was 75.7 per cent under the revised methodology; below the 76.0 per cent target set for 2018 under the MTF 2018-2021.¹³⁰ Improvements in housing quality variables over the period were observed in the exclusive use of a water closet and electricity for lighting which auger well for other SDG targets related to access to clean water (SDG 6) and electricity (SDG 7) see table 20. While there were increases in these HQI components over the period, the variables on drinking water source and structure declined.

129 The Housing Quality Index is a composite indicator used to assess the quality of the housing stock and is defined as the mean of the individual scores of selected variables namely: Walls of Concrete Block and Steel, Indoor Tap/Pipe as Main Source of Drinking Water, Electricity for Lighting, Exclusive Use of Water Closet, Exclusive Use of Kitchen, Number of Persons per Habitable Room.

130 The 2030 target of this indicator is for 86.0 per cent of the housing stock which will require an improvement of 10.3 percentage points.

TABLE 20: HOUSING QUALITY INDEX

Indicator of Housing Quality	2017	2018	2019
Walls of Concrete Block & Steel	74.8	72.6	73.0
Exclusive Use of Water Closet	72.9	73.7	77.7
Indoor Tap/Pipe as Main Source of Drinking Water	51.3	51.0	46.5
Electricity for Lighting	93.9	95.6	95.5
Exclusive Use of Kitchen	94.1	94.3	94.1
Number of Persons Per Habitable Room	62.7	64.9	67.2
HQI	75.0	75.3	75.7

SOURCE: JAMIACA SURVEY OF LIVING CONDITIONS

In addition to the HQI, the indicator on the proportion of households with access to secure tenure, is used in the NDP to measure sustainable urban and rural development. The proportion of households reporting a secure dwelling tenure arrangement was 70.9 per cent in 2019. This was a 4.4 per cent decline over the observable period 2017-2019. The indicator remains below the 80.5 per cent NDP baseline and is 17.1 per cent beneath the MTF 2018-2021 target.¹³¹ The proportion of households reporting ownership of the property on which they lived declined by 5.5 per cent, contributing to the decline in the indicator.

TABLE 21: PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY STATUS OF DWELLING

Tenure Status	2017	2018	2019
Owned by Household Member	59.7	59.3	54.2
Rented/Leased	15.6	15.9	16.7
Proportion of households reporting secure tenure status	75.3	75.2	70.9

SOURCE: JAMIACA SURVEY OF LIVING CONDITIONS

When disaggregated by sex, more male headed households reported a secure dwelling tenure status compared with female headed households. The decline in reported home ownership is observed across male and female headed households, however female headed households reported a larger percentage decline of 4.5 per cent, compared to 1.1 per cent for males.

131 The 2030 target under the Vision 2030 National Development Plan for the proportion of households with access to secure tenure is 95.0 per cent.

TABLE 22: DISAGGREGATED PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY STATUS OF DWELLING AND SEX OF HOUSEHOLD HEAD

Dwelling Tenure Status	2017		2018		2019	
	Male	Female	Male	Female	Male	Female
Owned by Household Member	32.3	27.4	33.6	25.7	31.2	22.9
Rented/Leased	7.3	8.3	8.3	7.6	7.9	8.8
Proportion of households reporting secure tenure arrangement	39.6	35.7	41.9	33.3	39.1	31.7

SOURCE: JAMAICA SURVEY OF LIVING CONDITIONS

At the programme level, the Systematic Land Registration project has commenced to utilise research, geographic information system GIS data and adjudication processes to issue over 20 000 titles across the island. As of 2019, 40.6 per cent of households reported owing the land on which they live, and of this number, 68.1 per cent had a registered title for the property. Overall, 29.1 per cent of households who reported ownership of dwelling and land, had a registered title for the land. This is an increase from the 28.8 per cent in the previous year. Further, amendments to the Registration of Titles, Cadastral Mapping and Tenure Classification (Special Provisions) (Amendment) Act, 2020 and the Registration of Titles (Amendment) Act, 2020 support greater use of adjudication as a means of proving occupation and possession of land, and will separate the issuing of titles from the processes of planning and subdivision approval. These programmes and legislative changes evince the interconnectedness of the SDGs through impacts on goal 8 in lowering informal employment and goal 1 in property rights as the issuance of titles allows citizens to have security of tenure, which can be used to access capital for small businesses and insurance for protection of their assets from hazards.

Accessibility and Affordability

At the international level, the New Urban Agenda (NUA) aids in aligning national programmes and policies to affordable housing solutions that ensure a mix of quality services and access to public spaces by all (United Nations, 2017). Jamaica, in keeping with the NUA and the domestic Urban Renewal and Development Programme is seeking to build out the housing stock, increase the delivery of titles and regularise informal communities across the country. The draft National Housing Policy (2019) represents the commitment to address the inequities in development through focussing on: affordability, partnerships, social housing, legal frameworks, squatting and planning, management and governance. These interventions by the government and stakeholders aid in the achievement of targets 11.1 and 11.3 directly, while also addressing issues of security, non-discrimination and improved livelihoods.

The domestic housing shortage is quantified at 6 200 units annually, based on output from the NHT, NHT supported developers, the private market and informal development. The change in housing stock between the publishing of the 2001 and 2011 censuses was reported at 111 525 units. Of this total, 43 905 were completed by NHT and major developers which are captured in the annual ESSJ publication. The Draft Housing Policy recognises the remaining 67 620 units as units supplied by private builders and the informal sector. (MEGJC, 2019). The state facilitates residential construction by citizens and builders through housing finance and development from a number of agencies. Private development accounts for the bulk of residential construction, the main partner in this is the NHT, which is responsible for an annual average 53 per cent of reported residential mortgages. (Figure 63)

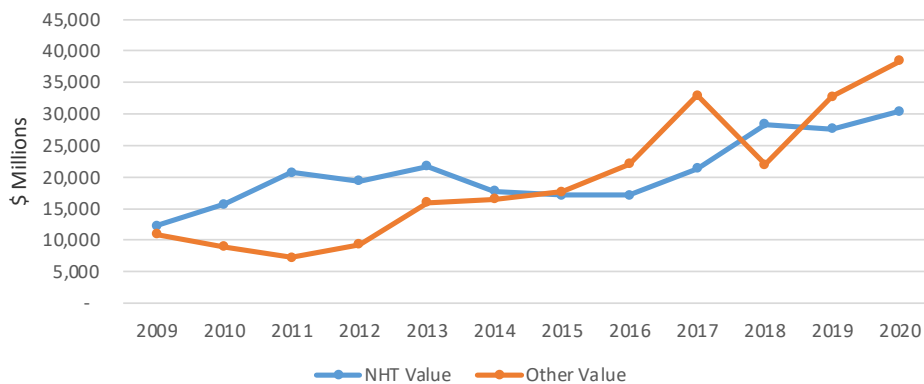


FIGURE 63: VALUE OF RESIDENTIAL MORTGAGES (ANNUAL DISBURSEMENT 2009-2020)
SOURCE: ECONOMIC AND SOCIAL SURVEY JAMAICA

With the gap in housing solutions still substantial, recommendations for improvement include developing innovative finance solutions, increase in housing projects from the national developers,¹³² policy amendment and greater stakeholder collaboration. The approach in collaborative housing represents an opportunity to increase the quality of the existing housing stock for ownership and rental, build social capital and include citizens and civil society in the design and development of communities that can best meet their needs (Mullins & Moore, 2019).

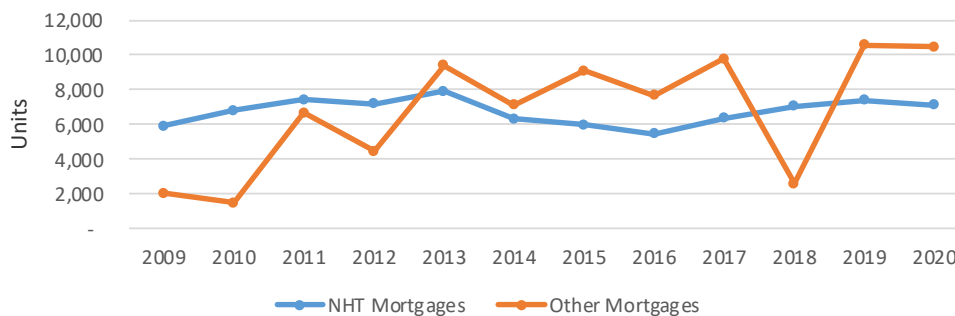


FIGURE 64: NUMBER OF RESIDENTIAL MORTGAGES 2009-2020
SOURCE: ECONOMIC AND SOCIAL SURVEY

The inclusion of private developers and civil society to support the development of innovative and affordable solutions can directly impact on 10 SDGs, through partnerships with the government in developing affordable housing, city planning and innovative designs. (Fei *et al*, 2020) multi-stakeholder collaboration—supported by the regulatory framework such as the current Development Orders, the National Building Act, 2018, which allows for application of the National Building Codes, and the upcoming Urban Renewal Policy and Action Plan and the Draft National Housing Policy—guide development that is inclusive, non-discriminatory, and provides safe quality infrastructure for a wide cross section of society.

In addition to the housing shortage due to low output, the challenge of rehabilitating existing housing stock and minimising the quantity of informal settlements remains a challenge in meeting target 11.1. Economic activities continue to play a role in the areas persons settle, transitioning from the traditional goods production and port activities, to tourism

132 National Housing Trust, Housing Association of Jamaica, Sugar Company Holdings Jamaica and other state agencies in residential development

and other services. As a result, attempts to remedy informal settlements have to be paired with industry development initiatives, which provide opportunities for entry into the formal economy.

Regularising existing and preventing the establishment of informal settlements continues to be an agenda item, addressed through policy and programmes. Work commenced on the National Squatter Management Policy (NSMP) which is scheduled to be completed in 2022. The NSMP seeks to curtail squatting in Jamaica to enhance the optimal and sustainable use of the country's land resources. It contains measures to address all forms of squatting in Jamaica, wherever it occurs – on government or privately owned lands, on beaches or on cays. Preliminary findings from the national squatter survey estimate that approximately 20 per cent of the population lives in squatter settlements. Approximately 541 settlements were identified prior to the national squatter survey and there are approximately 273 settlements surveyed to date across 8 parishes.

Target 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

Through a liberalised transportation sector, citizens commute in rural and urban communities using public and private passenger vehicles. Public passenger vehicles operated by the government are primarily in Montego Bay and the Kingston Metropolitan Transport Region, with private passenger vehicles including buses and taxis supplement rural and urban routes.

Providing effective public transport in Jamaica is especially challenging, with the high density in the metropolitan areas resulting in capacity shortages based on the number of available buses; while the unplanned nature of some rural communities creates the problem of access. Efforts to increase the size of the fleet of public buses are underway as well ensuring efficient and cost-effective services. The high cost of fuel and out of commission buses has been a challenge in servicing routes adequately while regulating the offering of licensed private operators.

Overall seating capacity from public transport averages 60 seats per 1 000 persons and this shortage of capacity leads to an illegal or unregistered market for transport providers who capitalise on commuters' needs. The informal market complements the established providers and offers commuters an alternative and, in some cases, the only option for some routes. The informal modes however face criticism for dangerous road use affecting drivers and other road users and enforcing negative cultural archetypes, (Wright, Tangwell and Dick, 2021)

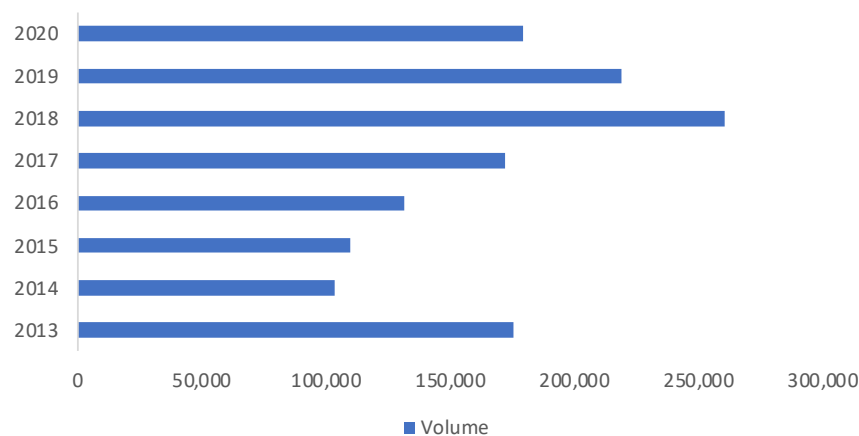


FIGURE 65: ANNUAL SEATING CAPACITY, PUBLIC PASSENGER VEHICLES (2013-2020)
SOURCE: ECONOMIC AND SOCIAL SURVEY

The increase in private vehicle ownership that has been spurred by the lowering of interest rates on motor-vehicle loans, affordable used cars and other positive indicators related to incomes and spending requires greater focus on road infrastructure and legislation.¹³³ Ensuring the roadways are safe and regulations in place to protect persons becomes increasingly paramount, as well as readily available public transport that lowers the potential for collisions and fatalities, reduces congestion and vehicle emissions.

Road fatalities and injuries not only present a severe public health challenge but also impact on the safety of all road users, pedestrians and motorists. When analysed by gender, young men in Jamaica are five times more likely to be involved in collisions and fatalities than are women. In 2021, some 482 deaths were recorded from collisions, representing the highest number of fatalities from vehicular accidents on record in Jamaica. Additionally, an average 10 500 patients are treated annually for motor vehicle accidents, representing the second largest trauma category at Accident and Emergency facilities.

The legislative responses targeting road safety, was passed in 2018. However, outstanding regulations for the Road Traffic Act (2018), were tabled in February 2022. The delay in promulgation represents a challenge to the implementation and enforcement of rules that influence road safety and air quality from vehicle emissions including greenhouse gas emissions and particulate matter. These have further implications for the achievement of indicator 13.2.2 on the amount of greenhouse gas emissions and indicator 11.6.2 on annual mean levels of fine particular matter.

Target 11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

A key impact on the quality of settlements in Jamaica, are the prevalence of environmental events. The threat of damages from natural disasters continues to affect the island, with rainfall from storms and hurricanes being the most prevalent events. The previous VNR highlighted \$128 billion in losses and damages from hydrometeorological events between 2000 and 2017, this amount has increased with the passages of multiple storms and excessive rainfall events impacting on infrastructure, economic activities- primarily agriculture. In the period under review damages from weather systems totalled \$7.2 billion, largely on account of the passage of tropical storms Zeta and Eta in 2020. Three lives were lost between 2018 and 2020 from these and other climate related events.

Mitigating the impact of these events has been the focus of local and international support, through resilience building and financing initiatives. The promulgation of the Building Act is meant to regulate and improve the safety in the built environment and facilitate the application of the national building code. Disaster Risk Management (DRM) and Climate Change Adaptation plans have been developed at the community level to improve resilience. In financing, domestic resources have been bolstered by the transfer of \$2 billion to the Contingencies Fund specifically for natural disaster recovery as well as the signing of a US\$285.0 million Contingent Credit Facility with the IDB.

Target 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

Jamaica's capacity to collect and treat waste in an efficient manner can impact on the natural environment- land, sea and air. The actions of both residents and commercial entities are contributory to the prevailing issues of improper waste disposal. A variety of factors including sporadic formal collection, barriers to servicing informal settlements due

133 The number of certified fit motor vehicles by the Island Traffic Authority in 2020 of 551,886 represents an increase of 48 per cent to the 351, 620 in 2016.

to terrain and crime, lack of receptacles in public spaces and weak regulations contribute to the illegal dumping (JET, 2016). These activities lead to flooding when there is heavy rainfall, marine pollution and air pollution through open air burning. National strategies take into account the importance of waste management by and ensuring equitable access to sanitation and solid waste disposal. Efforts are also focussed on addressing the nature of waste, to include all types such as e-waste, medical waste, agricultural waste inter alia, through a revised National Waste Management Policy to be completed as a strategic objective of the MTF 2018–2021.

Per capita waste generation has remained constant at 1.0 kg per day and forecasted to reach 1.5 kg by 2030. The total amount of waste collected through formal (public and private) systems in 2020 was 1 103 433 tonnes, increases of 9.7 per cent and 64.0 per cent since 2019 and 2014, respectively. The metropolitan parks and markers (MPM) waste shed accounts for 50.4 per cent of the waste collected nationally. The North-Eastern waste shed has had the fastest pace of collections, 23.0 per cent (CAGR) over the period 2014–2020, while the Southern region has a reported decline of 2.1 per cent over the same period.¹³⁴

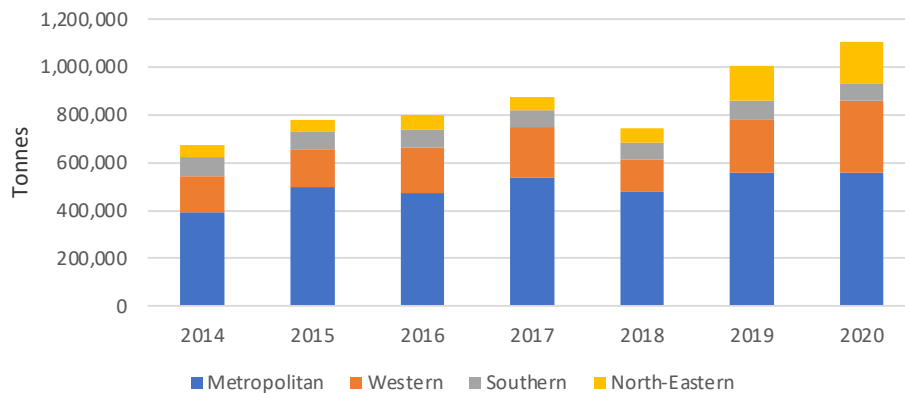


FIGURE 66: VOLUME OF WASTE COLLECTED BY REGION
SOURCE: ECONOMIC AND SOCIAL SURVEY JAMAICA

Household disposal of garbage using formal methods at the national level was 70.0 per cent in 2019. Over half of households report use of regular public collection systems, 50.4 per cent nationally and 74.7 per cent in the GKMA. The main informal means of disposal is burning, which was reported by 27.2 per cent of households. Burning remains a popular form of disposal in rural households 46.3 percent compared with 51.1 per cent that reported disposal via public/private collection systems. While data on the proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated (Target 11.6.1) is unavailable, the proxy of household disposal shows a large proportion of public/private collection systems being used for disposal of waste, 92.2 per cent in the GKMA, against burning and other forms of disposal.

134 Metropolitan wasteshed includes: Kingston, St Andrew, St Catherine, and St Thomas. Western wasteshed includes: Westmoreland, Hanover, St James, and Trelawny. Southern wasteshed includes: St Elizabeth, Clarendon and Manchester. North-Eastern wasteshed includes: St Ann, Portland, and St Mary.

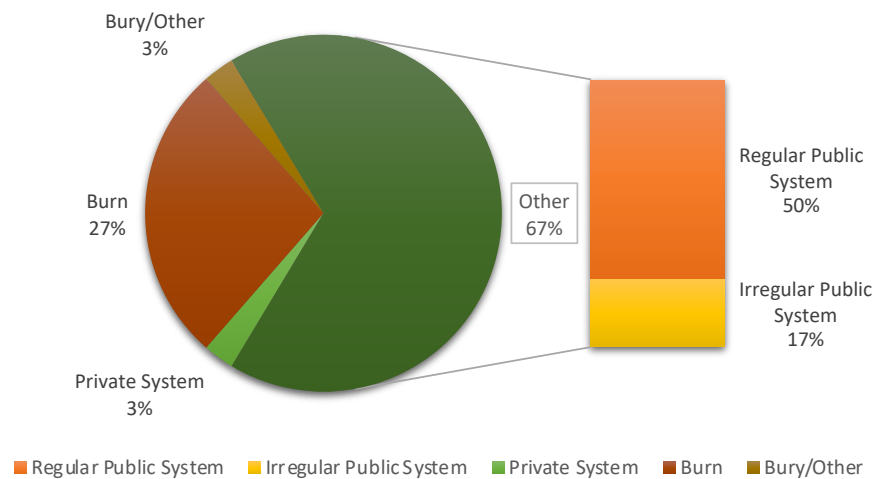


FIGURE 67: METHOD OF GARBAGE DISPOSAL BY HOUSEHOLD
SOURCE: JAMAICA SURVEY OF LIVING CONDITIONS

With the impact of COVID-19 felt across all sectors, the full impact on progress related to SDG 11 is yet to be measured. Beyond public health impacts, COVID-19 depleted household incomes, through a reduction in economic activities related to global economic downturn and restrictions on movement. These activities had a deleterious impact on persons from urban areas, where there was a density of COVID-19 cases, e.g., Kingston and St Andrew accounted for 26.7 per cent of all cases while women accounted for 57.0 per cent of all cases. The immediate effects on income from the pandemic can affect the housing situation of urban residents leading to further declines in the tenure status of households, where the numbers of individuals living rent-free has been climbing year over year.

Lessons Learnt and Best Practice

While challenges continue to affect developing countries in implementing the SDGs, the purpose of constant monitoring and evaluation allows for the identification of problem areas, successes with multiplier effects and the ability to observe best practice from other nations. In the case of Jamaica, the discussion has identified challenges in increasing the housing stock, faster policy responses and the impact of climate related events. Amidst this, there have been key measures taken to move progress incrementally in these and other areas:

- Parliamentary approval of the Water Sector Policy in 2019, to promote and ensure sustainability and intergenerational equity and improved efficiency, Integrated Water Resources Management and universal access to safe water. These actions improve the distribution and use of water, which can have the requisite multiplier effect on SDG 6 and on variables used in the Housing Quality Index.
- Multiplier effects can also be observed in the Gazetting of Trade (Plastic Packaging Materials Prohibition) Order, 2018 and the Natural Resources Conservation Authority (Plastic Packaging Materials Prohibition) Order, 2018 which sets restrictions on the importation, trade and use of certain plastics products effective January 1, 2019. Plastic materials are large components of garbage illegally dumped and lead to flooding, and pollution of the ocean along with other effluent that block drains.
- Improvement in disaster risk response, through insurance coverage for catastrophes from the Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company (CCRIF SPC);

which resulted in a \$500 million pay out in December 2020 to assist with recovery from tropical storms Zeta and Eta.

- The preparation of the Comprehensive Disaster Risk Management Policy and the completion of a number of DRM governance documents including:
 - Protocol and Guidelines to Mainstream Gender in DRM/CCA Consultancy
 - National Framework for Disaster Risk Management
 - Outline of Parish Disaster Risk Management Plan
 - National Disaster Response Coordination Plan
 - National Relief Clearance Plan
- Information and communication technology are increasingly being used in projects to facilitate effective planning and decision making. The ongoing Squatter Management Survey to support the Squatter Management Policy, has been utilising—in eight of the fourteen parishes—geo spatial data to map and store data on informal settlements.
- The importance of spatial data was highlighted in the 2018 VNR, with reference to the National Spatial Plan. The plan remains in draft; however, the National Spatial Planning Information Portal was launched in 2021. The portal is publicly available and when complete will allow for the analysis and modelling of data to support research, planning and development.
- Under the Urban Renewal and Development Programme Sector Plan of *Vision 2030 Jamaica*, the former Ministry of Housing Urban Renewal and Climate Change referenced three sub-programmes in its activities under health and wellness, environment health and greenspaces. These led to the identification of eight public parks as multi-generational and multi-purpose green spaces so that the needs of women, children, the disabled and elderly are met and fulfilled within these locations.
- The pace of progress in improvements to local planning capabilities has been mixed, with the island now being completely covered with local development orders. The development orders which guide the use of land, have been on record since 1962, and the most recent update being done in 2021. In keeping with sustainable development practises, the process of updating and confirming Development Orders continues.

Way Forward

In addressing the challenge of rapid urbanisation, the New Urban Agenda (NUA) represents a novel approach by countries to incorporate principles of sustainable development. The NUA reinforces the ethos of the SDGs of leaving no one behind, leveraging urbanisation for productivity, decent work and opportunities for all, while maintaining sound

environmental practices that allow for harmony between human settlement, industry and the natural environment.¹³⁵ In localising the application of the NUA, Caribbean SIDS are faced with a confluence of issues related to human, financial and technical resource capacity, as well as frequent adverse weather events and the growing threat of climate change to coastal cities. According to Mycoo and Bharath (2021) refocussing the NUA to the realities of a small island developing state would focus attention on:

- (i) Safe, affordable, and resilient urban housing
- (ii) Informal communities and rural-urban linkages
- (iii) Safe and affordable urban water and sewerage services
- (iv) Disaster risk reduction, climate change and urban resiliency
- (v) Safe and sustainable urban transportation
- (vi) Inclusive urbanisation and participatory integrated spatial planning
- (vii) Technology

Achieving the outcomes in SDG 11 requires a multifaceted approach that will allow for cross dimensional impacts in all the SDGs due to the health, safety, environment, infrastructure, economic development and partnerships implications. Monitoring and mitigating potential threats from any of these areas is the immediate action to avoid missing the target of making cities and human settlements inclusive, safe, resilient and sustainable. Specific areas with alignment to the goals 11, 13 and 15 include the improvement of infrastructure along coastline and complement with the expansion of nature-based solutions (mangrove forest rehabilitation, coral reef rehabilitation, watershed restoration and preservation, inter alia.), complemented by the adoption of the disaster risk management plans and guidance documents.

Improvements are needed in the pace of policy and legislative processes to avoid urban decay, unwanted citizen reaction to developments, environmental degradation and loss of life from adverse natural events.

Resource Requirements

The key challenges undergirding achievement of SDG 11 are in financing, data, and pace of policy development. Availability of domestic financing continues to be a challenge in augmenting the public transport sector, increasing the housing stock and improving road infrastructure. Data gaps exist in reporting on spending on cultural preservation, availability of green space and disaggregated data to drive planning in the public and private sectors to reduce vulnerability to climate and other types of hazards. The policy development process is still protracted. A number of policy documents have remained in draft for long periods including the National Housing Policy. Notwithstanding the progress made on developing a draft National Spatial Plan, there is need to finalize and operationalize, include considerations for the blue economy and the exclusive economic zone. Addressing these gaps not only impact on the achievement of goal 11, but also the related environmental, economic and social indicators across the SDGs.