The Barbados Information Ecosystem Assessment (IEA):

How the flow of information impacts disaster preparedness and response





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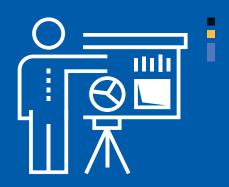
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List of Acronyms

BBC	British Broadcasting Corporation
BBS	Barbados Broadcasting Service
BGIS	Barbados Government Information Service
CANANews	Caribbean News Agency
CAPCAP	Common Alerting Protocol based Emergency Warning System
CARPHA	The Caribbean Public Health Agency
СВС	Caribbean Broadcasting Corporation
CCN	Caribbean Communications Network
CDC	Centers for Disease Control and Prevention
CDEMA	Caribbean Disaster Emergency Management Agency
CMC	Caribbean Media Corporation
CNN	Cable News Network

DEM	Department of Emergency Management
FGDs	Focus Group Discussions
ICT	Information and Communications Technology
JIS	Jamaican Information Service
KIIs	Key Informant Interviews
MCTV	Multi-Choice TV
NCDs	Non-communicable diseases
NEMO	National Emergency Management Organization
NGO	Non-governmental Organization
NHC	National Hurricane Centre
NIS	National Insurance and Social Security
ODPEM	Office of Disaster Preparedness and Emergency Management
PMO	Prime Minister's Office
RSS	Regional Security System
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
TAMIS	Tax Administration Management Information System
UN	United Nations
UNDP	United Nations Development Programme
UNECSCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WHO	World Health Organization

01EXECUTIVE SUMMARY



An information ecosystem can be defined as the system through which information flows within a community; that is, the system through which information is received from one source and passed on to other sources through various channels such as word of mouth, the phone, the internet, television etc. This ecosystem plays a critical role in helping persons prepare and respond to emergencies, disasters and crises and helps them to make better decisions as it relates to protecting themselves and their family. As such, given the Caribbean's vulnerability to natural disasters such as Hurricanes and Earthquakes, this information ecosystem assessment was conducted to determine how the flow of information within Barbadian communities helps persons in their response and readiness to crises and disasters such as the COVID 19 pandemic.

In particular, the investigation sought to: Determine the information needs of individuals and communities across Barbados and the extent to which those needs are met.

Identify what infrastructures are in place to support the production and flow of information.

Determine the means via which Barbadians generally access information.

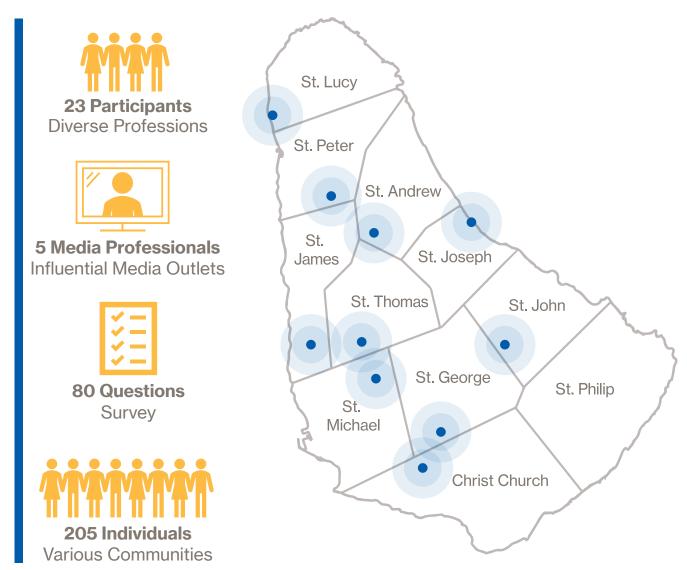
Evaluate the extent to which individuals and communities have access to key information channels.

Identify the sources of information that are most influential and trusted in Barbados.

Ascertain how information is processed and used among Barbadians.

Examine the impact that the types of information disseminated to the public has on the lives of individuals and communities.

In carrying out the investigation, a mixed methods approach was adopted. Altogether, four focus group sessions comprising a total of twenty-three (23) participants of diverse professions were conducted; five media professionals who work at some of the most influential media outlets in Barbados were interviewed; a survey instrument, comprising of approximately eighty (80) questions, was used to collect data from a total of 205 individuals who reside in various parishes across the island (e.g., St. Lucy, St. Michael, St. Andrew, and St. Joseph); and desk research was conducted to garner information on the media landscape of Barbados.



1.1 Overview of Key Findings and Recommendations

Analysis of the information obtained via these methods revealed the following key findings [also see *Table 1.1* for a more detailed summary of the findings]:

- 1. Although Barbadians reported having timely access to the information that they need to make informed decisions, especially as it relates to disaster preparation and response, accounts of their experiences with recent disaster events indicate otherwise.
- 2. Barbadians are not sufficiently prepared for natural disasters. In addition to being heavily reliant on electricity and the internet for communicating during times of crises and disasters, Barbados is in need of a mandatory building code, more resilient housing and building infrastructures, and greater uptake of insurance among property owners. Moreover, some Barbadians continue to be delayed in their response to emergency warnings. Their tendency to procrastinate on preparing for emergencies and disasters is largely attributed to the fact that, unlike other Caribbean territories, Barbados has not been significantly impacted by a disaster event for over sixty (60) years.
- 3. As the telecommunication penetration continues to rise in the island, and the Barbados Government continues to be increasingly communicative, the past few years have seen the emergence of a healthier information ecosystem in Barbados, which in turn has made it easier for Barbadians to access the information that they need to effectively participate in society. This progress is however being undermined by the presence of the following undesirable properties:
 - Citizens' and media professionals' lack of access to information from local authorities caused by inaccessibility of authorities, unavailability of information, and bureaucratic structures and processes oft;
 - Some citizens' lack of access to the key information channels;
 - The disabled community's inability to access information from credible news and information sources;
 - Government's increasing control over information flow;
 - Delays in dissemination of crisis and disaster communication to the media by the government;
 - The use of jargons in crisis and disaster communications by local authorities;
 - The proliferation of fake news and propaganda shared on social media and other online platforms;
 - The inability of some Barbadians to identify malicious/inaccurate information;
 - · The deterioration of trust among Barbadians in their main information sources.

To continue to strengthen the information ecosystem in Barbados, and in turn improve the nation's resilience the impacts of future crises and disasters, it is recommended that a concerted effort be made by key stakeholders, particularly: the local authorities, media, and the citizens, to address the above shortcomings. Accordingly, it is proposed that:

Government and its stakeholders:

- Honour all requests for information equally and provide all media outlets with equal opportunities to access information that is relevant to the public;
- Seek to establish a national forum that will serve to facilitate the public's access to and use of locally relevant research and data that are generated by the government;
- Develop a national crisis and emergency communication plan that takes into consideration island wide disruption to electricity and internet services;
- Make nation-wide awareness and education programs about disaster preparedness a national priority;
- Promote and support more sustainable disaster planning and recovery practices among Barbadians;
- Commit to reducing complacency about disaster preparation among Barbadians.

The Media:

- In collaboration with local authorities, make a special effort to improve access to information for persons living with disabilities;
- Join forces with local authorities to host public awareness campaigns to enlighten Barbadians on the issue of misinformation and disinformation and how to go about discerning the difference between credible and false or misleading information;
- Commit to strengthening the quality of their journalism.

Citizens of Barbados:

 Make it their responsibility to scrutinize the credibility of the information consumed and disseminated to them prior to sharing.

Table 1.1: Summary of Key Findings

Production and Movement of Information

- For Barbadians, the information channels most frequently used to access and consume information are social media (70.2%), radio (55.1%), and the internet (54.6%).
- Social media (62.4%), TV (52.7%) and the internet (46.3%) were identified as the top three (3) channels used to obtain Covid-19 related information.
- Radio (67.3%) and social media (52.2%) were identified as the most used channels to obtain disaster and emergency related information.
- WhatsApp (45.9%), Instagram (39%), and Facebook (38.5%) were identified as the most frequently used social media platforms to access information.
- Social media (83.3%), the internet (59.5%) and online newspapers (47.6%) are most often used by the younger demographic (16-45 years) to obtain news and information, while the older demographic (46-80+) most often turn to the radio (73.1%) and television (61.5%) to meet their information needs.
- Persons living with disabilities generally rely on the radio (62.5%) and social media (62.5%) to obtain news and information.
- Local family and friends (74.1%), internet sources (48.3%), local radio/TV personalities (42.9%), and government officials (42.4%) were most often identified by the Barbadian respondents as their main sources of information.
- Government officials were identified by the respondents as the most trusted sources for accurate information about Covid-19, disasters, and emergencies.

Barbadians' Information Needs

- Across the four (4) main information channels radio, television, phone, and the internet – national/country affairs, local Covid-19 information, and job opportunities were among the topic/issues on which respondents most often accessed information.
- The top five (5) topics/issues on which the respondents reported needing more information were: Covid-19, national/country affairs, job opportunities, health, and education.
- The majority of the respondents indicated that their access to information relating to Covid-19, as well as disaster and emergency situations, is 'important' or 'very important' (Covid-19 = 91.1%; Disasters/Emergencies = 96.6%).

Barbadians' Access to Information

- Overall, 98% of the survey respondents indicated that they have access to a phone, while 94.6% reported having access to a radio, 93.2% indicated having access to the internet, and 95.6% conveyed that they have access to a television.
- Among the 196 persons who indicated that they have access to a working TV set, 60.2% of them reported having access to a streaming service, inclusive of: Netflix, YouTube, Amazon Prime, Disney+, HBO Max, Apple TV, and Hulu, with the majority of them (66.9%) noting that they have access to Netflix.
- For those survey respondents who indicated that they own a phone (N = 197), 90.4% of them reported owning a smartphone, while 10.7% indicated that they owned a mobile phone, and 69.0% reported having a landline.
- Of the 6.8% of persons who indicated that they did not have access to the internet, some of the reasons given were: lack of finances, lack of electricity, a disability (visual impairment), and personal preference.
- The Barbadian respondents reported that although they sometimes experience challenges accessing information from local authorities, primarily due to the inaccessibility of authorities, and their lack of knowledge as it relates to who to source the information from and the appropriate channel to use, in general, they have a reasonable amount of access to information from local authorities.
- The current strategies used by local authorities and organizations to share information are inhibiting the differently abled community from independently accessing the information they need.
- Lack of access to information from government sources can sometimes be a significant bottleneck to information flow in Barbados.
- Local authorities rely heavily on information channels that require electricity and internet to communicate with the public during times of crises and disasters.





Use of Information

 When it comes to the sharing of information, Barbadians expressed a preference for using the social media platforms WhatsApp and Facebook.



 Barbadians' tendency to verify information prior to sharing varies from person to person, according to the source and type of information, and is sometimes dependent on the individual's mood.

Impact of Information

- With information being more readily accessible to the public, Barbadians are capitalizing on the opportunity to participate in public discourse and influence events that are happening in the country.
- Despite sometimes receiving timely information relating to impending disasters and crises, some Barbadians are usually delayed in their preparation efforts.
- Although the majority (75%) of the survey respondents indicated that their current knowledge of disaster and emergency preparedness is sufficient to ensure their safety and the safety of their loved ones, 25% of them indicated otherwise. Barbadians recent experience with natural disasters echoes the latter viewpoint.



Social Trust

- Barbadians' trust in their information sources varies from person to person and from source to source, with some of the survey respondents reporting that they have complete trust in local traditional media, while the others stated that they are unable to ever trust just one source.
- Barbadians' trust in their main information sources has deteriorated over the years due to several reasons including: the media's tendency to prioritize being first over being accurate, the grammatical errors that often plague the information reported by the newspapers, the reporting bias of some information sources, and the scandalous nature of some of the news content.
- Barbadians often encounter misinformation and disinformation in some form, primarily on the social media platforms Facebook and WhatsApp, and less so in traditional media.
- Barbadians reported being recipients of disinformation relating to both major and minor issues, including the Covid-19 pandemic, the La Soufriere volcanic eruption, death, disruption in electricity and water services, fires, accidents, storms, and hurricanes.
- **//**
- While some Barbadians are often able to identify malicious/ inaccurate information, some are unable to do so and do not always attempt to verify information.

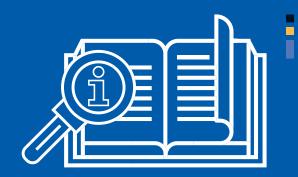
Influencers



 Among the numerous sources from whom Barbadians access/ receive information, the local media was identified as the most influential.



02BACKGROUND



The Caribbean is one of the areas in the world that is increasingly vulnerable to high-impact disastrous events. Over the last five decades, Caribbean people have been subjected to more than five hundred (500) of such events, inclusive of category V hurricanes, droughts, floods, storms, volcanic eruptions, tropical cyclones, and earthquakes. ¹ ²Given the frequency of occurrence of these events and the severe impact they tend to have on people's livelihood, there is an urgent need to strengthen the region's capacity to prepare for and respond to these events more effectively.

One crucial way in which the Caribbean region can improve its preparedness for and response to these events is by strengthening its *information ecosystem* (see *Section 2.1* below for more details on the information ecosystem). During times of emergencies or disasters, the information ecosystem plays a vital role in equipping individuals and communities with information that shapes their understanding of and response to the specific event. Armed with pertinent information relating to a disaster or emergency in a timely manner, people are better able to make decisions as it relates to protecting themselves and their family. This in turn serves to reduce panic among the population, mitigate loss of life, lessen the adverse impact of the specific event, and preserve human dignity.³ Conversely, when the information ecosystem is weak, it inhibits persons' access to accurate and relevant information. For instance, even when information is made available to the population, with a weak ecosystem, situations can arise whereby individuals and groups are unable to access and use such information due to a number of reasons, including: their socioeconomic status, physical and mental disabilities, ethnicity, and existing social inequalities.⁴ This is especially likely to occur among individuals from poorer households and can significantly jeopardize their well-being and livelihood by hindering their preparedness, response, and recovery from disasters and emergencies.⁵ ⁶

Hence, given the importance of access to information, especially to emergency or disaster preparedness and response, it is critical to examine the health of the information systems – the access, sourcing, flow and trust around information movement – in Barbados. It is anticipated that the findings from this research effort will facilitate greater understanding of: how persons in Barbados access and use information during times of crisis or emergency, the extent to which

Bello, O., Bustamente, A., & Pizarro, P. (2021). Planning for disaster risk reduction within the framework of the 2030 Agenda for sustainable development. United Nations ECLAC. Retrieved March 03, 2021, from https://repositorio.cepal.org/bitstream/handle/11362/46639/1/S2000452_en.pdf.

individuals or communities across Barbados have access to the various information channels, the sources of information that are deemed influential and trusted, the gaps in information that exist, the extent to which the production and flow of information is supported, and the impact that the types of information disseminated to the public has on the lives of individuals and communities. In turn, this is expected to facilitate efforts to strengthen the information ecosystem in Barbados.

2.1 Overview of the Information Ecosystem

An information ecosystem is the adaptive system through which information flows within a community or space.



More specifically, it is a constantly evolving and dynamic system via which information is received from one source and passed on to others, whether through word of mouth, the phone, the internet, radio, and television etc.⁷ An Information Ecosystem Assessment (IEA) therefore examines the flow, trust, use and impact of news and information, and aids in the identification of the most effective methods and channels to use in designing two-way communication strategies to meet the information needs of any given community. IEAs involve an examination of media access and consumption, as well as an evaluation of information needs, information creation, and information distribution that constantly evolve, adapt and regenerate according to a community's needs and challenges.⁸ ⁹The eight (8) critical components of the information ecosystem are depicted in *Figure 2.1*.

² United Nations World Food Programme. (2019). Barbados Annual Country Report 2019: Country Strategic Plan 2018-2020. United Nations World Food Programme. Retrieved March 03, 2021, from https://docs.wfp.org/api/documents/WFP-0000113846/download/.

³ Article 19. (2005). Humanitarian disasters and information rights: Legal and ethical standards on freedom of expression in the context of disaster response. London, UK: Article XIX Publication. Retrieved March 03, 2021, from https://www.article19.org/data/files/pdfs/publications/freedom-ofinformation-humanitarian-disasters.pdf.

⁴ Savoia, E., Lin, L., & Viswanath, K. (2013). Communicatios in public health emergency preparedness: A systematic review of the literature. Biosecurity and Bioterrorism: Biodefense strategy, practice, and science, 11(3), 170-184. doi:10.1089/bsp.2013.0038

⁵ See footnote 4 for reference

⁶ Internews. (2015a). Why information matters: A foundation for resilience. Internews. Retrieved March 03, 2021, from https://www.internews.org/sites/default/files/resources/150513-Internews WhyInformationMatters.pdf.

⁷ See footnote 6 for reference.

⁸ Internews Humanitarian. (n.d). Information Ecosystem Assessments. Retrieved June 25, 2021, from Internews Humanitarian: https://humanitarian.internews.org/information-ecosystem.

⁹ See footnote 6 for reference.

Figure 2.1: The eight critical dimensions of an information ecosystem



Source: Internews. (2015). Why information matters: A foundation for resilience.

1. Information Needs

Information Needs refer to the different types of information that are valued and needed by persons within various communities. Information needs are dynamic and can vary/change over time, and even within a particular situation such as a crisis or a disaster.

2. Information Landscape

The information landscape refers to the physical and institutional infrastructures that support the production and flow of information; for example: media outlets, distribution systems, production units, and the government.

3. Production and Movement

Production and Movement refers to the "who" and the "how" of information. Hence, it refers to who generates and disseminates the information (information sources) and how that information is passed on to and received by others (information channels).

4. Dynamics of Access

Information access seeks to address the ways in which people obtain the information they need, and the level of risk undertaken to do so. Access to information is especially critical during times of crises or disasters, and hence it is critical to evaluate the channels through which information is accessed, as well as the potential barriers to information access.

5. Use of Information

Information use seeks to address how information is processed and applied by individuals once it is received; for instance, whether they verify information prior to sharing, or use it to make life decisions.

6. Impact of Information

This dimension looks at whether some form of behavior change occurs as a result of the information received.

7. Social Trust

The social trust dimension looks at the extent to which one believes that the information disseminated by their various sources is reliable and trustworthy.

8. Influencers

Influencers are defined as the people, organizations and institutions that shape how information flows within society.

¹⁰ Definitions are adapted from the references indicated at footnote 8, as well as: Internews. (2021). Internews information ecosystem analysis: A human-centered approach. Retrieved June 26, 2021, from Internews: https://internews.org/wp-content/uploads/2021/05/Internews_Information_Ecosystem_Assessments.pdf, and Internews. (2015b). Mapping information ecosystems to support resilience. Retrieved June 26, 2021, from Internews: https://internews.org/wp-content/uploads/legacy/resources/Internews_Mapping_Information_Ecosystems_2015.pdf



¹³ UNDP, UNICEF, and UN WOMEN. (2020). Barbados COVID-19 macroeconomic and human impact assessment data. UNDP. Retrieved from https:// www.undp.org/content/dam/barbados/docs/heat-reports/updated-heat-reports/Human%20and%20Economic%20Impact%20AssessmenT%20 (HEAT)%20-%20Barbados.pdf.

03RESEARCH METHODOLOGY



To examine the health of Barbados' information ecosystem, data was collected on its eight (8) dimensions, particularly relating to: Barbadians' information needs, the country's information landscape, the information channels most accessible and often used by Barbadians, how they process and use information, and the sources of information that are deemed influential and trusted. In collecting the data, a mixed methods approach was adopted, including virtual semi-structured interviews, focus group discussions, and desk research.

During the completion of the data collection and report writing process, a few hazards occurred, inclusive of the La Soufriere volcanic eruption in St. Vincent which occurred in April 2021, a 'freak' weather system which affected the island in June 2021, and Hurricane Elsa, which ravaged certain parts of the country in July 2021.

To capture Barbadian's experience with these weather events and to evaluate the utility of the Barbados IEA, an online survey and further desk research were conducted. Further details on the methods used are discussed in the following sub-sections.

3.1 Interviews



- 1. Interviewed 17 individuals on average
- 2. Collect data from at least one person from the parishes of St. Peter, St. Lucy, St. Michael, St. Andrew, St. John and St. Joseph



- 1. Access and consumption habits of Radio, Broadcast/Cable TV and Streaming Services, Phone (Landline, Mobile and Smartphone) and Internet
- 2. Information needs
- 3. Interaction and feedback from local authorities
- 4. Information channels and sources; and demography



- 1. At least 2 persons 55 years and older
- 2. At least 2 persons living with disabilities
- 3. At least 2 persons with disabilities
- 4. At least 2 single-adult headed households
- 5. At least 1 household with 3 or more children under the age of 21
- 6. At least 1 homeless person
- 7. At least 1 person on welfare/unemployed person
- 8. At least 1 migrant/immigrant
- 9. At least 1 person with no internet at home
- 10. At least 1 ex-offender
- 11. At least 1 elderly person (65 years and older) who lives alone

Tables 7.1 and 7.2 (see Appendix A) provides a breakdown of the demographics for survey participants in Barbados and the number of survey respondents from each of the groups assessed.

3.2 Focus Group and Key Informant Interviews

Focus group discussions were hosted with residents of Barbados to gain further information from them as it relates to: information flows and trends, information and news consumption, crisis- and disaster-specific information consumption, social media usage, and the issue of misinformation and disinformation. Additionally, the participants' feedback was sought to gain insight into their experience with the volcanic eruption. The focus group participants were primarily sourced from an advertisement placed on Instagram and Facebook calling for focus group participants. While a total of forty (40) Barbadians agreed to participate, low attendance resulted in the actual participation numbers being reduced to twenty-three (23). Accordingly, participating in the four (4) focus group sessions were nineteen (19) Women and four (4) Men, who ranged between the ages of 21 - 74 (M = 47.4), and work in a cross section of professions, inclusive of: life coaching, architecture, software development, teaching, and digital marketing. These participants reside in a number of parishes across Barbados, namely: St. James, Christ Church, St. Michael, St. George, and St. Thomas.

Additionally, five (5) key informant interviews (KIIs) were conducted with women professionals who have been operating in the media landscape for periods spanning 5 to 35 years. These media professionals, who included editors, journalists and a programming/content coordinator, operate in some of the most influential media houses in Barbados, inclusive of: CBC, Barbados Today, Nation News, The Barbados Advocate, and Starcom Network.

3.3 Post-Hurricane Elsa On-line Survey

On July 2, 2021, Barbados experienced its first Hurricane in 65 years. To gain insight into Barbadians' experience with its passing, a short survey consisting of fifteen (15) questions was distributed to Barbadians via the social media platforms Facebook, Instagram, LinkedIn, and WhatsApp. The survey [referred to as the post-Hurricane Elsa survey hereafter] sought to obtain information regarding the extent to which Barbadians felt they were prepared for the passing of the weather system, the actions taken to prepare for it, their chosen channels and sources for information prior to and during the passage of Elsa, and the extent to which Barbadians feel prepared to face a similar event in the future. In total, ninety-eight (98) persons responded to the survey, 74.5% of which were female. The respondents ranged between the ages of 26 - 79 years of age, and resided in the eleven parishes across Barbados, the majority of whom resided in those most affected by Hurricane Elsa, namely Christ Church (24.5%), St. Phillip (20.4%) and St. Michael (14.3%). *Table 3.1* presents an overview of the contents of each of the data collection methods.

Table 3.1: Overview of the Data Collection Methods utilized for the IEA

Data Collection Method	Type of Data	Sample Characteristics
Interviews with Survey Instrument	Access and consumption habits of Radio, Broadcast/Cable TV and Streaming Services, Phone and Internet; information needs; interaction and feedback from local authorities; information channels and sources; demography.	Information vulnerable populations and communities in Barbados.
Focus Group Discussions (FGDs)	News consumption habits; social media usage; information needs; disinformation and misinformation; information flows and trends.	Laypersons, representatives from a wide variety of industries.
Key Informant Interviews (KIIs)	Media landscape; information and communication trends and needs; disinformation and misinformation; news consumption trends on social media.	Persons operating in the media landscape.
Post-Hurricane Elsa Survey	Disaster preparation; most used information channels; most popular information sources.	Individuals residing in Barbados who experienced the passing of Hurricane Elsa
Desk Research	Media landscape of Barbados; Barbadians' experience with disasters.	N/A

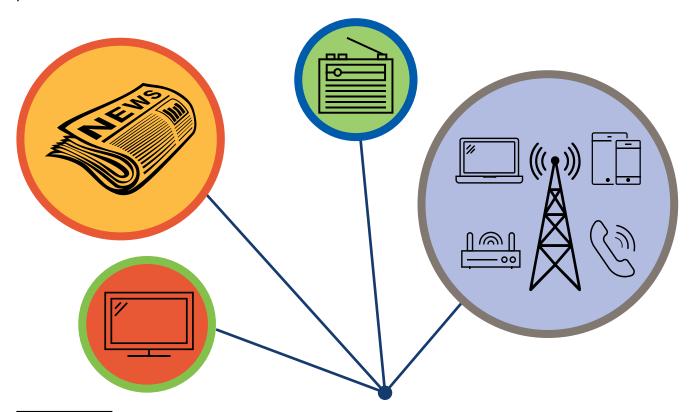
3.4 Limitations

This study experienced several challenges and limitations. 1. The IEA was implemented during the global Covid-19 Pandemic, at a time when government protocols restricted social interactions among citizens to reduce the spread of the virus. As a result, data collection was primarily conducted using the digital platforms: Microsoft Teams, skype, WhatsApp, and Zoom. This reliance on technology to collect data inhibited access to persons considered to be most vulnerable, i.e., those more likely to experience challenges accessing information due to lack of access to key information channels, electricity, and the internet. It also restricted the type of persons who participated in the focus group sessions, as mostly those who had an interest in the issue responded to the social media call for participants. 2. The lack of incentive for participation in focus groups limited the number and type of persons who participated in the sessions. Upon hearing that there was no incentive, some persons opted not to participate in sessions. 3. Challenges in accessing local authorities prevented the researchers from sourcing input on the issue from local disaster management personnel and agencies. 4. The length of the survey instrument proved to be a hindrance, as many of the researchers indicated that their interviewees often became fatigued during the interview process. Given these challenges, along with the small sample size, care should be exercised in generalizing the findings of the study to the entire population of Barbados.

04BARBADOS MEDIA LANDSCAPE REVIEW



Like most islands in the Caribbean, Barbados entered the independent media business quite late. Although its first published newspaper, the *Barbados Gazette*, emerged in 1731, its other media entities, inclusive of its radio and television broadcasting organizations, did not surface until the 1900s.¹⁴ Nevertheless, the Barbados Gazette paved the way for the broad collection of media entities that exist today. Following its emergence as Barbados' first ever newspaper, several other publications followed, including: Barbados' first two daily newspapers, the *Bridgetown Ledger* and the *Barbados Advocate*, which began printing in 1886 and 1895 respectively, as well as the *Barbados Herald* which started in 1919, *The Observer* which emerged in 1934, and the *Daily News* which came about in 1960. Over time, many of these newspapers folded, except for the Barbados Advocate, which endured the 1800s and is still in existence today, making it the oldest print media establishment in Barbados.¹⁵



¹⁴ Surlin, S. H., & Soderlund, W. C. (1991). Mass Media and the Caribbean. Routledge. The Caribbean Media Corporation. (2020). About us. Retrieved March 06, 2021, from The Caribbean Media Corporation: https://www.cmccaribbean.com/

In 1973, the Barbados Advocate's biggest competitor, *The Nation*, emerged. To date, they remain the two largest newspapers in Barbados, publishing daily in print and online. In 2006, the Nation newspaper company merged with the Trinidad and Tobago media giant, Caribbean Communications Network (CCN), to become One Caribbean Media – the largest media conglomerate in the English-speaking Caribbean. As of 2012, its circulation was estimated to be 32,000, surpassing that of the Barbados Advocate, which had a circulation of approximately 22,000. It publishes several newspapers, namely: The Daily Nation, Weekend Nation, Saturday Sun and Sunday Sun, as well as a number of specialty magazines and niche publications, inclusive of: Business Authority, Better Health, Smart Homes, Fine Cuisine, Parenting Today, Explore Barbados, the Crop Over Souvenir, and the Nation Workbook for primary schools. In addition to its print media, the Nation Corporation owns a number of radio stations (four in Barbados, one in Trinidad, and two in Grenada), and a television station in Grenada.

In addition to The Barbados Advocate and The Nation, Barbados is home to several online news entities. Among them are: Loop Barbados, Barbados Today, The Bajan Reporter, and Barbados Underground. With the advent of the internet, advancement in technology, and the increased usage of the internet and social media across the country, online news is becoming a major force in Barbados. Other noteworthy print media are the Barbados Government Information Service (BGIS), the Caribbean Media Corporation (CMC), and Caribbean360. Established in 1958, the BGIS is the official communication arm of the Barbados Government. Through it, the government disseminates public information to the general public using the press, radio, television, and its social media platforms.¹⁸ The CMC, through its print service – Caribbean News Agency (CANANews), and Caribbean360, both of which are based in Barbados – are producers and distributors of regional news, sports, and information throughout the Caribbean.¹⁹

With respect to broadcasting, Barbados' first radio station, Radio Distribution, emerged in 1934 and it was decades before another joined it on the AM band. This was done by the Caribbean Broadcasting Corporation (CBC), a government-owned radio station, which began broadcasting in 1963. Following was the Barbados Broadcasting Service (BBS), which was the third radio

¹⁵ See above footnote for reference.

¹⁶ Storr, J. (2014). Caribbean Journalism's media economy: Advvancing democracy and the common good? the International Communication Gazette, 76(2), 177-196. doi:DOI: 10.1177/1748048513504168

¹⁷ See above footnote for reference

¹⁸ Barbados Government Information Service. (2020). About GIS. Retrieved March 06, 2021, from Barbados Government Information Service: https://gisbarbados.gov.bb/about-gis/

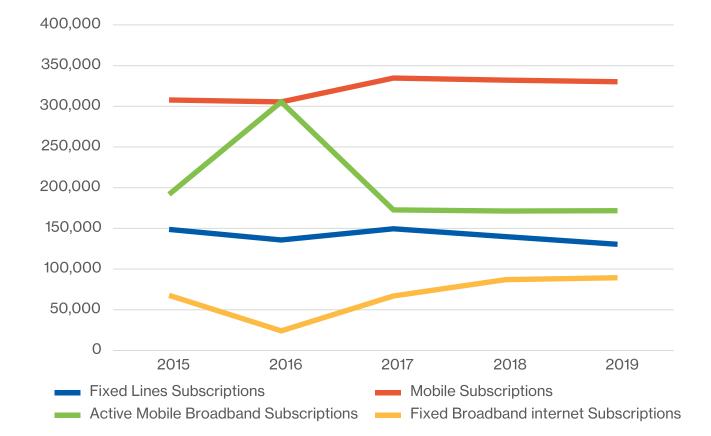
¹⁹ The Caribbean Media Corporation. (2020). About us. Retrieved March 06, 2021, from The Caribbean Media Corporation: https://www.cmccaribbean.com/

Figure 4.1: The trend in telecommunication penetration in Barbados between 2015 -2019 for fixed broadband, fixed lines, mobile and mobile broadband subscriptions

organization to emerge in Barbados and the first to begin its operation on the FM band. This occurred in 1983, and soon after several others joined it, including Radio Liberty, which was established by CBC in 1984, and YESS 104.1 FM, which started broadcasting in 1988.²⁰ Over the years, Barbados' broadcast industry continued to expand as evidenced by the broad selection of radio stations available to Barbadians in 2021. Currently there are approximately sixteen (16) well established radio stations operating on the FM band, most of which are privately owned and also stream online. Additionally, there is one locally owned radio station (CBC Radio) that still operates on the AM band, a few that are not based in Barbados but have significant island coverage (e.g., We FM and Praise FM, St. Vincent), and numerous others that operate solely online, such as: Power Slam radio, Evah Blaze radio, and Kiss Web radio. Together, these radio stations cover a range of programming including news, sports, talk shows, and call-in programmes, while featuring a variety of music including local and regional music, R&B and Gospel. As it currently stands, Barbados has two major radio networks: the CBC Network and the Starcom Network.

In addition to owning and operating several radio stations in Barbados, CBC is home to the island's first and sole television station, CBC TV8. The station began operating in 1964 and was the first in the Caribbean to begin transmission in color in 1971.²¹ Its programming includes news, sports, and lifestyle programs, as well as local and international entertainment shows. Besides this television station, CBC also offers a television subscription service called Multi-Choice TV (MCTV). Through this service, Barbadians can access many television stations from around the world, including the United States, Europe, and the Caribbean. Other providers of television subscription services include: Digicel, Flow and Directv. Via such services, CMC through its television network, CaribVision, is able to air Caribbean-rich content in over 22 Caribbean territories, the USA, Canada, and the UK. Its programming includes news, current affairs, sports, drama, sitcoms, entertainment, and lifestyle shows.²² Television programming also enters the homes of Barbadians through streaming services, such as Netflix, Hulu, and Prime video, via the internet.

As it relates to telecommunications in Barbados, there are currently two major telecommunications companies operating on the island: Flow Barbados and Digicel Barbados. These service providers both offer TV, mobile, landline, and broadband services to Barbadians. Consistent with Information and Communication Technology (ICT) data published by the Telecommunications Unit of the Ministry of Innovations, Science and Smart Technologies, among the Barbadian population, approximately 116% were mobile cellular users, 60% were mobile broadband subscribers, 31% were fixed broadband subscribers, and 46% were fixed line users in 2019. *Figure 4.1* illustrates the trend in telecommunication penetration in Barbados between 2015-2019.



²⁰ See footnote 14 for reference.

²¹ See footnote 14 for reference

²² See footnote 19 for reference.

05 KEY FINDINGS



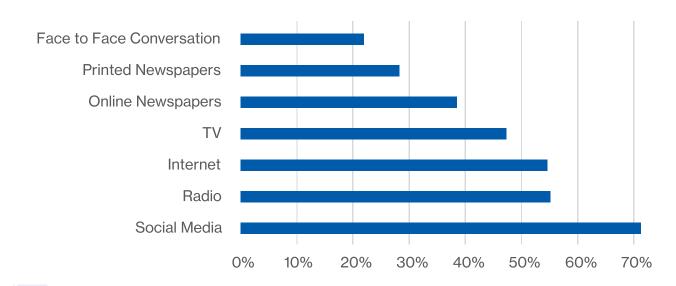
5.1 Production and Movement of Information

A healthy information ecosystem is generally characterized by a multitude of channels via which information is disseminated to the public, as well as sources from whom the information is generated. In Barbados, information is often disseminated to the public from information sources such as: the government, local friends/families, local media, and local radio personalities via several information channels, including: social media, television, radio, the internet, and the phone. The following subsections identify the most popular information channels and sources among Barbadians.

5.1.1 Social Media: The Most Used Information Channel among Barbadians

For the survey respondents, the information channels most frequently used to access and consume information were social media (70.2%), followed by radio (55.1%), and the internet (54.6%), as highlighted in *Figure 5.1*. Among the various social media platforms used by the survey respondents, WhatsApp (45.9%), Instagram (39%), and Facebook (38.5%) were reported to be the most frequently used for information access.

Figure 5.1: Most Used Information Channels among Barbadians









According to the focus group respondents and Key Informants, social media offers numerous benefits, inclusive of: access to lots of up-to-date and relevant information; networking opportunities; instantaneous responses; opportunities to build social connections; the ability to stay in contact with friends and family across the globe at no cost; revenue generation opportunities; and increased public engagement. It is especially beneficial for persons in the disabled community. As highlighted by one of the focus group respondents, social media facilitates the community's access to information:

"

There are very few media in the Caribbean, let alone Barbados, that has provided an easy read format that they can follow. Yes, there is sign language interpreting on evening news segments and stuff. But a lot of other information comes out that's not provided in a format that the deaf community can easily access. So that turns our attention to a lot of social media."

- Woman, NGO Representative

Along with these benefits, however, come a number of challenges, both for the media and laypersons. These challenges include but are not limited to: the proliferation of misinformation and disinformation; unwelcomed attention from strangers; and the time and resources needed to manage the numerous platforms. In addition to the challenges, several concerning trends with respect to the use of social media were also identified. These include the tendency of persons to: comment on a story after only reading the headlines; be disrespectful and abusive to others; and to manipulate the narrative to fit their personal agenda. One highly notable trend was the tendency of social media users to merely scan the information rather than read it comprehensively. This observation was noted by a Key Informant:

Younger people are gravitating more towards the online content; younger people are not interested, not even in reading the online paper. You could give them a digital version of the paper, and they are still not going to be interested in reading it. For them, they want bite sized pieces of information, here and now, so the Instagram and the Facebook works fine for them. Because they just want to see that headline, and that's it. They don't read past the headline..."

- Woman, Media Professional, 19 years' experience in the media industry

5.1.2 Radio: The Most Used Information Channel for Disaster and Emergency Related Information

When accessing information relating specifically to disaster or emergency situations, radio (67.3%) and social media (52.2%) were identified by the survey respondents as the most used channel. This finding was later validated by the post-Hurricane Elsa survey respondents who reported that the channels most used to obtain information prior to and during the passing of Hurricane Elsa were the radio and the WhatsApp [see *Figure 5.2*]. On the other hand, social media (62.4%), TV (52.7%) and the internet (46.3%) were identified by the survey respondents as the top three (3) channels used to obtain Covid-19 related information, with Instagram (35.1%), WhatsApp (33.2%), and Facebook (27.8%) cited as the most used social media platforms.

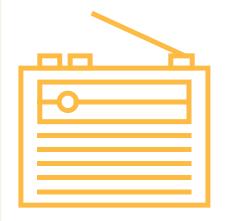
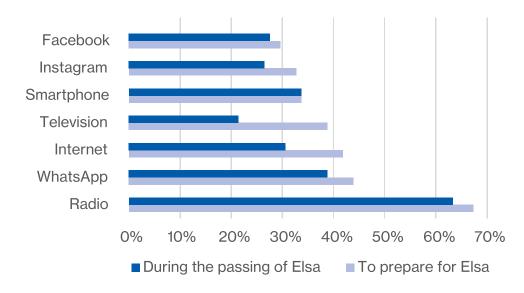


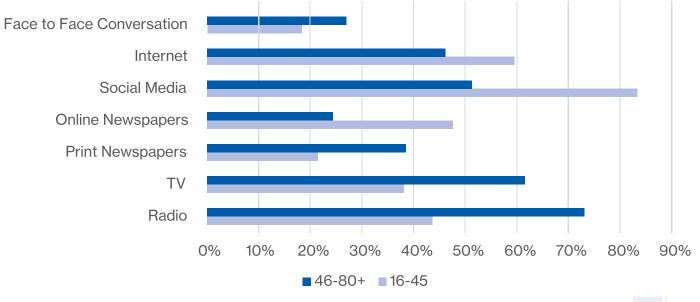
Figure 5.2: Most used information channel for disaster and emergency related information



5.1.3 Radio and Television: The Most Used Information Channel among Persons Who Fall in the 46-80+ Age Group

Also of importance to note was the finding that while the younger demographic (16-45 years) gravitates more towards social media (83.3%), the internet (59.5%) and online newspapers (47.6%) for their news and information, the older demographic (46-80+) instead uses the radio (73.1%) and television (61.5%) most often to meet their information needs. Please see *Figure 5.3* for further details.

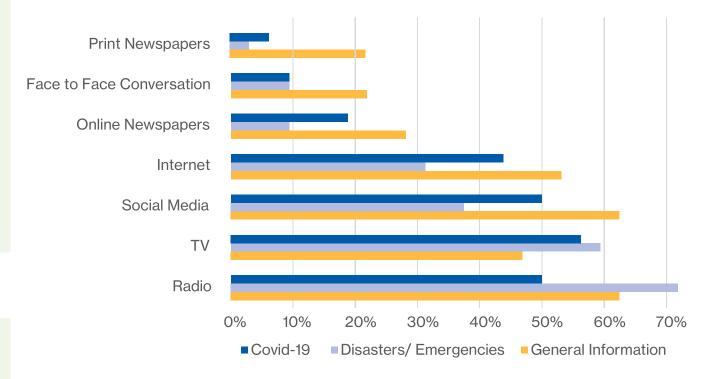
Figure 5.3: Most used information channels among persons in the different age groups



5.1.4 Radio and Social Media: The Most used Information Channels among Persons Living with Disabilities

Among the thirty-two (32) persons living with a disability who participated in the survey, the majority of them reported that they generally rely on the radio (62.5%) and social media (62.5%) to obtain news and information. However, as noted in *Figure 5.4*, this changes somewhat when accessing information relating to Covid-19 and disasters/emergencies. Overall, it is noted that this community mostly uses four channels, namely: television, radio, social media, and the internet.

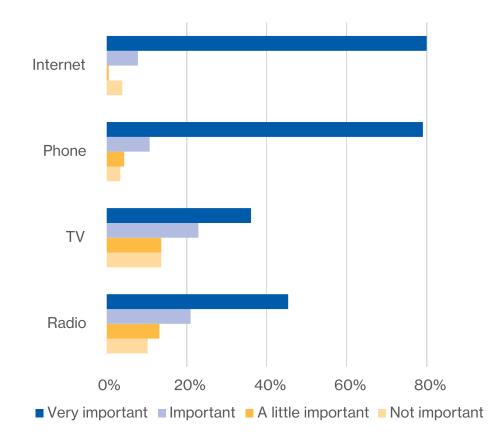
Figure 5.4: Most used information channels among persons living with disabilities



5.1.5 Phone and Internet: The Most Important Information Channels among Barbadians

Given the popularity of social media among the survey respondents, it was no surprise that when asked how important the various channels (radio, TV, phone, and internet) were for accessing information, they rated the internet and their phone to be more important to them than radio and television [see *Figure 5.5*]. In response to why the phone and the internet is so important to them, two of the survey respondents noted that "without my phone, I would not receive any updates or have any access to pertinent information", and "the internet provides access to information and allows you to stay in touch with loved ones".

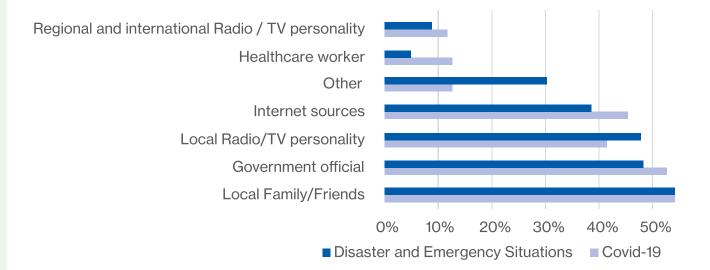
Figure 5.5: Survey participants' ratings of the importance of the various channels for accessing information



5.1.6 Most Popular Information Sources among Barbadians

Local family and friends (74.1%), internet sources (48.3%), local radio/TV personalities (42.9%), and government officials (42.4%) were most often identified by the survey respondents as their main sources of information. Similarly, with respect to information specifically related to Covid-19 and disasters/emergencies, local family and friends was again identified as the respondents' most popular information source [see *Figure 5.6*]. Subsequent data derived from the post-Hurricane Elsa survey, which revealed that most of the respondents turned to: the Barbados Meteorological Services Office (MET office; 57.1%), local friends and family (40.8%), VOB 92.9 FM (39.8%), CBC TV 8 (35.7%), and BGIS (35.7%) for information to prepare for its passing, validates this finding.

Figure 5.6: Survey participants' main sources of information for Covid-19 and Disaster/ Emergency related information



In addition to the above, the survey respondents identified approximately twenty-nine (29) different internet sources from whom they generally access information. These include: The Ministry of Health and Wellness, Queen Elizabeth Hospital, Barbados Advocate, Nation News, Loop News, the Prime Minister's Office (PMO), and Barbados Today, as well as regional/international sources such as CARPHA, UN, and UNDP.

5.1.7 The Government: The Most Trusted Source for Information about Covid-19, Disasters, and Emergencies

Despite being the most popular information source, local family and friends were not the most trusted. Government officials were identified by the survey respondents as the most trusted source for accurate information about Covid-19, disasters, and emergencies. Although they sometimes access such information from international sources such as: CDC, CNN, BBC, WHO, Accuweather, CAPCAP, and the NHC, the focus group respondents highlighted that BGIS is especially key for local Covid-19 related and disaster/emergency related information. Other noteworthy local and regional information sources for crisis and disaster/emergency related information include: Office of Disaster Preparedness and Emergency Management (ODPEM), the Department of Emergency Management (DEM), the Caribbean Disaster Emergency Management Agency (CDEMA), National Emergency Management Organization (NEMO), the UWI Seismic Centre, and the Regional Security System (RSS).

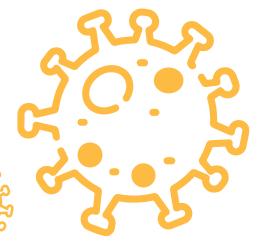
5.2 Barbadians' Information Needs

The type of information needed by an individual, group, community, or a nation tends to be diverse and is constantly evolving. Nevertheless, an attempt was made to determine the types of information Barbadians are generally in need of on a daily basis, as well as during times of crises and disasters. The following subsections highlight their feedback.

5.2.1 Types of Information Most Needed by Barbadians

Although the information needs of the survey respondents differed across individuals, a comparative analysis of their needs across the four information channels (radio, television, phone, and internet) revealed some commonalities. The most needed type of information were: national/country affairs, local covid-19 information, and access to job opportunities [see *Figure 5.7*]. Community/parish matters, information about education, and how to access health advice and treatment were also among the most accessed or needed information type among the survey respondents. Other note-worthy topics identified by both the survey and focus group respondents included but are not limited to: care for the vulnerable (children, persons living with disabilities, the elderly); youth programmes, development and opportunities; disability education and awareness; opportunities for the vulnerable (the poor, elderly, and the disabled); entrepreneurship education and opportunities; and, regional and international news.

Although many of the survey respondents reported that they generally have access to the different types of information needed, they indicated that there are still some topics/issues on which they sometimes need more information. Among the top five (5) topics/issues on which the respondents reported needing more information were: Covid-19 (e.g., side effects of Covid-19, Covid-19 links to other diseases, Covid-19 stigma, Covid-19 plan of action, Covid-19 vaccines, and regional Covid-19 information), national/country affairs (e.g., hurricane preparation, court matters, the economy, legislative issues, homelessness, labour-related issues, elderly care, safety, security and abandonment, food prices, housing, youth development and opportunities, cost-of-living, pensions, food sustainability, poverty, water outages, and income tax returns), job opportunities (e.g. job opportunities for the disabled), health (e.g. mental health, NCDs, STIs and STDs), and education (e.g. the resumption of school, sex education, disability awareness and education, entrepreneurship education, financial education and opportunities), respectively.



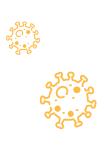
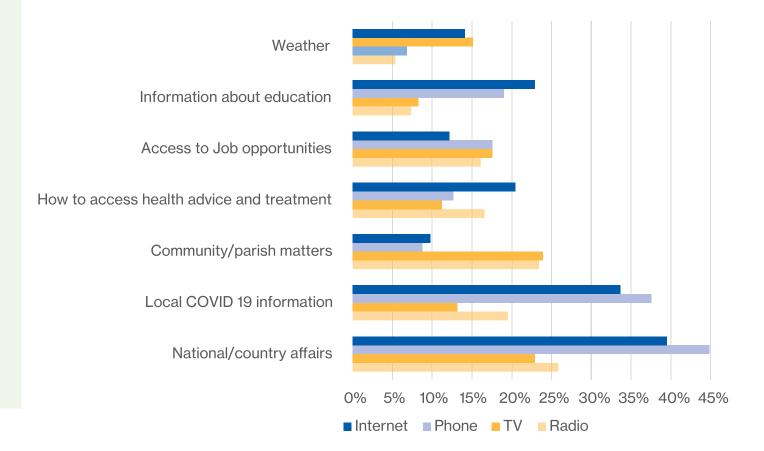




Figure 5.7: Most needed type of information, as identified by survey respondents, across the information channels – radio, television, phone and internet.



5.2.2 Access to Covid-19 and Disaster/Emergency related Information is important to Barbadians

The survey respondents were asked to rate the extent to which having access to news and information about Covid-19, as well as disaster and emergency situations are important to them. While most of the respondents indicated that their access to both types of information was either 'important' or 'very important' (Covid-19 = 91.1%; Disasters/Emergencies = 96.6%), there were still a few who considered such information to be of little to no importance. Some of the respondents who deemed access to Covid-19 information to be important noted that access helps them to "...better prepare to protect me and my children", "keep updated about vaccinations and their effectiveness and side effects", and to "...decide whether you are going to take the vaccine". On the other hand, those who deemed such information to be of little to no importance highlighted that such is the case because: "it used to be pretty important in the beginning, but it has gotten a bit overwhelming", they are "tired hearing about Covid-19", they "question accuracy and credibility of information", and because it is irrelevant as "I only leave home when necessary, e.g. to get groceries".

5.2.3 Information Needed by Barbadians for effective Disaster and Emergency Preparedness and Response

To effectively prepare and respond to disasters and emergencies, the respondents reported that they require various types of information before, during and after the event. Among the top concerns of the survey respondents at the onset and in the aftermath of disasters or emergencies were information relating to: the safety of their friends and family, provision of basic resources (e.g., food, electricity, water, and clothing), and shelter/housing. Following these, they also require information that will help to ensure their survival. *Table 5.1* presents a breakdown of the different types of information needed during the different phases of a disaster/emergency, as indicated by the focus group respondents and Key Informants.

Table 5.1: The different types of information that is commonly needed by Barbadians before, during, and after a disaster/emergency

Phases of a Disaster/Crisis	Information Needs
	What is the event, the urgency, and the potential impact of the situation;
	How the government is preparing for its occurrence and to mitigate all risks;
Before a Disaster/Emergency	How to prepare for the event and safeguard one's life;
	Available shelters (if necessary);
	If impacted in anyway, what should be one's immediate action, and who can be reached out to for assistance.



Phases of a Disaster/Crisis	Information Needs
	What actions should be taken to address the effects and safeguard one's life;
	The impact that the event is having on various parts of the nation;
	What actions are being taken to address the situation as it unfolds;
During a Disaster/Emany	How are people being cared for;
During a Disaster/Emergency	Who can one reach out to if help is needed or to address questions and concerns;
	Length of time the event will last;
	If there is a need to evacuate, where is the meeting point;
	Whether or not the essential services (e.g., water, electricity) are still stable and effectively functioning.
	The overall impact of the event on the nation;
	Whether or not it is safe to venture outside;
	The risk of the event reoccurring in the future;
After a Disaster/Emergency	What needs to be done to operate and effectively function in the new reality;
	Resumption of services and the return to normalcy, as it relates to schools, businesses, travel, etc.;
	Individuals and organizations to reach out to if assistance is needed;
	How effectively was the situation/event managed;

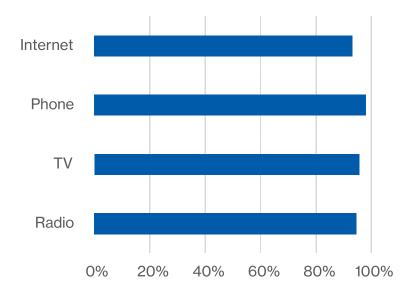
5.3 Barbadians' Access to Information

The explosion of digital technology has transformed the way in which people communicate with each other. Thus, in addition to the traditional communication channels: radio, television, landlines, print newspaper, and face-to-face conversations, people today also communicate using digital communication, inclusive of: the internet, social media, online newspapers, smartphones, laptops, tablets and much more. The upcoming subsections examine the extent to which Barbadians have access to key communication channels and information sources, as well as the barriers commonly encountered in accessing the information needed.

5.3.1 Phones: The Most Accessible Communication Channel for Barbadians

In general, the survey respondents reported having relatively easy access to information. As highlighted in *Figure 5.8*, the majority of the respondents either owns or has some form of access to all four of the information channels, with the phone appearing to be the most accessible. Also, among the 196 persons who indicated that they have access to a working TV set, 60.2% of them reported having access to a streaming service, inclusive of: Netflix, YouTube, Amazon Prime, Disney+, HBO Max, Apple TV, and Hulu, with the majority of them (66.9%) noting that they have access to Netflix.

Figure 5.8: Percentage of survey respondents who reported having access to the various information channels – radio, phone, internet, and television



Plans to rebuild, if necessary.

For those survey respondents who indicated that they own a phone (N = 197), 90.4% of them reported owning a smartphone, while 10.7% indicated that they owned a mobile phone, and 69.0% reported having a landline. Moreover, 30.5% of them identified their phone service provider as Digicel, while 39.1% of them indicated that they are Flow users, and 26.4% of them reported that they use both providers. The majority of them who indicated that they owned a landline and mobile phone reported that they primarily use them to keep in touch with friends and family (landline = 66.9%, mobile phone = 57.1%) and to conduct business (landline = 50.7%, mobile phone = 42.9%). With respect to the use of their smartphones, the respondents revealed that they most often use the device to connect with friends and family (90.4%), access the internet (64.0%), receive news and information alerts (57.3%), and conduct business (53.9%). Overall, most of the survey respondents (98.5%) reported having mobile network coverage in the areas in which they reside.

Of the 6.8% of persons who indicated that they did not have access to the internet, some of the reasons given were: lack of finances, lack of electricity, a disability (visual impairment), and personal preference. One respondent, who was homeless, noted that he does not have access to anything but old newspapers and therefore is only informed of current events "...if someone tells me something". Among the 191 respondents who indicated that they had access to the internet, the majority of them most frequently accessed it using their smartphone (91.6%), and most often accessed the internet for entertainment purposes (70.7%) such as streaming and listening to music, to gather information on relevant topics/issues (62.8%), and for social networking (62.3%).

5.3.2 Access to Information from Local Authorities is sometimes a Challenge for Laypersons

Overall, the respondents reported having a reasonable amount of access to information from local authorities. When asked if they are generally able to ask questions of, or raise concerns with, local authorities about their needs, 55.1% (N = 113) of the survey respondents replied in the affirmative, with thirty-six (36) of them indicating that despite being able to, they never usually do so. In the case of those who do take advantage of the ability to access information directly from local authorities (N = 75), they tend to do so using numerous mechanisms [see *Figure 5.9*], among which the most popular and most preferred appeared to be telephone voice calls. Most often, they contact local authorities to discuss their current situation (e.g., education, food prices, NIS payments, service bill errors, immigration status, etc.) and to inform them of the needs of their community (e.g., poor lighting, road issues, waste disposal, water issues, transportation for the disabled community, etc.) [see *Figure 5.10*].



Figure 5.9: The main mechanisms used by the survey respondents to communicate with local authorities

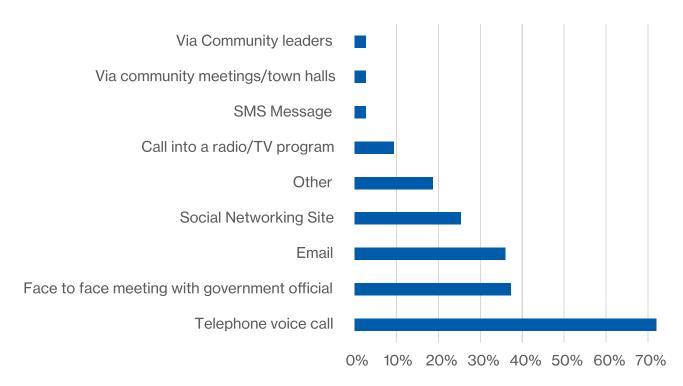
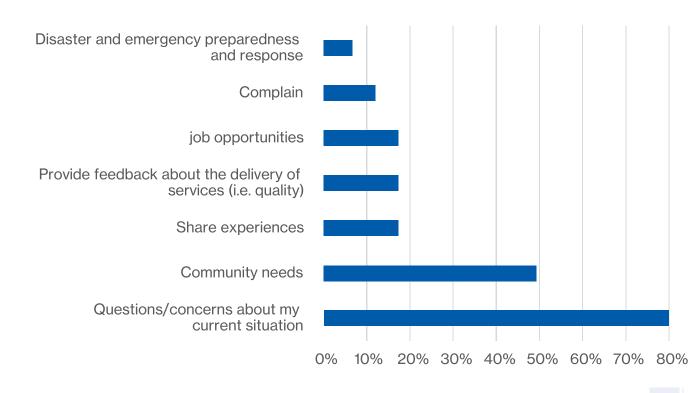


Figure 5.10: Topics/issues that respondents most often discuss with local authorities



The majority of them revealed that on the occasions that they did reach out to local authorities for information, they frequently (28%) or sometimes (32%) received responses to their questions or concerns, while the others reported that they rarely (26.7%) or never (10.7%) receive a response. This variation in experience when accessing information from local authorities is reflected in some of the respondents' comments, as noted below:

As long as you ask a question people respond. They may not have all the information, but somebody somewhere knows the information and can steer you in the righ direction."

- Man, 60-79 years old, Christ Church

It is frustrating, you call and all you get is answering machines."

- Woman, 46-59 years old

They respond frequently, but it's usually a nothing response. It's mainly an acknowledgement of my query but there is no action."

– Man, 60-79 years old, St. Joseph

My Minister for my area... he is very friendly. You can talk to him about anything. So, when we have like issues within the community, you can always come to him exact. For example, with the food that they were giving out- there's a family out by me who needs a lot of help. And I was able to contact him to get the truck to pass through because they didn't. And then apart from that, it will also be a religious leader like my pastor. Yea, I can raise concerns with him."

— Woman, 16-25 years old, St. Phillip

For those respondents who indicated that they are unable to ask questions of or raise concerns with local authorities, the main reasons cited were the inaccessibility of authorities, and their lack of knowledge as it relates to who to source the information from and the appropriate channel to use. Speaking on the inaccessibility of authorities, some of the survey and focus group respondents had the following to say:

You have no access to them; if you do access- it's like going through a maze to get the answer."

- Woman, 36-45 years old, St. Lucy

"There is no reliable outlet. There are no town hall meetings held or anything of the sort where you can raise issues. Local authorities are not accessible. For you to get attention or to get your point across now... you have to go on social media and post a video and hope it goes viral, only then you will get attention and action from local authorities."

- Woman, 26-35 years old, St. John

They only listen to certain people of a certain class, or if you work in a certain job for example, reporter or politician."

- Woman, 26-35 years old, St. Michael

They are not approachable. Able bodied persons tend to not respond the most favourable to disabled persons."

- Woman, 45-59 years old, Christ Church

- "
 - I think in terms of organizations like Barbados Water Authority, you can go on their sites and you can easily ask questions; ...Light and Power, those organizations- so you reach those agencies better probably more so than a direct person, like a politician or something like that."
 - Woman, FGD Respondent
- I have been trying to reach somebody from an insurance company, she gave me her Direct Line. Imagine she's given me her Direct Line and it's been months; I still have not been able to reach her. When I do call, I called the insurance company and I asked for her, and they said, 'can you hold a minute? I will transfer you to her desk'. No response. I've emailed and I still cannot get in touch with that person, and it is frustrating."
 - Woman, FGD Respondent

To navigate some of these access challenges, the focus group respondents reported using a number of workarounds, including: using the social media platforms of the local authorities, using their professional or personal network to gain access, and calling numerous numbers of the organization until a response is obtained, as highlighted in the following excerpts:

- If I want information from a business, I usually try to message the business on Facebook or WhatsApp first before picking up and dialing usually because 8 out of 10 chances, if I call on the phone either: 1. no one's going to answer, or 2. Never going to be able to reach the person that I need to talk to on the phone."
- Man, FGD Respondent
- I have found that when I need specific information like I needed information from NIS or from Tamis, what I have realized is trying to get them via the telephone does not work but they respond to messages on their social media."
- Woman, FGD Respondent

- When a number is 431-2007, I would try 2008, 2009, 2010, 2011 etc., which are not listed, and then someone might answer."
 - Woman, FGD Respondent

5.3.3 Lack of Access to Government Officials is sometimes an Impediment to Information Flow in Barbados

In accordance with the Key Informants, lack of access to information from government sources can sometimes be a significant bottleneck to information flow in Barbados as information is largely controlled by government entities, and very often, the information required can only be obtained from high-ranking government officials. One Key Informant explained the issue, saying:

"

Barbados is a very conservative society. And... a lot of the information is controlled by... governments in general. So, there are times when you can reach a bottleneck; as in you can try to access some information but if it doesn't come freely then you have to either find another way or you have to try to get around that or you have to sometimes put it on hold because there are some information you can only get-the only source can be your government."

- Woman, Media professional

With the onset of the pandemic, however, the Government of Barbados has been playing a greater role in disseminating information directly to the public and has been doing so via a number of sources (e.g., the Department of Public Affairs, BGIS, the Covid Communication Unit, the Prime Minister's Office, etc.). While their efforts to be more communicative have seen a proliferation of information being provided to the public directly by the government, it has also given the government more control and influence over information flow. As highlighted by one of the Key Informants in the excerpt below, this does not only undermine Barbadian's access to impartial information but also has the potential to undermine democracy.

- "
 - ...if information is just flowing from all of the PR firms, Government PR firms, Government entities, it means that our public is just hearing one set of information. In a democracy, you cannot have that. You have to be in a position as an independent media company operating in a democracy. You have to be able to hear the views of different people."
 - Woman, Media professional, 35 years' experience in the media industry

The Key Informants also acknowledged that access to government officials is especially more challenging for journalists from private media houses than it is for those from the publicly owned media houses.

5.3.4 Access to Credible Information from Local Authorities and the Media is a challenge for Persons Living with Disabilities

The survey and focus group respondents reported that there is a need for inclusive communication in Barbados. As per their feedback in the below excerpts, the current means of information sharing by local authorities and organizations are inhibiting the independence of persons living with disabilities in accessing the information they need. Specifically, as a result of their lack of consideration to the differently abled community in their website designs and the content of the information shared in mainstream media, the community is often left to source its news and information from social media. With the issue of misinformation and disinformation on these platforms [see Section 5.6 for more details], however, accessing credible information is therefore a challenge.

- - I access a lot of information by YouTube as well as the many persons within the community of persons with disabilities. A lot of stuff is shared via Facebook and WhatsApp messages and that kind of thing. But whether or not it is accurate, credible information, I can't vouch for all of the time, because like I said, most regional entities do not provide reasonably accessible information. And that also goes for websites; they are very poorly designed. I'm sorry, but I find regionally, we put more effort in making things look pretty than we do in ensuring that it is accessible by all persons."
 - Woman, NGO Representative

- Less of accessibility ... due to visual impairment; many websites [are] not accessible for screen readers that I would need to use."
- Woman, 26-35 years old, St. Thomas
- "

You don't get a lot of information on television about persons with disabilities."

- Woman, 60-79, St. Peter

5.3.5 Access to Locally Relevant Research and Data from Local Authorities a Challenge for NGOs

Representatives from the NGOs in Barbados, who participated in the focus group discussions, expressed their frustration with accessing up-to-date, locally relevant research and data in Barbados. Consistent with their feedback, gaining access to the data and research needed to inform their operations is extremely challenging. Explaining the issue, one respondent shared the following experience:

"

I went to... the Ministry of Education, almost 10 years ago now, looking for information about how many children on the island there were who were on the autistic spectrum. And you know what, it took me about six months to get a two-page ledger out. And most of the information on the two-page ledger was out of date; it was basically useless."

- Man, NGO Representative



In addition to having difficulty obtaining information from local authorities, the NGO representatives admitted that the lack of information sharing amongst local NGOs is also problematic:

...we do not share enough among ourselves. A lot of us operate in too many different silos. And it's only when crises occur, that we tend to realize that there are linkages and that they are all of these things...So sharing information, I find that we have a culture in this region, where it seems as though we feel as if we share information, we're losing power over things. So, we hang on to bits and pieces. Funding opportunities come up, and we don't share that information. Because we think that you know, if we share it, somebody else might grab it, and we don't get in on it." – Woman, NGO Representative

5.3.6 Dissemination of Disaster and Crisis related Information is Sometimes Delayed

The consensus among the respondents was that Barbadians generally receive timely information relating to impending disasters and crises. Although one Key Informant acknowledged that sometimes, the government is slow in sharing such information, which in turn delays dissemination and opens the door to the circulation of fake information, the focus group respondents and Key Informants largely agreed that in general, Barbadians have timely access to the information that they need to make effective decisions before, during, and after a crisis or disaster. The same sentiment was expressed by 89.8% of the post-Hurricane Elsa survey respondents, who reported that they received information from their main sources in time to effectively prepare for the passing of the weather system. Consistent with one respondent, this access has notably improved over the last year:

It has improved over the last year, I think since the change in- I think it's the way how the government now shares information and I think it's the covid pandemic that forced them to find new ways to share information faster with the public."

– Woman, FGD Respondent

Specifically, as it relates to preparing for the Covid-19 pandemic, two Key Informants stated that:

Barbados built Harrison point - as quickly as we had Covid, Harrison point was established. So, we were able to, because of the information we would have received, I believe that we, we were well prepared. Well, we were as prepared as we can be for Covid because nobody could have foreseen Covid. But then when it did arrive, things were put in place to safeguard as many lives as possible. So, as it relates to information and Covid, I think that Barbados, we definitely got the information that that was necessary."

- Woman, Media Professional, 5 years' experience in the media industry

...about the sourcing of the covid vaccines, we had covid vaccines ahead of a number of people throughout the region; we in fact had to share ours. So, I would like to say that- and again, that's only based on where I sit- that we do have the access to that type of information that would put us a little bit ahead of the game dealing with some of these crisis situations."

- Woman, Media Professional, 35 years' experience in the media industry

With the recent La Soufriere volcanic eruption, however, some of the focus group respondents acknowledged that although they would have received early notification of the impending volcanic eruption in St. Vincent, they did not expect its impact on Barbados to be so severe. Consequently, some of them did not sufficiently prepare as it related to safeguarding themselves, their friends/family, and their assets/property. Their lack of preparation was also linked to the fact that the information relating to how to safeguard themselves during the ashfall was largely disseminated to the public *during* the event as opposed to *before* its occurrence. As such, two focus group respondents noted the following:

Yeah, I just think there should have been specific instructions given right away in terms of instructions, read on the news, that you had to tape up your windows because there's nothing [that] keeps it out..."

- Man, NGO representative

I thought that a better job could have been to let us prepare ourselves for it, and it came after. I don't think that when they said "oh, maybe the possibility of ashfall" that people really understood what was going on. They could have done a better job at that. They do better with hurricanes, so they could have done better with that."

– Woman, FGD Respondent

Nevertheless, many of the respondents believed that not much could have been done to better prepare Barbadians for the event as the impact that the eruption had on Barbados could not have been anticipated. In making this argument, one focus group respondent and one key informant said:

...I can't blame anyone for this because it was something unexpected. We didn't think that we were gonna get that amount of ash for the amount of days that we had it."

- Woman, FGD Respondent

I feel we should have had more warning, but really did anybody expect the plumes to shoot so high in the air? Not even the seismologist would have or did predict that as well."

- Woman, Media Professional, 35 years' experience in the media industry

A similar sentiment was voiced again after a number of parishes were significantly impacted by a 'freak' weather event, on June 16th, 2021. Given that such systems are common and tend to be short-lived with little to no effect, the MET office was delayed in warning Barbadians about the impending system, and as a result many Barbadians were caught off-guard by its effects in the middle of the night. The reason given for the delayed warning was that it was a freak incident that could not have been predicted. Nonetheless, the event resulted in uprooted trees, approximately 165 damaged homes, electricity and telecommunication outages, road blockages, and a number of traumatized Barbadians.

5.3.7 Crisis and Disaster Communications are Heavily Reliant on Electricity and the Internet

As indicated in *Section 2.2*, prior to the occurrence of Hurricane Elsa, Barbadians have not been affected by a major disaster event since 1955. Consequently, the flow of information during such times has not been significantly tested. Nevertheless, it has been observed that local authorities rely heavily on information channels that require electricity and internet to communicate with the public during times of crises and disasters. When asked about how the media operates when these services are interrupted, all the Key Informants indicated that their respective establishments possess generators. However, when probed about how they would disseminate information to the public if said public has no access to electricity and internet, they all indicated that they have never given that much thought, and they are unaware of the existence of an organizational or national communication plan that caters to such an occurrence. This lack of consideration to the possibility of losing access to electricity and internet/data was also conveyed by a few of the focus group participants. In response to the probe about how they will access the information they need if their internet/data service was disrupted, two of the respondents had the following to say:

Luckily for me, I'm not challenged yet, where all are- all of the above are down at the same time. But if social media is down and I need news or if there is no information on social media, I pick up the phone and call somebody. Somebody somewhere got to know something."

- Man, FGD Respondent

I guess if there's no electricity, and internet connectivity, we would have to literally go back to basics. And back to basics, meaning just driving around and informing people [so, by word-of-mouth]."

- Woman, Media professional, 19 years' experience in the media industry

Efforts to gain input on this issue from the Department of Emergency Management proved futile. However, in a press conference hosted by local authorities on the day prior to the passing of Hurricane Elsa, the Prime Minister noted that they were in possession of a few satellite phones to communicate with the outside world if telecommunication services were disrupted.

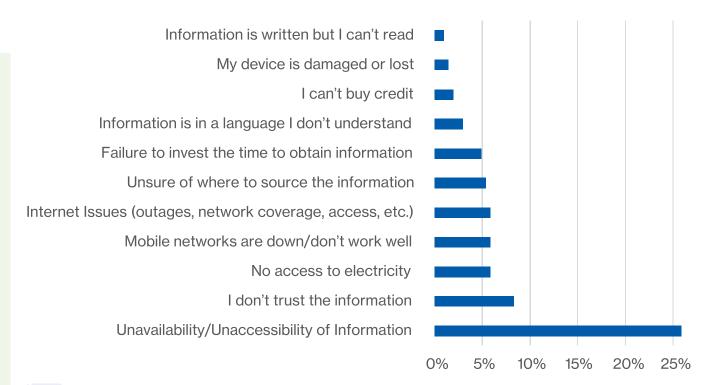
5.3.8 Barriers to Information Access

To identify the barriers to information access in Barbados, respondents were asked what prevents them from obtaining the information they need. While some of the survey and focus group respondents reported that nothing prevents them from accessing the information they need and were of the opinion that 'once you have a phone or the internet and a device, you can get the information you need once it is there', as highlighted in Figure 5.11, some survey respondents identified numerous factors that prevent them from accessing the information that they need, of which 'unavailability/inaccessibility of information' was the most frequent cause. Speaking on the unavailability of information, one survey respondent complained about the difficulty experienced in sourcing information on the Covid-19 vaccine, stating:

The way that they explain it on social media, it's not that I don't understand... From one media they will say the vaccine – you should take the vaccine – and you don't know if the vaccine would actually affect you...the information has me a bit puzzled. If you get a shot for measles or hepatitis, it's supposed to stop the disease, but not with this vaccine ...it's not that I'm against the vaccine, I just need more precise information."

- Woman, 36-45 years old, St. Peter

Figure 5.11: Barriers to information access in Barbados



In addition to the above, the use of jargons by information sources was identified as another barrier. The respondents noted that sometimes the information is presented with too many jargons and is therefore difficult for a layperson to understand. This issue was particularly linked to the information disseminated to the public on Covid-19 and the legal jargons used in the local Covid-19 protocols. In highlighting the issue, one focus group respondent noted the following:

I find even with the press conferences, there's lots of information that's shared. Actually, sometimes I feel like it's information overload; it's so much information. But I think the layman does not understand fully, especially the legal jargon...But I feel like it's also necessary to have somebody to translate information for persons who just do not understand these legal concepts or other concepts that they're discussing." – Woman, FGD Respondent

Other notable barriers to information access in Barbados included: lack of access to devices (e.g., radio, laptop, tablet, and television), service outages, information access fees, the circulation of fake news, as well as the bureaucratic structures and processes of the Barbados Government.

5.4 Use of Information

In today's digital environment, when people receive information, they do not only process and use the information at a personal level; they sometimes share it with their friends and family as well as to millions of other people using the numerous online platforms available to them. This section outlines how Barbadians go about processing the information that they receive, and the various ways in which they use it upon receipt.

5.4.1 Barbadians Do Not Always Verify Information Prior to Sharing

With the ease at which information can be shared to a widespread audience using the numerous social media platforms available, it was no surprise that when it comes to the sharing of information, Barbadians expressed a preference for using the social media platforms: WhatsApp and Facebook. Taking into consideration disinformation is mostly encountered on social media [see more on this in Section 5.6.2], which is largely shared by friends and families, the respondents were asked whether they tend to verify accuracy prior to sharing information on their personal social media platforms. Analysis of the feedback showed that sharing practices varied from person to person, according to the source and type of information, and was sometimes dependent on the individual's mood. Accordingly, while some of the focus group respondents indicated that on the rare occasions that they do share, they only do so if they can corroborate the information

with another news source, those who generally share whatever information they receive admitted to a number of different sharing habits. Whereas some of the respondents reported that they generally do in-depth reading on an issue prior to sharing, some noted that their tendency to verify accuracy depended on who is going to be the recipient. Furthermore, some acknowledged that they verify their information by sharing with close friend/family circles, and some admitted that they do not verify accuracy of information prior to sharing. The following excerpts highlight the different sharing habits of the focus group respondents.

...with the news, I tend to only share certain articles if I can find it on more than one media outlet. So, if the Nation post something but Barbados Today or Loop News doesn't post it, I usually hold out from sharing it until someone else could verify that information."

- Man, FGD Respondent

I would read multiple articles on the same topic. I also consider like, for example, if the first place that I see a particular article I don't trust the source, I will then do an active search for more information."

- Woman, FGD Respondent

Actually, I'm very careful with who I share with. So, if it's my friends, my very close friend or family, I'll share it with them. But, if I'm going to share anything to other persons, I make sure that it is valid before I send it; so probably it may take me longer to actually send out the information, especially if it's something about someone because I don't want to share anything that would discredit anyone and then have to go back and say, 'I'm sorry, this wasn't true'. So, with my friends I'm fast to share because [if it is] not true, they would tell me, 'well, I don't think this is correct; I saw this on another source, and it was incorrect'".

- Woman, FGD Respondent

Yes. I share but ...I tend to have a select few people who I would probably discuss it with and say, 'have you all seen it on any other page or have you seen it anywhere else?', before I decide well, let me share it to- cause we all know we are in group chats and stuff. Sometimes, you may get something in a group chat as well, people would start to share it out, and then someone will come back and say, 'hey, this was not true' and I would be like, 'oh well, you know, we thought it was', or whatever. But usually, if you are gonna share something like... like a death or anything like that, usually no, I would have to see maybe if I see it on- it might pop up on Instagram or the same Nation News [or] Barbados Today before you can actually say 'well yea, maybe there is some truth to that'. But other things generally depends on the mood at the time."

- Woman, FGD Respondent

Outside of social media, the focus group respondents indicated that Barbadians have a general tendency to share information in physical spaces such as: the bread shop, the village shop, home, work, rum shops, churches, "on the block", and anywhere else that Barbadians gather. As highlighted in the below excerpt, however, the credibility of the information shared in some of these spaces is questionable and therefore requires fact-checking.

...you gotta know, you know the personalities, so you know if you see one particular guy come with information or something, I have a habit of what I consider fact checking them. I would say, is that true? Where did this happen? How did it happen? Because you know Bajans; we could tell a story real good, with all the expression, all the facials, all the exaggeration."

- Man, FGD Respondent

5.5 Impact of Information on Barbadians

Information and knowledge are crucial to the development of society. Depending on the type of information provided to the public, it can either be an agent of positive or negative transformations. For instance, while it can be instrumental in fostering greater civic participation, it can also be used to perpetuate the governments' control and influence over its citizens. This section highlights the impact that the information accessed by Barbadians has on them generally and during times of crises or disasters.

5.5.1 Access to Information Impacts Civic Engagement and Behavior Change

With information being more readily accessible to the public, Barbadians are capitalizing on the opportunity to participate in public discourse and influence events that are happening in the country. This has been especially evident over the past few months, whereby Barbadians played an active role in impacting the government's decisions and actions. For example, in recent times, a citizen took it upon his/herself to document the inhumane manner in which a teenager was being treated at the Government Industrial School (an institution which serves as a reform center for the nation's delinquent boys and girls). This incident was shared with the media in video format, which was later disseminated to the public, causing outrage and a major public debate. The public discussion later resulted in the government establishing a new Board of Management that was tasked with reforming the way the institution operates.

In addition to impacting change, Barbadians also use the information they access to inform their behaviour. Unfortunately, they do so even in cases when they are disinformed, as noted in the following excerpt:

...when the ash was starting to fall and there were a message trending saying that Light and Power is going to turn off electricity, so charge your devices. I was like, 'where you get this information from?!' So, I find like some people were just quickly... going with the story; like, ok go and charge your device and stuff like that, like they didn't verify who actually sent that out."

- Man, FGD Respondent

5.5.2 Some Barbadians Remain Complacent about Disaster Preparation

When it comes to information relating to impending disasters and crises, both the Key Informants and focus group participants highlighted that despite sometimes receiving information in a timely manner, Barbadians are generally late in their response. Speaking on the issue, two respondents stated:

I think sometimes we are more doubtful, and we are lazy when it comes to, well, I don't want to speak for everyone, but because we really haven't experienced mother nature at her best, we are a little delayed in our response and since we don't have much experience with dealing with other things that other persons in the Caribbean would of experienced, obviously we are not as prepared as we should be."

– Woman, FGD Respondent

Barbadians are complacent and are last minute people."

- Woman, Media professional, 19 years' experience in the media industry

This observation was later validated by a post-Hurricane Elsa survey respondent, who noted the following despite local authorities' alerting the public days earlier about the incoming weather system.

Heard about 3pm that places were closing earlier due to its likely passing. So was not enough time for me to gather essential items before stores closed."

– Woman, 46-59 years old, St. James

5.5.3 Some Barbadians are III-prepared for Natural Disasters

Although the majority (75%) of the survey respondents indicated that their current knowledge of disaster and emergency preparedness is sufficient to ensure their safety and the safety of their loved ones, 25% of them indicated otherwise, with one respondent indicating that she "doesn't know a lot about shelters and protocols", another stating that there is a "lack of information regarding the resources to help persons", and two others indicating that it depends on the disaster, with one of them stating: "let's say it was an earthquake, you would know to cover your head and what's not; but let's say it was a radioactive situation, I probably might not know much of what to do", and the other saying that if it is a disaster like a tsunami, "we ain't ready".

In agreement with the latter sentiment that Barbadians are ill-prepared for some natural disasters, some of the focus group respondents noted that Barbadians are not as prepared as they think or would like, citing their inexperience with major disasters as the main cause. Speaking on the issue, two of the focus group respondents stated the following:

They are not prepared. Sorry but this is coming from a St. Lucian living here. I've gone through a hurricane and a major tropical storm, and I can tell you from my experience when the tropical storm hit Barbados and just the types of complaints that were coming. I realized OK, you guys have no idea what it means to be in crisis. You do not understand that your electricity may be off for weeks or months, the water may be off for weeks or months..."

– Woman, FGD Respondent

Barbadians' ill-preparedness for natural disasters was evident after the passing of the weather system on June 16, 2021 and Hurricane Elsa on July 2, 2021. With the two events resulting in significant damages to, and in some cases complete destruction of, approximately 2,350 homes, the need for a building code and more resilient housing and building infrastructures is just being recognized by local authorities.²³ Moreover, given that the majority of the houses which sustained damages from these events were uninsured, the absence of insurance coverage among property owners in Barbados was highlighted. It was estimated that 70% of homeowners in Barbados who are no longer repaying a mortgage do not have property insurance.²⁴

Subsequent findings from the post-Hurricane Elsa survey also support the assertion that Barbadians are not sufficiently prepared for natural disasters. In reviewing their recent experience with Hurricane Elsa, 17.3% of the post-Hurricane Elsa survey respondents reported that they wished they knew or had more information on several things prior to the passing of Elsa, inclusive of:

before and after its passing, the majority of the survey respondents reported that they were either "slightly prepared" or "moderately prepared". A similar trend was noted in their response to the query about how prepared they think they are to face future similar events having experienced Hurricane Elsa [see *Figure 5.12*]. As illustrated in *Figure 5.13*, to prepare for Hurricane Elsa, the survey respondents focused more on their physiological (e.g., securing food and water) and communication needs (e.g., ensuring electronics are charged), and less on their safety and security needs. Their lack of focus on safety and security may be a result of numerous factors, inclusive of some persons thinking it unlikely that the event would hit Barbados [see *Figure 5.14*], or some persons not expecting the hazards associated with it to be significantly disruptive or destructive [see *Figure 5.15*]. It is important to note that prior to the passing of Hurricane Elsa over Barbados, the nation expected the weather system to be a tropical storm; the system was upgraded to a hurricane *during* its passage over Barbados. Accordingly, a few respondents, as noted in the below excerpts, cited this occurrence as the reason for not being sufficiently prepared.

the possibility that Elsa could change from a storm to a hurricane; the likelihood that there would be water and power outages for an extensive period; the devastating power of hurricane force winds; and the need for alternative sources of energy (generator and solar). Moreover, when

asked to what extent they thought they were prepared for the impact of Hurricane Elsa, both

It became a hurricane right before it hit us, so I don't think anyone was fully prepared."

- Woman, 46-59 years old, St.George

The information [that it was a hurricane] was given during the hurricane and one would have been unable to do anything at that point."

- Woman, 36-45 years old, St. Peter

The strength of the storm was much stronger than the country was led to believe."

– Man, 60-79 years old, St. Michael

²³ King, K. (2021, July 3). Improving Barbados' housing infrastructure a priority. Loop News. https://barbados.loopnews.com/content/improving-barbados-housing-infrastructure-priority

²⁴ The Saturday Sun. (2021, June 26). Wake-up call on property insurance. The Nation Newspaper, 8.

Figure 5.12: Barbadians' perception of their level of preparedness for the impact of Hurricane Elsa, both before and after its passing, as well as for future similar events

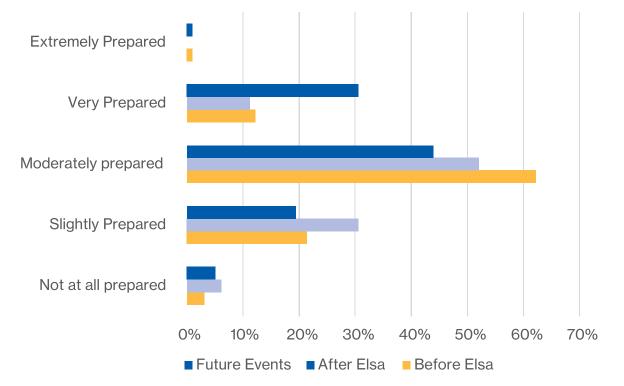
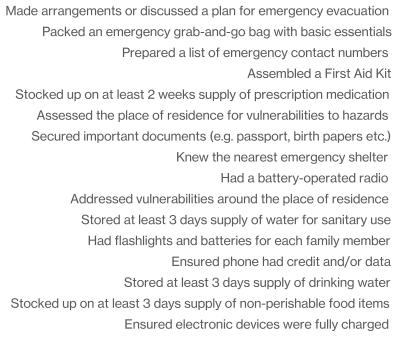


Figure 5.13: Actions taken by post-Hurricane Elsa survey respondents to prepare for its passing across Barbados



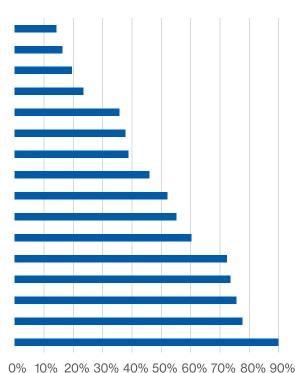


Figure 5.14: Survey respondents' rating of the extent to which they believed Hurricane Elsa would likely hit Barbados

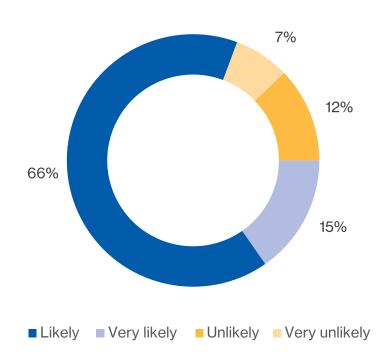
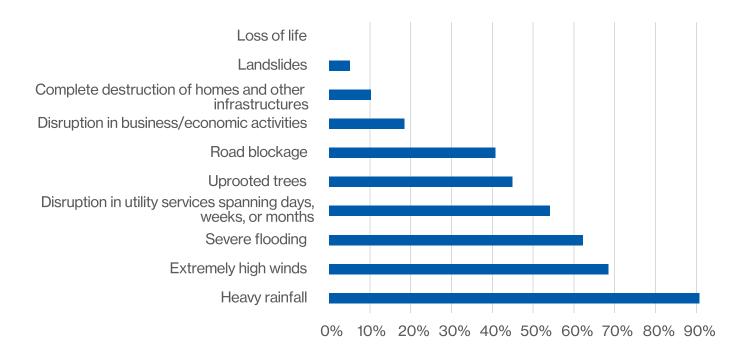


Figure 5.15: Percentage of survey respondents who anticipated Hurricane Elsa would be associated with the various hazards



Having experienced Hurricane Elsa, 39.8% of the survey respondents shared some key lessons learned, some of which are highlighted in the following excerpts (Note: See Table 7.3 in Appendix A for a summary of all post-Elsa survey findings). In addition to stressing the importance of anticipating and preparing for the worst, the respondents noted:

Learnt that considering how many days some people were left without water, I didn't have nearly enough stored should I have been in a similar position. Also, it just now occured to me that if the natural gas became disrupted, we didn't put an alternative in place."

- Woman, 46-59 years old, St. Michael

I really need to be more prepared. At the beginning of the season, make sure I have what I need. I need to get a hurricane checklist and secure the items. Also having an electrical stove and no electricity; I have to have a back up for this situation."

- Woman, 46-59 years old, St. James

I have to revisit my preparedness. My "preparedness" was just optics. I actually need to have a plan."

- Woman, 46-59 years old, St. Joseph

Do not overstock the freezer."

- Woman, 60-79 years old, St. Philip

You have to take every system very seriously because you don't know how the system will change as it approaches and it may be too late to make preparations for any upgrades. Also, need to plan for days and weeks of power and water outages in advance. We were lucky power and water was restored to certain areas where we could take a bath, catch water and charge devices but what if it was island-wide?"

– Woman, 36-45 years old, St. James

Will seek to invest in portable and rainwater storage and an independent power system. I also need to organise my emergency plan and first aid kit as well as prepare waterproof storage for important documents."

- Woman, 36-45 years old, St. Thomas



Accordingly, when preparing for future similar events, the post-Hurricane survey respondents indicated that they will be seeking to:

- Invest in water tanks and store more water
- Invest in alternative sources of energy (e.g. solar bulbs, solar energy storage, generators)
- Ensure roof and vulnerable areas around the house are secured prior to the passing of the event;
- Develop an actionable emergency plan
- Pack an emergency grab-and-go bag and prepare for the likelihood of being forced to leave their home
- Stock up more on non-perishable goods and less on the perishables
- Trim or remove trees
- Identify the state agencies that exist to aid affected persons post event
- Invest in window shutters
- · Store more gasoline for generators
- Insure home
- · Build more resilient homes
- Invest in waterproof storage for important documents
- Assemble a first aid kit, and
- · Save money for possible damages

5.6 Social Trust

Peoples' level of trust in the information that they access daily is dynamic. As a result of a number of factors, including the perceived impartiality, quality, and accuracy of information, their trust level sometimes decreases or increases. The following subsections highlight the extent to which Barbadians trust their main information sources, and the various factors that have impacted their trust over the years. The proliferation of misinformation and disinformation and its impact are also examined.

5.6.1 Barbadians' Trust in their Information Sources is on the Decline

Trust in information varies from person to person and from source to source. When asked to what extent they trust their key sources of information, the focus group respondents expressed both feelings of trust and mistrust. While some of them reported having complete trust in local traditional media, some indicated otherwise, stating that they are unable to ever trust just one source, and that their trust is dependent on whether they can corroborate the story with other trusted sources. This difference in trust inferences is highlighted in the following excerpts:

I would have to say that I trust legit media houses because I mean the whole thing is that they are supposed to do their research and report to us. So, I more or less trust the stories that I get from them... Because if it is something local, we depend on them to give us the truth. But when it comes to something international or something regional, I go to find where else can I read about this to kind of see if I can triangulate and say OK yeah OK yes, this is what is happening for truth."

— Woman, FGD Respondent

...if the Nation post something but Barbados Today or Loop News doesn't post it, I usually hold out from sharing it until someone else could verify that information. As Nation news, and the Advocate and Barbados Today, they've been known to get information wrong sometimes, so I wait to see if someone else has the same story."

– Man, FGD Respondent

I will take the story but if it is a true story, I am gonna find it in more than one source; so, I will cross reference my sources and verify. If I am not clear about something, in addition to what I would of read, I am likely to reach out to someone from one of the official agencies to ask a question to confirm that the information is what it is. So, I don't go by one source; ...I cross reference to make sure that it is valid."

- Woman, FGD Respondent

When asked if their trust in their main information sources changed over the years, quite a few of the focus group participants responded in the affirmative, with one of them stating that:

I think and I really don't want to blame him for it but definitely with the rise of Donald Trump and fake news, you've seen kind of an accelerated growth across all segments, especially with deep web stories. So, WhatsApp articles, newspaper articles, even falsifying official gazettes making their way around. So, within the last four to five years, you have definitely been seeing more of that going on. So I've become more skeptical of a lot of articles. But back in university or secondary school, you know whatever you saw online, you use to take for gospel."

I'm a lot more, I guess, aware that things could look official and not be. So yea, I'm a

- Woman, FGD Respondent

lot less trusting."

- Man, FGD Respondent

Another respondent indicated that her trust levels decreased as a result of the local authorities' dishonest reporting on the Covid-19 situation, particularly:

The covid numbers and the community spread. What was the word they were using to avoid the use of community spread? It was local transmission. That bothered me because I think a lot of persons became infected because they were trying to downplay it and persons- you know Bajans love to socialize. So, I was saddened when I recognized what they were doing, like misleading us and trying to make us think that everything was ok when it wasn't. And then after we had these major issues...That really changed my mind from watching the PMO updates."

— Woman, FGD Respondent

In addition to the above, the focus group respondents highlighted a number of other issues that negatively impacted their trust in their main information sources over the years, inclusive of: the media's tendency to prioritize being first over being accurate, the grammatical errors that often plague the information reported by the newspapers, the reporting bias of some information sources, and the scandalous nature of some of the news content. Nevertheless, they admitted to having more trust in such information sources because of the ease of access, as explained in the following excerpt:

Why I trust Barbados Today over Nation News is that Nation News' content is only part ways available online. So, what starts happening is that you would get a headline, get part of the story, and you never really get the full thing unless you subscribe, whereas with the Barbados Today, you can always depend on them to get the full story without having to go the extra mile in terms of looking for a newspaper to buy or going online to subscribe."

- Man, FGD Respondent

When it comes to trusting an information source, however, one should take into consideration more than just the issue of access. This viewpoint was highlighted by the Key Informants in their response to the inquisition about the key responsibilities of trusted media sources to the public. Consistent with their feedback, a trusted media source should always strive to: put out factual and unbiased information, obtain information from credible sources, be fair and balanced in their reporting, help create positive change in society, relay information as accurately as possible, maintain their journalistic integrity, and to provide information that is relevant to their people, whether or not it is difficult information to digest. In addition to these, one focus group respondent and one key informant highlighted that:

The media should not only be available to politicians and business people; it must be available to the ordinary man. There must be a place where people who- let's say for example those tourism workers who went home for months without severance-there must be a place where they can call and say, 'look, this is what I'm facing and nobody's listening to me. Can you help people to listen to me?' There must be a place where the average person can turn to, to get the information or the help that they need if the people in charge are not listening."

- Woman, Media professional

The media has a fundamental role in also ensuring that society, and government remains on the right track. While we provide information and that is our central role, we are also more or less like gatekeepers to ensure that at the end of the day, there's transparency and accountability."

- Woman, Media professional, 19 years' experience in the media industry



5.6.2 Misinformation and Disinformation: A Major Cause of Distrust among Barbadians

Like the rest of the world, Barbados' information ecosystem is significantly impacted by issues relating to misinformation²⁵ and disinformation²⁶. Given the increasing popularity of social media and other digital platforms among the public, misinformation and disinformation can be shared with unprecedented speed. Consequently, more and more individuals are receiving and being impacted by such types of information. When asked about their experience with misinformation and disinformation, many of the focus group respondents reported that they often encounter the issue in some form, primarily on the social media platforms: Facebook and WhatsApp, and less so in traditional media. According to them, they have been recipients of disinformation relating to both major and minor issues, including the Covid-19 pandemic, the La Soufriere volcanic eruption, death, disruption in electricity and water services, fires, accidents, storms, and hurricanes. The following are examples of some of the disinformation they have received and the manner in which they were affected:

I remember there was a point early in the pandemic, probably March or April last year, there were fake messages about the country being shut down immediately. And like everyone else, I rushed to the supermarket to get those last-minute items [and] rushed to the gas station. So yes, definitely those messages... tend to incite panic in the general public."

- Man, FGD Respondent

Yes, I have a whole list of them; messages about fires in Bridgetown... messages about hurricanes. People love to bring out the fake stories especially when there are systems in the Atlantic. Persons like to copy past images from other storms and some of them get so creative to change the dates on them to make them look legitimate for the time period that we are in. So, especially during the hurricane season, you tend to get all of those fake messages coming out. Messages about major collisions, highway being closed off due to a ten-car smash up— yeah, I get lots of that fake news coming out."

- Man, FGD Respondent

²⁵ Misinformation refers to false or misleading information that is disseminated without any intention to harm, mislead or deceive others (CivicSpace. tech, 2021). The sender of such information is unaware that the information is false.

²⁶ Disinformation refers to false or misleading information that is disseminated intentionally to harm, mislead or deceive others (CivicSpace.tech, 2021). The sender of such information is fully aware the information is false, yet knowingly shares it with the intention of deceiving others.

- Som
 - Some of these messages aren't just about major disasters. ...every couple weeks you will get a message talking about water authority is shutting off water, or that they are rationing water in certain areas. Or just two days ago with Light and Power, where Light and Power had to put out one statement and before the statement was fully circulated, someone had a different message coming out from Light and Power, which was... false. So not even with always the big stuff, but even little stuff get circulated frequently."
 - Man, FGD Respondent
- I got information about death. Persons having passed away... so there you are panicking and saying 'can you believe this?!' And then to find out that that's not true. So yeah, the fake information can cause anxiety."
 - Woman, FGD Respondent

While some of the focus group respondents reported that they are often able to identify malicious/inaccurate information, some reported otherwise and acknowledged that they do not always attempt to verify information. As a result, they have fallen victim to disinformation on numerous occasions. Giving an account of a time that this occurred, one focus group respondent noted:

- Just last week, I think, they were sending out this thing about the curfew, that the curfew hours- something about the curfew hours, and apparently it wasn't even Barbados. It was JIS, which was Jamaica. And I was believing; I was like wait, I never hear about these things. That had me real frantic because the hours [were] crazy. So yeah, but I didn't research to find out if that was true. I just assume it was until I
 - Woman, FGD Respondent

heard that it wasn't."

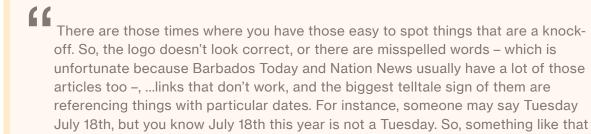
Another respondent reported that even when an effort is made to cross check and verify the information, it is still possible to fall victim to disinformation:

- ...it can be difficult because people are so creative where the page could look like it has come from GIS, or it has come from NEMO, or you know whoever. ...people are so creative with the way they create things now, so we really have to be on our
- Woman, FGD Respondent

toes."

Nevertheless, many of them reported that given their awareness of the proliferation of misinformation and disinformation, they often attempt to verify any information received. In doing so, they employ numerous strategies, which include: checking for grammatical errors, scrutinizing the logos used, verifying dates, fully reading the content of received messages, seeking confirmation directly from the purported source, fact-checking the information, and cross-checking information with other reputable and/or traditional news and information sources. Below are some accounts of the how the respondents have been able to identify disinformation in the past:

- ...they will embed past stories into a current story and really just increase the hype. For me, it had an effect on me where I became more vigilant about what I was looking at... I started now looking at the buildings, looking at the time frame, you know. So even in St. Vincent, there's been some pictures circulating about various volcanoes, and I'm looking, 'where is the ash?'. So, I start now to take information that I know is factual and apply it to what I am seeing visually as a part of my measurement or verification that the information is true."
- Woman, FGD Respondent
- ...sometimes people would post things that seem true, but because, well, I don't usually take one source of information. I would go to the website or wherever."
- Woman, FGD Respondent



will pop out immediately..."Man, FGD Respondent

For me, when it is a WhatsApp status, I think twice before I actually confirm 'ok, that may be true', because sometimes a lot of fake news get spread by the statuses via WhatsApp... and the social media. I ... tend to verify based on their news sources like Barbados Today, Nation News, [and] Loop news."

- Man, FGD Respondent

5.6.3 Effects of Misinformation and Disinformation on Journalism in Barbados

Similar to laypersons, the media has been negatively impacted by the issue of misinformation and disinformation. According to feedback provided by the Key Informants, the proliferation of misinformation and disinformation has made the job of journalists in Barbados much more difficult. Explaining its impact, one respondent stated:

It affects us because I find, especially during this COVID period, we are always doing stories in response to something. So, somebody would have shared something that may have not necessarily been true, or it may have had a bit of truth in it, but it's not fully truthful. And then we're always seeking clarity... We are working against social media, against fake news, against people just having way too much time on their hands and they are using official logos and sending out things that are false but they're making it look as if it's real. So that has been tedious."

- Woman, Media Professional, 5 years' experience in the media industry

Given the public's heavy reliance on local media for credible and trustworthy news and information, the media has a role to play in combatting the spread of misinformation and disinformation. As such, the media has thus far exerted much effort to do so using a number of strategies, including:

- · Looking for and using reliable sources;
- Verifying their story by ensuring that they obtain the information directly from the source/subject
 of the story, obtaining input from an authority on the subject matter, and securing documentation
 of the event;
- Having their legal team scrutinize the information;
- Not running a story if efforts to verify are proven futile; and by,
- · Carrying balanced stories where both viewpoints are included.

5.6.4 The Media's Fight Against Misinformation and Disinformation is Challenged by Social Media

Despite the media's efforts in combatting the spread of false information, as noted above by some of the focus group respondents, they have been responsible for the spread of misinformation in the past. Acknowledging this, the Key Informants noted that more can be done by the media to combat the spread of misinformation. As per their suggestions, this can be accomplished by:

- Always having a source attached to the information;
- Always ensuring that their publicized information is accurate;
- Discouraging people from spreading incorrect information;
- Apologizing for errors made in reporting;
- Diminishing the use of misleading and/or click-bait headlines;
- Raising awareness of the impact that spreading such information can cause among the public; and by,
- Prioritizing being factual over being first.

Speaking on the media's role in fighting the spread of misinformation and disinformation, two of the Key Informants noted the following:

I think that it is better to be factual than first, but because of how quickly the information moves, sometimes media houses take risk with information, and then- it concerns us because you are ruining your credible name. And as a media house, you want to remain a trusted entity, where credible information can always be found... You have to be way more careful with the information that you put out there, and then you have to be careful with the narrative that you put out, in the language you use, in the headlines you use, that you're not fear mongering in any way, because of the times that we are already in. So those are the things that media houses especially have to look out for and guard against."

- Woman, Media Professional, 5 years' experience in the media industry

By making sure that we are credible, we have the right information. I understand for social media ... we need to be fast, but we also more importantly need to be correct. We also need to make sure that we have all of our facts together and that is the way that you have to fight misinformation and disinformation. The misinformation out there for sure because you want that when people see it on... which ever platform you're on- print or social media, that you feel comfortable and confident enough to know that this is accurate... And also owning up to your mistakes; that is also how you fight wrong information. If we've made a mistake, own up to it; apologize."

— Woman, Media Professional, 35 years' experience in the media industry

Conversely, one Key Informant expressed doubts in the media's ability to fight the spread of disinformation on social networks, stating that:

I almost feel sometimes as if the social networks are overtaking us. And that is because they are quicker than us to get mis and disinformation out there. By the time that gets there, it's difficult to pull it back. Nobody then wants to hear what the truth is. So as hard as you can try to put systems in place to make sure you're out there putting out accurate information, it only takes one person to pick up something that is not true and send it out to a couple of people and they send it and they send it, and it spreads like wildfire. So, I don't know how much the traditional media can do...other than saying that this is not true. But after it has already spread far and wide, is anybody listening to you to actually hear it is not true?"

- Woman, Media Professional, 19 years' experience in the media industry

Their ability to fight the spread of such types of information is also diminished by the lack of systems in place to actively monitor rumors and/or disinformation affecting they have been circulated in the public, as noted in the following excerpt:

What usually would happen in a lot of cases, the public will send to us to ask us if we can verify this. So, a lot of times, people will send us- 'is this WhatsApp true?' - send us an email, or people will call. So, the phone will ring non-stop, 'is this true that the hospital has 20 cases of Covid?' Or people will send you stuff, and they will say, 'can you guys check this out? We want to know what's going on here'. So, a lot of the times, you get a lot of feedback from the public asking you if this is true or giving you a heads up on what's happening or supposedly happening somewhere." – Woman, Media professional

5.7 Influencers

In general, the information providers that populate an information ecosystem have the power to impact the way people think, act, and feel. Due to factors such as trust, accessibility and politics, some providers possess more power than others in influencing people. This section identifies the most influential provider(s) in Barbados.

5.7.1 Local Media: The most Influential Information Provider in Barbados

Although information is largely controlled by the Barbados Government, feedback from the survey and focus group respondents, as well as the Key Informants, suggests that the local media is the most influential news and information source in Barbados. Accordingly, when accessing news and information using the television, especially that related to Covid-19 and disaster/emergency related information, Barbadians most often view CBC TV 8. When using the printed newspaper, they most often read The Nation Newspaper, when using the online newspapers, they most often turn to Barbados Today and The Nation Newspaper, and when using the radio, they most often listen to VOB 92.9 FM. This observation is reflected in the social media followings of these sources (see *Table 5.2*), except in the case of the radio stations. The reason for this is likely due to the fact that while VOB 92.9 FM is popular among Barbadians for its programs and discussions on local and current events, the other stations are more popular among Barbadians for their entertainment content, particularly as it relates to music.

Table 5.2: Social media presence of the most popular news and information sources in Barbados

	Facebook		Twitter	Instagram	YouTube
As of June 7, 2021	Followers	Likes	Followers	Followers	Subscribers
		Newsp	apers		
The Nation Newspaper	210,402	192,870	22,200	121,000	Not stated
The Barbados Advocate	2,216	1,903	-	4,190	-
Barbados Today	200,978	189,508	22,900	130,000	Not stated
Television					
Caribbean Broadcasting Corporation (CBC)	51,213	23,216	7,472	8,953	10,800

	Facebo	ook	Twitter	Instagram	YouTube
As of June 7, 2021	Followers	Likes	Followers	Followers	Subscribers
Loop News Barbados	36,714	33,895	5,619	51,400	-
Barbados Government Information Service (BGIS)	58,309	38,281	4,779	48,100	4,190
		Radio S	tations		
CITA Radio 90.1 FM	5,975	5,755	809	2,080	66
BBS 90.7	-	-	-	-	-
VOB 92.9 FM	19,247	15,916	1,112	5,290	44
CBC 94.7 FM	5,987	4,538	-	1,020	-
HOTT 95.3 FM	26,132	24,575	4,429	44,500	201
Mix 96.9 FM	-	-	964	189	-
Life 97.5 FM	5,465	5,028	284	1,977	-
98.1 The One	42,198	38,788	7,731	20,400	-
Capital Media HD 99.3	18,930	13,985	151	7,648	1,060
Q 100.7 FM	56,603	45,247	-	-	-
SLAM 101.1 FM	42,466	38,982	17,000	15,600	3,100
Faith 102.1 FM	_	-	_	-	-
Y 103.3 FM	8,730	8,559	131	1,483	-
The Beat 104.1 FM	10,215	9,999	52	3,063	4

CONCLUSION AND RECOMMENDATIONS



Since the onset of the Covid-19 pandemic in 2019, Barbados has been unexpectedly impacted by a few other disasters, namely the La Soufriere volcanic eruption which occurred in April 2021 and covered the nation in ash plumes for several days, as well as the 'freak' weather system which affected the island in June 2021, and Hurricane Elsa, which ravaged the country in July 2021, both of which produced heavy downpours and strong winds that resulted in uprooted trees, road blockages, electricity and telecommunications outages, and extensively damaged homes. Although history indicates that due to its geographical location, Barbados is not usually in the path of hurricanes and has therefore not been hit by a strong hurricane system since 1955,²⁷ these recent activities highlight the need for more attention to be paid to building resilience against crises and disasters. One such means via which the country can enhance its resilience is by strengthening its information ecosystem. With a healthy information ecosystem, it is anticipated that all or most Barbadians will have the ability to access the information they need to understand and effectively respond to events that affect their lives. Thus, with respect to crises and disasters, everyone will have access to the information they need to facilitate their safety and that of their family and friends.

Accordingly, this assessment was conducted to examine the health of Barbados' information ecosystem. In particular, the investigation sought to: 1. determine the information needs of individuals and communities across Barbados and the extent to which those needs are met, 2. identify what infrastructures are in place to support the production and flow of information, 3. determine the means via which Barbadians generally access information, 4. evaluate the extent to which individuals and communities have access to key information channels, 5. identify the sources of information that are most influential and trusted in Barbados, 6. ascertain how information is processed and used among Barbadians, and to 7. examine the impact that the types of information disseminated to the public has on the lives of individuals and communities.

In carrying out the investigation, a mixed methods approach was adopted. Altogether, four focus group sessions comprising a total of twenty-three (23) participants of diverse professions were conducted; five media professionals who work at some of the most influential media outlets in Barbados were interviewed; a survey instrument, comprising of approximately eighty (80) questions, was used to collect data from a total of 205 individuals who reside in various parishes across the island (e.g., St. Lucy, St. Michael, St. Andres, and St. Joseph); and desk research was conducted to garner information on the media landscape of Barbados [see Section 3 for further details]. Analysis of the information obtained via these methods led to several discoveries, the most significant of which were that:

- 1. Although Barbadians reported having timely access to the information that they need to make informed decisions, especially as it relates to disaster preparation and response, accounts of their experiences with recent disaster events indicate otherwise.
- 2. Barbadians are not sufficiently prepared for natural disasters.
- 3. Some Barbadians continue to be delayed in their response to emergency warnings. Their tendency to procrastinate on preparing for emergencies and disasters is attributed to the fact that unlike other Caribbean territories, Barbados has not been significantly impacted by a disaster event for over sixty (60) years.
- 4. As the telecommunication penetration continues to rise in the island, and the Barbados Government continues to be increasingly communicative, the past few years has seen the emergence of a healthier information ecosystem in Barbados, which in turn has made it easier for Barbadians to access the information that they need to effectively participate in society. This progress is however being undermined by the presence of several undesirable properties [see Section 5 for additional details], including:
 - Citizens' and media professionals' lack of access to information from local authorities caused by inaccessibility of authorities, unavailability of information, and the bureaucratic structures and processes of the Barbados Government;
 - Some citizens' lack of access to the key information channels;
 - The disabled community's inability to access information from credible news and information sources;
 - Government's increasing control over information flow;
 - Delays in dissemination of crisis and disaster communication to the media by the government;
 - The use of jargons in crisis and disaster communications;
 - The proliferation of fake news and propaganda shared on social media and other online platforms;

²⁷ See footnote 24 for reference.

- The inability of some Barbadians to identify malicious/inaccurate information;
- The deterioration of trust among Barbadians in their main information sources.

To continue down the path of strengthening the information ecosystem in Barbados, and in turn improve the nation's resilience against the impacts of future crises and disasters, it is recommended that a concerted effort be made to address the above shortcomings. Accordingly, it is proposed that the key stakeholders, particularly: the local authorities, media, and the citizens, partake in the following course of actions.

6.1 Recommendations for Improving Access to Information

As discussed in Section 5.3, access to information is sometimes challenging for both laypersons and media professionals in Barbados. The reasons behind this challenge included but are not limited to: inaccessible local authorities, the bureaucratic structures and processes of the Barbados Government, unavailability or inaccessibility of up-to-date, locally relevant research and data, and the general lack of inclusive communication. To improve the nation's access to credible information, steps should be taken to:



Improve access to information for persons living with disabilities

Barbadians with differing abilities are currently facing challenges in accessing credible information from local authorities and the media. To facilitate their right to information and the development of a more inclusive society, it is recommended that local authorities and the media make an effort to: enhance their awareness, as well as that of that public, of the challenges faced by this community when trying to access relevant information; promote equal access to information; and adopt communication strategies that are instrumental in facilitating greater information accessibility for persons living with disabilities.



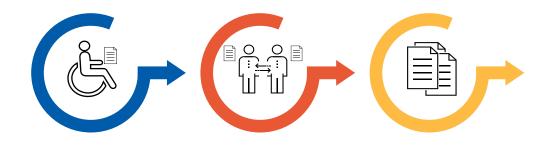
Provide all media outlets, both public and private, with equal opportunities to access information from the government

Given that the effectiveness of mass media in disseminating news and information differs as a result of varying preferences among Barbadians regarding the channels from which they most often obtain information and sources who are more trusted [see Section 5.1 for more information], it is critical that government officials enable timely access to information for all media outlets, and not just those who report pro-government content. Hence, the Barbados government should make a special effort to honour all requests for information equally and provide all media outlets with equal opportunities to access information that is relevant to the public. In the long term, a Freedom of Information Act should be developed to regulate this process.



Improve access to up-to-date, locally relevant research and data

Individuals and organizations often encounter challenges in accessing information and data collected and controlled by the Barbados government. According to feedback, this is sometimes due to the bureaucratic processes of the government, delayed responses by government officials, and the unavailability of current data. Given that the ability to access and analyse data produced and held by the government can be of much value to businesses, citizens, the wider society, it is recommended that more be done by local authorities to improve the public's access to such data. Particularly, it is proposed that the government seek to establish a national forum that will serve to facilitate the public's access to and use of data sources that are generated by the government.



6.2 Recommendations for Improving Access to Information During Disasters

As discussed in Section 5.6, misinformation and disinformation is significantly impacting the extent to which Barbadians trust the information that they access. As per their feedback, over the past few years their trust in their information sources has deteriorated because of the proliferation of disinformation on social media and the decline in the quality of journalism. Therefore, to improve the credibility of the information accessed by the public and thereby strengthen the information ecosystem, the media, lay persons and the local authorities all have a role to play. The following are thereby proposed:



Barbadians should make it their responsibility to scrutinize the credibility of the information disseminated to them

With social media making it possible for people to spread misinformation and disinformation quickly and easily to a global audience, and the increasingly negative impact that such information tends to have on individuals, civil society, and democracy, there is a growing need for today's information consumers to evaluate information credibility. By verifying accuracy of information before sharing with friends and families, Barbadians can be instrumental in decreasing the spread of false or misleading information across the nation, and thereby increase their access to more trustworthy information. Please see Appendix B for some tips on how to assess information credibility and minimize the spread of misinformation and disinformation.



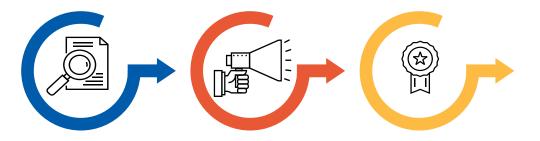
Local authorities and media outlets should host public awareness campaigns to enlighten Barbadians on the issue of misinformation and disinformation and how to go about discerning the difference between credible and false or misleading information

While some Barbadians are acutely aware that the information which they consume may be inaccurate or intentionally misleading, and as a result have adopted strategies to accommodate for such, some of them do not even consider the possibility that the information may be false [see Section 5.6 for more details], and thus are sometimes guilty of unintentionally facilitating the spread of misinformation and disinformation, as is evidenced by the rapid rate at which such information is spread across the nation. Accordingly, it is proposed that both the media and local authorities join forces to sensitize the public on the issue, encourage them to be more attentive to information accuracy, and to educate them on how to be more mindful information consumers to help with minimizing its spread.



Media professionals in Barbados should commit to strengthening the quality of their journalism

Although the issue of misinformation is less of problem in mainstream media than it is on social media, it is still problematic for the nation. As per feedback from the focus group respondents, the few times that they have encountered inaccurate information in mainstream has been sufficient for inciting distrust in the source [see Section 5.6 for more details]. Given that Barbadians rely heavily on local media for their information, and the importance of having access to trustworthy media sources, it is thereby essential that media professionals prioritize providing the public with accurate information to avoid inciting further distrust. In achieving this endeavor, it is recommended that journalists strive to: abide by standards and ethics of the profession, refrain from publishing unverified information, photos and videos, minimize the publication of stories with sensational headlines, maintain fairness in their reporting, and to always get it right in the first instance rather than rely on post-publication corrections. It is also recommended that media professionals obtain training in fact-checking, combatting misinformation and disinformation, and in evaluating the credibility of visual content and information sources to aid in improving the nation's access to trustworthy news and information.²⁸



²⁸ Ireton, C., & Posetti, J. (Eds.). (2018). Journalism, 'fake news' & disinformation. UNESCO.

6.3 Recommendations for Improving Trust in Information

As highlighted in *Section 5.5.3*, Barbadians are not sufficiently prepared for natural disasters. In addition to being heavily reliant on electricity and the internet for communicating during times of crises and disasters, Barbados is in need of a building code, more resilient housing and building infrastructures, and greater uptake of insurance among property owners. Moreover, some Barbadians continue to be complacent about disaster preparation. While it is possible that this is the case for some because of their unfavorable economic circumstances, it was highlighted that some of them continue to procrastinate because they do not believe that the threat will occur or that it would cause much of any damage, as has been the case over the past six decades. Additionally, some admitted to not having sufficient knowledge of disaster and emergency preparedness. Given recent local activities and the increasing rate at which the world is being affected by disasters and emergencies, however, it is imperative that Barbadians become more alert and better prepared. To achieve this, it is recommended that the government of Barbados:



Develop a national crisis and emergency communication plan that takes into consideration island wide disruption to electricity and internet services

During times of disasters, communication flow is often the first to be affected due to disruptions in utility services (electricity and internet) and damages to communication infrastructures. Given that information access is crucial in saving lives, as well as effective response to and management of disasters, ensuring consistent and uninterrupted communications during these times is vital. Hence, the government should ensure that they have an emergency communication plan in place that takes into account the possibility of an island wide disruption to the nation's communication infrastructure and energy source. Moreover, with radio proving to be the most affordable and resilient emergency communication channel, it is proposed that the government invest in more radio systems, particularly those that have a track record for facilitating information sharing during such times (e.g., amateur radio). In addition to investing in such systems, the government should ensure that at least two persons from each community and disaster response agency across Barbados are equipped with and trained to use such systems.



Make nation-wide awareness and education programs about disaster preparedness a national priority

As revealed in Section 5.5.3, some Barbadians do not have sufficient knowledge of how to effectively prepare for a disaster. As such, much effort should be invested in educating the public, inclusive of: schools, communities, churches, businesses, medical and vulnerable groups, on the different aspects of disaster preparedness (e.g. caring for children, protecting and insuring your home or business, planning for evacuation, emergency sheltering, etc.) for the different types of disasters (e.g. Floods, hurricanes, earthquakes, tsunamis, extreme heat, droughts, landslides, fire, etc).



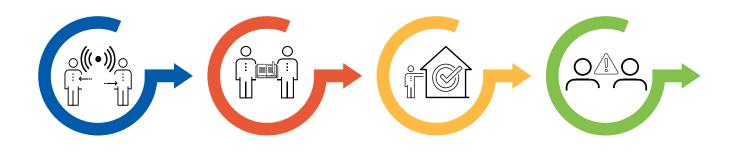
Promote and support more sustainable practices among Barbadians

Recent weather events exposed a number of national issues, particularly the need to build more climate resilient structures and shift to alternative sources of energy. To enhance resilience and minimize damages and losses from future disaster events, it is thereby imperative that the government develop and enforce more resilient building standards, as well as support and encourage Barbadians in adopting alternative sources of energy.



Commit to reducing complacency about disaster preparation among Barbadians

During times of crises and emergencies, local authorities can seek to reduce complacency among Barbadians by ensuring all communications are tailored in such a way that convinces the public that they are in immediate, personal danger and therefore need to take action. For example, at the onset of a storm or hurricane, the focus of the messaging should be on articulating the path, timing and strength of the disaster event, as well as information on shelters, emergency foods and water supply, safeguarding home and self, evacuation routes, and likely impact of the event, etc. Additionally, they should ensure that they provide accurate and timely information on emerging disasters using communication styles that are tailored to special populations (e.g., elders, children, and persons with disabilities etc.), communication channels that are preferred and/or accessible by all, and languages that are comprehensible by the average human being.



O7 APPENDIX A



Table 7.1: Breakdown of the demographics for the survey participants from Barbados

	Category	Number of Respondents	Percentage of Respondents
Gender	Women	138	67.48%
	Men	67	32.5%
Age	16-25	41	20.10%
	26-35	56	27.45%
	36-45	29	14.22%
	46-59	36	17.65%
	60-79	37	18.14%
	≥80	5	2.45%
Highest Level of Education	Completed College/ University	88	42.93%
	Some College/ University	25	12.20%
	Completed Technical/ Vocational	23	11.22%
	Some Technical/ Vocational	9	4.39%
	Completed Secondary	35	17.07%
	Some Secondary	15	7.32%
	Completed Primary	6	2.93%

	Category	Number of Respondents	Percentage of Respondents	
	Some Primary School	2	0.98%	
	No schooling, literate	2	0.98%	
Nationality	Barbadian	173	85.22%	
	Guyanese	5	2.46%	
	British-Barbadian	4	1.97%	
	St. Lucian	4	1.97%	
	Jamaican	3	1.48%	
	British	2	0.99%	
	Trinidadian	2	0.99%	
	Trinidadian-Barbadian	2	0.99%	
	Canadian	1	0.49%	
	Cuban	1	0.49%	
	Dominican-Barbadian	1	0.49%	
	Barbadian-American	1	0.49%	
	Guyanese-Barbadian	1	0.49%	
	American	1	0.49%	
	Kenyan-Barbadian	1	0.49%	

	Category	Number of Respondents	Percentage of Respondents
	Barbadian-St. Lucian	1	0.49%
Ethnicity	African	179	88.61%
	Mixed (e.g., African- European, African-Carib, Afro-Latino)	8	3.96%
	European	3	1.49%
	Indian	3	1.49%
	Carib-Amerindian	2	0.99%
	Chinese	1	0.50%
	Unsure	6	2.97%
Languages spoken (in order of ability)	English	196	95.61%
	Spanish	26	12.68%
	French	18	8.78%
Persons living with Disabilities		32	15.61%
	Motor	14	43.75%
	Intellectual	4	12.50%
	Visual	11	34.38%
	Unable to care for self	3	9.38%

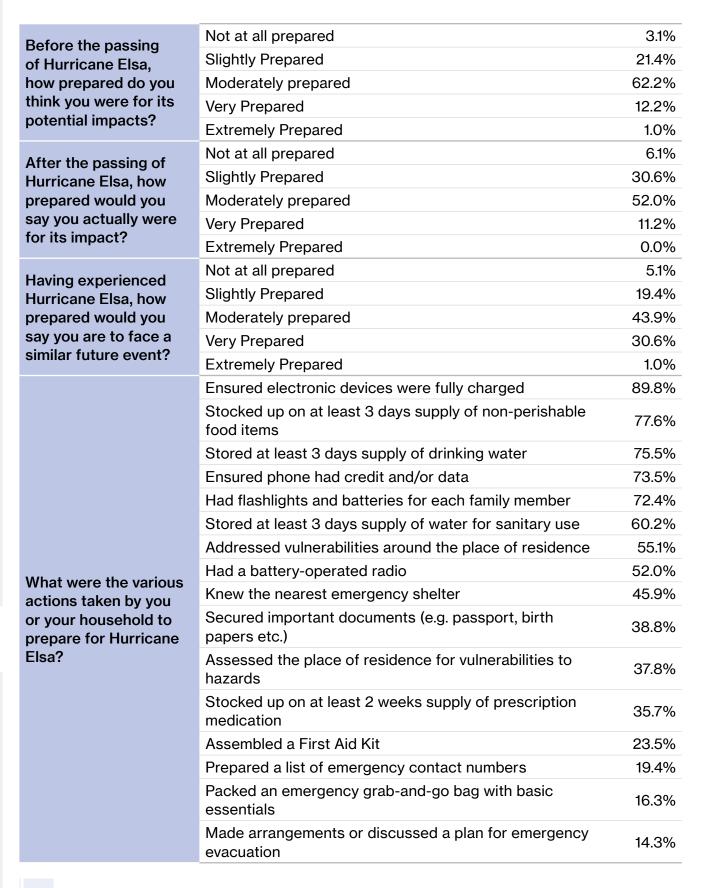
Table 7.2: Breakdown of the number of survey respondents from each of the groups assessed in Barbados

Criteria	Total Completed
St. Peter	15
St. Lucy	17
St. Michael	44
St. Andrew	12
St. John	14
St. Joseph	15
55 years and older	52
Person living with disabilities	32
Single-adult headed households	34
Household with 3 or more children under the age of 21	18
Homeless person	4
Person on welfare/unemployed person	37
Migrant/immigrant	21
Person with no internet at home	14
Ex-offender	7
Elderly person (65 years and older) who lives alone	12

Table 7.3: Summary of Post-Elsa Survey Findings

	Male	25.5%
Gender	Female	74.5%
	26-35	18.4%
	36-45	32.7%
Age	46-59	33.7%
	60-79	15.3%
	Christ Church	24.5%
	St. Philip	20.4%
	St. Michael	14.3%
	St. James	12.2%
	St. George	9.2%
Parish	St. Joseph	5.1%
	St. Thomas	5.1%
	St. Peter	4.1%
	St. John	2.0%
	St. Lucy	2.0%
	St. Andrew	1.0%
	Radio	67.3%
	WhatsApp	43.9%
	Internet	41.8%
	Television	38.8%
	Smartphone	33.7%
Channels used to	Instagram	32.7%
obtain information to prepare for Hurricane	Facebook	29.6%
Elsa	Face-to-Face conversations	20.4%
	Online Newspapers	17.3%
	Print Newspaper	13.3%
	Landline	3.1%
	Twitter	2.0%
	YouTube	1.0%

	Radio	63.3%
	WhatsApp	38.8%
Channels used to	Smartphone	33.7%
	Internet	30.6%
	Facebook	27.6%
access information	Instagram	26.5%
during the passing of	Television	21.4%
Hurricane Elsa	Online Newspapers	19.4%
	Face-to-Face conversations	10.2%
	Landline	5.1%
	Had nothing	2.0%
	Twitter	1.0%
	Barbados MET Office	57.1%
	Local Friends and Family	40.8%
	VOB 92.9 FM	39.8%
	CBC TV8	35.7%
Sources used to obtain	BGIS	35.7%
the information to	The Nation News	29.6%
prepare for Hurricane	Barbados Today	25.5%
Elsa	Government Officials	19.4%
	Barbados Weather Watchers Facebook Group	5.1%
	National Hurricane Centre	4.1%
	Life 97.5 FM	1.0%
	Q 100.7 FM	1.0%
Do you think that you received this information in time to	Yes	89.8%
effectively prepare for the passing of Hurricane Elsa?	No	10.2%
Was there anything you wished you knew or had more information	Yes	17.3%
on before the passing of Hurricane Elsa?	No	82.7%

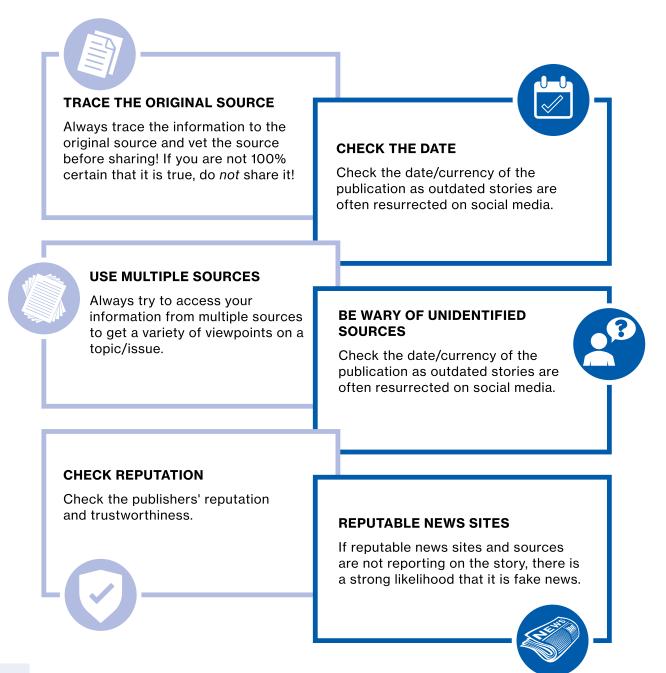


Before the passing of Hurricane Elsa, what did you think was the likelihood that it would	Very likely	15.3%
	Likely	65.3%
	Very unlikely	7.1%
hit Barbados?	Unlikely	12.2%
	Heavy rainfall	90.8%
	Extremely high winds	68.4%
Defens the massing of	Severe flooding	62.2%
Before the passing of Hurricane Elsa, known before its passing as	Disruption in utility services spanning days, weeks, or months	54.1%
Tropical Storm Elsa,	Uprooted trees	44.9%
which of the following hazards did you anticipate would be associated with it?	Road blockage	40.8%
	Disruption in business/economic activities	18.4%
	Complete destruction of homes and other infrastructures	10.2%
	Landslides	5.1%
	Loss of life	0.0%

08APPENDIX B



Figure 8.1: Tips for determining information credibility and reducing the spread of misinformation and disinformation





CHECK PERSONAL BIASES

Check your personal biases when consuming information as you are more likely to think that something is true if it confirms your beliefs and to discount something that differs.



INSPECT VISUALS

Inspect images and videos for alterations.



CONSULT CREDIBLE SOURCES

Always try to access your information from multiple sources to get a variety of viewpoints on a topic/issue.



Check for grammar, spelling and typographical errors (though this is not a foolproof method as information from credible sources is sometimes riddled with such issues).



READ MORE ON THE TOPIC

If the story evokes strong emotions, e.g., anger, read more on the topic using other sources to ensure that it was not purposefully written that way to increase engagement.

READ PAST THE HEADLINES!

Read past the headlines!! Very often, they do not reflect the content of the story.



Some Barbadians do not have sufficient knowledge of how to effectively prepare for a disaster. As such, much effort should be invested in educating the public on the different aspects of disaster preparedness for the different types of disasters.