



MIGRATION, ENVIRONMENT, DISASTER AND CLIMATE CHANGE DATA IN THE EASTERN CARIBBEAN

Saint Kitts and Nevis Country Analysis

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CONTENTS

Acknowledgements	iii
List of figure and tables	vi
Abbreviations and acronyms	vii
Executive summary.....	ix
1. Introduction	
1.1. Migration, climate and environmental change and issues of data in Saint Kitts and Nevis	1
1.2. Scope and objective of the study.....	3
2. Analytical and methodological framework	
2.1. Conceptual framework: Understanding the climate and environmental change, disaster, and human mobility nexus and outcomes	4
2.2. Methodological approach and data	4
3. Data on climate and environmental change, disasters and human mobility: A focus on Saint Kitts and Nevis	
3.1. Country profile	6
3.2. National governance of the climate and environmental change, disaster, and human mobility nexus	9
3.2.1. <i>(Im)migration policies and legislation</i>	10
3.2.2. <i>Climate and environmental change policies and legislation</i>	10
3.2.3. <i>Disaster management policies and legislation</i>	10
3.3. Sources of information and/or data on migration, climate and environmental change and disaster risk reduction in Saint Kitts and Nevis.....	11
3.3.1. <i>The Immigration Department</i>	11
3.3.2. <i>Department of Statistics</i>	11
3.3.3. <i>The National Emergency Management Agency</i>	12
3.3.4. <i>Other national agencies</i>	13
3.4. Gaps and limitations to enhanced data collection, analysis and dissemination on human mobility in the context of climate and environmental change and disaster	14
3.4.1. <i>Identified data gaps in relation to the Immigration Department</i>	14
3.4.2. <i>Identified data gaps in relation to the Department of Statistics</i>	14
3.4.3. <i>Identified data gaps in relation to the National Emergency Management Agency</i>	15

4. Guidelines for improved and standardized data on the climate and environmental change, disaster and human mobility nexus in Saint Kitts and Nevis	16
5. Conclusion and recommendations for enhanced data collection, management and dissemination	19
Glossary	23
Annexes	
Annex I. List of regional stakeholders and national departments involved in the questionnaire activity	25
Annex II. Post Hazard Impact Community Assessment form.....	27
Annex III. Collection of data by other national agencies.....	29
Annex IV. Questionnaire – national level	30
References	41

LIST OF FIGURE AND TABLES

Figure 1. Map of Saint Kitts and Nevis

Table 1. Background of key socioeconomic information on Saint Kitts and Nevis

Table 2. Impact of disaster by event type: Saint Kitts and Nevis (1626–2014)

Table 3. Policies related to migration, environment, climate change and disaster risk reduction in Saint Kitts and Nevis

ABBREVIATIONS AND ACRONYMS

BMS	Border Management System
CARICOM	Caribbean Community
CDEMA	Caribbean Disaster Emergency Management Agency
CSME	CARICOM Single Market and Economy
DANA	Damage Assessment and Needs Analysis
DRR	disaster risk reduction
GDP	gross domestic product
IDHNA	Initial Damage and Human Needs Assessment
IOM	International Organization for Migration
ISO	Initial Situation Overview
NEMA	National Emergency Management Agency
OECS	Organisation of Eastern Caribbean States
PHICA	Post Hazard Impact Community Assessment
SIDS	small island developing State
SLC-HBS	survey of living conditions and household budgets
TWG	technical working group

EXECUTIVE SUMMARY

The increase in frequency and intensity of extreme weather events across the Eastern Caribbean as a result of ongoing changes in global climate and ecological systems has resulted in the destruction of critical infrastructure in Saint Kitts and Nevis. As well, it has been a major cause of economic losses and population displacement. With climate scenarios pointing to a higher incidence of such events in the near future, (forced) population movements are likely to become much more aggravated in the country. According to statistics developed by UNDRR DesInventar, Saint Kitts and Nevis witnessed a total of 506 disasters and related emergencies between 1626 and 2014, cumulatively affecting over one million people. Although the national Government has instituted distinct policy and legal frameworks to foster migration, climate change and disaster governance at the national level, critical issues related to human mobility in the context of climate and environmental change and disasters have not been given sufficient prominence in national agendas. Amongst the 10 policies and legislations related to migration, environment, climate change and disasters that were identified in Saint Kitts and Nevis, only the second national communication on climate change has made references to the topic. That does not, however, mean that effective provisions to address the phenomenon have been established in the country.

This study is part of the International Organization for Migration (IOM) project entitled “Regional Dialogue to Address Human Mobility and Climate Change Adaptation in the Eastern Caribbean”. The project is implemented under the auspices of the IOM Global Migration Data Analysis Centre (GMDAC) in Berlin, Germany, and IOM Dominica, and is funded by the Government of the Federal Republic of Germany. The objective of the project is to assess the national data systems of the six Eastern Caribbean countries in terms of their ability to collect, process and analyse data on migration, climate and environmental change, to identify strengths, weaknesses and opportunities to enhance available evidence on environmental migration.

The study methodology is largely based on a triangulation of methods, including desk reviews and interviews with officials, national agencies, and departments, as well as international/regional organizations. Two distinct sets of questionnaires were distributed to 28 national and regional agencies identified as relevant sources of data within the initial mapping exercise that was carried out during the desk review. In Saint Kitts and Nevis, questionnaires (see Annex IV) were shared with the Immigration Department, Department of Statistics and National Emergency Management Agency (NEMA). Alongside the aforementioned agencies, several other national agencies and ministries that collect some level of data on the topic – but were not identified during the mapping process – were also engaged as part of the national validation workshop. The analysis and findings of the study and consultation process served as the basis for the critical discussion of the issues that emerged with regards to climate change, environment, disaster and human mobility data in the six Eastern Caribbean countries.

The study assessed the extent to which the Immigration Department, Department of Statistics and NEMA collect, manage and disseminate data on migration, climate and environmental change and disasters. Based on this assessment, a host of gaps, limitations and constraints were identified. The analysis reveals that data collected by the Immigration Department is mostly associated with administrative data on passengers and visitors arriving or departing from Saint Kitts and Nevis. Also, the embarkation/disembarkation card (ED card) used as the main instrument at the various ports of entry and departure does not enable the compilation of information related to population movements that may result from climate and other environmental changes, including disasters.

The immigration/customs form asks about the purpose of visit or reason for seeking entry into the country. However, it does not include climate- and environment-related stressors as options or possible reasons for movement. The administrative data that is collected by the Immigration Department does not have an official database or established repository. Mostly, the data collected is hosted within the border management system (BMS) and limited to only the number of passengers and residents entering or leaving the country (with no information on immigration and emigration). Moreover, the BMS does not make provision to allow for hosting or presenting data on the more general environmental factors as potential drivers for seeking entry or moving. Another gap is that the Department does not have any established protocols or procedures related to the management and sharing of collected data within the Department. Whilst the data collected is periodically shared with the Department of Statistics, it is not clear how data is managed, nor the extent to which it is shared with other relevant national agencies.

The Department of Statistics does present a specific section dealing with environmental statistics. However, the environmental statistics generated do not present anything on climate change, disaster and related mobility in the country. This suggests that the Department does not generate indicators on climate change and disasters. With regard to statistics and indicators related to human mobility, the Department only produces statistics on some general aspects of migration collated as part of the national census. In this regard, the questionnaires that were deployed for the 2011 population and housing census included specific questions on international migration, and also probed the main reason for moving. However, only the individual questionnaire took environmental factors into account (“the weather”). Household and demographic surveys conducted by the Department (such as the labour force survey and survey of living conditions and household budgets) do not present questions that could produce data on human mobility in the context of climate and environmental change and disasters.

Despite having implemented the procedures of the Caribbean Disaster Emergency Management Agency (CDEMA) Damage Assessment and Needs Analysis (DANA) Continuum at the national level, the template currently in use by the NEMA to collect data on disasters do not enable the comprehensive quantification of persons forced to move in the wake of disasters and emergencies. Specifically, the NEMA does not have an established or set template for the development of the Initial Situation Overview (ISO) – stage 2 of the DANA Continuum (stages and procedures of the CDEMA DANA Continuum are detailed in the Regional Report). Also, the Post Hazard Impact Community Assessment (PHICA) form, used for the Initial Damage and Human Needs Assessment (IDHNA) – Stage 3 of the DANA Continuum – does not collect data directly linked to the human mobility dimension other than just compiling quantitative information on the extent and damage caused by a disaster. Nonetheless, there is the potential for the number of displaced persons to be implied from the number of required houses and the level of housing damages often recorded as part of qualitative and quantitative assessments. Likewise, houses with major damages and houses destroyed could also respectively be used as proxies determine evacuation and displacement. Furthermore, the NEMA does not have any identifiable or established official database/repository on disaster that could serve as a reference or portal that could be readily accessed by any relevant national agency and interested party.

Considering that effective data collection, analysis and dissemination are key to evidence-based policies related to migration, climate adaptation and disaster management at the national level, some recommendations and proposed guidelines to enhance the collection, quality and accessibility of data on climate and disaster related human mobility in Saint Kitts and Nevis are outlined. In the context of the immigration/customs form that is deployed at the various ports of entry and departure, this report recommends that the Immigration Department consider revising the form to include environmental

factors (such as weather conditions and disasters) amongst the options on “purpose of the visit”. Specifically, climate or disaster-related impacts could be listed amongst reasons for seeking entry. Additionally, the Department could consider integrating a field to allow for the capture of information on the sex or gender of persons arriving or departing the island. This could facilitate the collection of disaggregated data on the topic at the various ports of entry, and could help with planning, resource mobilization and targeted response in the wake of a disaster.

The reports also recommends that the Department consider developing a robust data system or including new variables in the BMS. This would allow for hosting data not only on passenger arrivals and departures, but also immigration and emigration, as well as climate- and disaster-related mobility that may be detected at the ports. To support this expansion, the Department may consider prioritizing or enhancing the collection, analysis, reporting and sharing of environment-related migration data by designating an officer with responsibilities to monitor the process, as well as facilitating capacity-building. The prioritization could be complemented by way of developing methodologies and common protocols that clarify how data could be collected at the existing ports of entry, as well as how this information could be subsequently managed and disseminated.

In addition to the environmental statistics, the Department of Statistics could also develop specific statistics on related indicators on climate change and disasters. These statistics could also focus on human mobility. With the Department already planning to integrate disaster impact as one of the reasons for migration in all upcoming data-collection processes, the report recommends that data collection processes allow for detailed disaggregation (such as age and sex) and defined categories (such as displaced, evacuated and relocated people). Similarly, indicators relating to climate change could include different aspects such as drivers, impacts and adaptation, with specific focus on vulnerable communities. The next census questionnaires could be designed (or revised) to capture and make visible data on human mobility categories, such as internal and cross-border migration, displacement and relocation, as well as other forms of movement. Specific questions in the census activity related to the reason or motivation that led to international migration or internal displacement and migration could include environmental aspects (for example, weather conditions and disasters) in the response options.

Regarding disaster data, the report recommends that the NEMA exploit the opportunity that the predetermined form from CDEMA presents for the development of the ISO. The ISO form has a specific field on “no. of people in shelters”, “displaced populations” and “others”. These fields provide the opportunity to adequately capture the mobility dimensions of disaster in the country. Also, the PHICA form could be revised to facilitate the effective accounting of human casualties (deaths, injured and missing people), as well as of the human mobility dimension (number of displaced, evacuated and relocated persons). This could be complemented by also developing proxies to determine displacement that may be instigated by disasters, if statistics on numbers of persons who may have fled or been forced to move as a result of an emergency cannot be captured directly. With the data or information on disaster that is collected or available, the report recommends that the NEMA develop a common national database on disaster data, from which information compiled and kept in the format of reports could be managed and disseminated. This proposed development of a common repository could make provisions to allow for validation of data collected and could also present data on human mobility dimensions of disaster in Saint Kitts and Nevis.

To ensure that the proposed national disaster database is robust and current, established, validated and harmonized methodologies and protocols on how to collect, manage and disseminate raw data on disaster at the national level (with standardized/common categories and definitions) will be needed. These harmonized methodologies and protocols should clearly outline the criteria for categorizing human damage (ensuring, among other things, the incorporation of a specific category on displacement). This could guide the activities of all the national actors involved in the collection of disaster data, and also offer opportunities for data cleaning and quality.

The report is organized into five sections. Section 1 gives an introduction and offers the background and scope of the study. In section 2, the report discusses the conceptual approach to understanding human

mobility outcomes in the context of climate and other environmental changes, including disasters. It further describes the methodological approach of the study. This is then followed by Section 3, which discusses the issues of data on climate and environmental change, disaster and human mobility in Saint Kitts and Nevis. This section highlights the main sources of information and data on these themes at the national level. It also underlines the main gaps in and limitations to effective data collection, management and dissemination in the country. Section 4 offers guidelines for enhancing the availability, quality and accessibility of data on the topic at the national level. In Section 5, the discussion concludes by emphasizing the importance and need for reliable data for informed decision-making and planning, and making recommendations for enhanced data collection, analysis and dissemination on human mobility in the context of climate and environmental change and disaster in Saint Kitts and Nevis.

1. INTRODUCTION

Amidst ongoing changes in global climatic and ecological systems, the scale and impact of climate-related disasters in the Caribbean and other SIDS have garnered considerable international attention (UNFCCC, 2005; Collymore, 2007; Thomas and Benjamin, 2020; Vinke et al., 2020). Not only have hurricane disasters increased in frequency and severity, but a significant proportion of the population – as well as livelihoods, cities and critical infrastructure – of countries in the Caribbean, like other SIDS, are situated within 1.5 kilometres of the coasts (Lewsey et al., 2004; Gallina, 2010; UN-OHRLS, 2015). Hence, they remain exposed and vulnerable to these extreme climate change events (Schicklinski and Noorali, 2011). As a consequence, vulnerable populations in SIDS, such as in the Eastern Caribbean, have suffered, and will continue to suffer, from the impact of climate-related risks and disasters (Thomas et al. 2020). During the hurricane season of 2017, for example, about 3 million people across 16 countries in the Caribbean were reportedly displaced by Hurricanes Irma, Harvey and Maria (IDMC, 2018).

Whilst the nature of the relationship between climate and environmental change, disaster and human mobility remains a contentious topic in both scientific and policy circles (Black et al., 2011; Piguet, 2013), it is undeniable that climate change impact on SIDS across the Caribbean could potentially exacerbate displacement and existing mixed mobility patterns in the region (IPCC, 2014; Kelman, 2018; Vinke et al., 2020). With specific reference to the Eastern Caribbean region, many people have been affected and displaced by disasters, and hence forced to move internally or to other States and territories within the region (IOM, 2017; Aragón and El-Assar, 2018; Thomas and Benjamin, 2018). Existing free movement arrangements, within the framework of OECS and provisions under the CSME initiative, have facilitated inter-State mixed migration of people in the region (Thomas-Hope, 2002; ACP, 2013; 2014; Aragón and Mawby, 2019). As such, migration and displacement in the (Eastern) Caribbean are complex phenomena, driven by a multiplicity of interrelated factors (Francis, 2019).

1.1. Migration, climate and environmental change and issues of data in Saint Kitts and Nevis

Saint Kitts and Nevis, by virtue of its location in the Lesser Antilles and topography, is exposed and vulnerable to ongoing climate change impacts and other natural hazards, including hurricanes, droughts, volcanic activity, storm surges, sea level rise and coastal erosion (Nurse et al., 2014; Edward and Robertson, 2017). Historically, residents of the twin-island State have coped with climate variability, droughts and hurricane hazards over the years (Hobson, 2003). Like most States in the Eastern Caribbean, Saint Kitts and Nevis has witnessed fluctuations in its mean surface temperature and precipitation (Government of Saint Kitts and Nevis, 2015). The country's second national communication on climate change reveals that mean annual rainfall has consistently declined

since 1960 at an average rate of 47 mm per decade (ibid.). Based on climate models and scenarios, it is projected that Saint Kitts and Nevis will witness an increase in mean annual temperature of 0.72°C in 2020 up to about 2.44°C in 2100. Annual rainfall is also expected to decline but will vary between from 2 and 15 per cent in 2020 to between 16 and 40 per cent in 2050 (ibid.).

Alongside the considerable increase in the number of warm days, with temperatures increasing slightly by 0.6°C in the observed period 1960–2000, hurricane occurrences have become more frequent and intensive since 1995 (ibid.; UN-ECLAC, 2011). In 1989, Hurricane Hugo accounted for an estimated USD 43 million in losses and damages. The passage of Hurricane Georges across the island nation in 1998 resulted in losses and damages of up to USD 445 million, whilst 80 per cent of the country's housing stock and infrastructure was destroyed (Hobson, 2003; World Bank, 2010). The damage caused by Hurricane Irma in Saint Kitts and Nevis was relatively minor in comparison with other island States in the Eastern Caribbean. Nevertheless, Hurricane Irma accounted for the displacement of a considerable number of people with an estimated USD 464.6 million of destruction and loss (Cardona et al., 2017; St. Kitts and Nevis Observer, 2017).

Given that much of the population (more than 40%) and critical social infrastructure are concentrated within two kilometres of the coastal zone (Government of Saint Kitts and Nevis, 2001a), the increase in extreme climatic events would have adverse implications for the national economy, whilst livelihoods and populations may be displaced (UN-ECLAC, 2011; Edward and Robertson, 2017; IDMC, 2018; Thomas and Benjamin, 2018). In view of the country's exposure and vulnerability to hazards (World Bank, 2010), the national Government has been proactive in instituting measures and governance frameworks to address issues of climate change and disaster risk. Some of these legislations and governance framework on (im)migration, climate and disaster include: the Immigration Act (Act No. 2 of 2006); Emergency Powers Act (Act No. 15 of 1967); National Disaster Plan (1999) and the National Natural Hazard Mitigation Policy and Plan (2001) (see Table 3). These governance frameworks and legislations are mainly aimed at the effective governance of mobility and disaster, as well as climate adaptation and resilience in the country.

The recent IOM migration governance and needs assessments, conducted in the ten island States of the Commonwealth Caribbean, showed that Saint Kitts and Nevis and all other OECS member States have national plans to guide the effective management of emergencies and disasters. Also, the national Government has designated agencies and institutions in charge of implementing the proposed actions and interventions (Aragón and El-Assar, 2018). Despite the relative strides that have been made, there is still limited integration of human mobility issues into climate change and disaster plans and strategies. Even in instances where the immigration department is drawn or deployed to handle issues of human mobility as part of emergency committees, their involvement is often on an ad hoc basis. This is because there are often no formally documented protocols for coordinating with immigration authorities (Aragón and El-Assar, 2018:51). This limitation is further compounded by the lack of critical data and evidence on climate- and environment-related mobility that could be accessed in a timely manner for effective planning or deployment of interventions.

At the national level, available information on migration is mostly based on census data collected by the Department of Statistics, as well as administrative data on entries and exits, visas and residence permits generated by the Immigration Department. Alongside these data sources, there are scanty statistics from other national agencies – like NEMA, Saint Kitts Tourism Authority and related ministries – that also capture or present some statistics or information on the number of people affected or displaced by climate-related disasters in the country. Although data at the regional level and from global sources provide information on climate risks, disasters and impacts across the region, there is a need for country-specific, disaggregated and comprehensive data on climate change and disaster-related human mobility. More importantly, there is a need to assess the reliability of data by probing the data collection, management and sharing mechanisms at the national level. The availability of adequate and reliable data is crucial to helping the national Government of Saint Kitts and Nevis to plan and develop evidence-based policies that can effectively address the adverse impacts of climate and environmental change and disasters on human mobility in the country.

1.2. Scope and objective of the study

This study is part of the IOM project entitled “Regional Dialogue to Address Human Mobility and Climate Change Adaptation in the Eastern Caribbean”, under the auspices of the IOM GMDAC (Berlin, Germany) and IOM Dominica, and funded by the Government of the Federal Republic of Germany. The project seeks to build a regional dialogue series in Eastern Caribbean States that will enhance the capacities of governments to collect, analyse and utilize data on human mobility and vulnerability derived from climate and environmental change. It is being implemented by IOM in six independent member States of the OECS: Antigua and Barbuda, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines. Its objective is to assess the national data systems of the six countries in relation to migration, climate and environmental change in order to identify strengths, weaknesses and opportunities to enhance available evidence on environmental migration. The ultimate goal is to enhance the availability of reliable data on environmental migration for informed planning and policy. This study report focuses exclusively on Saint Kitts and Nevis.

Generally, interisland mobility across the (Eastern) Caribbean States is facilitated through the two main free movement arrangements established under CARICOM and the OECS (Francis, 2019). These frameworks have contributed to intraregional mobility across countries in the region (IOM, 2017). Alongside these regional mobility frameworks, there are other existing regional climate change and disaster governance and institutional structures that seek to enhance climate change adaptation, as well as disaster response and management in the region. Given that this assessment focuses on human mobility in the context of climate and environmental change and disasters, the CARICOM CDEMA is also of importance in understanding climate- and disaster-related mobility management in the region. A detailed discussion of these aforementioned mobility, climate and disaster governance frameworks is outlined in Section 3 of the Regional Report.

2. ANALYTICAL AND METHODOLOGICAL FRAMEWORK

2.1. Conceptual framework: Understanding the climate and environmental change, disaster, and human mobility nexus and outcomes

The role of environmental factors in influencing patterns of human mobility has long been a focus of scientific research and policy (Piguet, 2011, 2013; Ionesco et al., 2017; Flavell et al., 2020). However, recent attention to disaster risk reduction (DRR) and climate change adaptation policy has invigorated calls to bring the human mobility dimensions of climate and disaster impact into mainstream political, development and climate action (Mercer, 2010; Black et al., 2011; Wilkinson et al., 2016). The increasing policy attention and evolving perspectives on the climate and environmental change, disaster, and human mobility nexus indicate the extent to which climate change impact and DRR has gained traction.

The broad distinction between the different types of human mobility (that is, “migration”, “displacement” and “planned relocation”) in the context of climate change also highlights the complexity of multiple factors that come into play in precipitating movements under circumstances of real or perceived climate and environmental risks (Renaud et al., 2011; Warner et al., 2013; IOM, 2018, 2019; Bower and Weerasinghe, 2021). The conceptual framework developed as part of the Foresight project provides a good point of entry to understanding mobility outcomes or decision-making in the context of climate and environmental change and disaster (Government Office for Science, 2011; Black et al., 2013). The Foresight framework¹ explains that mobility outcomes (including displacement and the decision to stay or being unable to leave) are influenced by a multiplicity of complex interrelated forces operating at the macro (social, economic, environmental and political), meso (mostly intervening obstacles and facilitators) and micro (personal and household characteristics) levels.

The emphasis on the need to collect, analyse and use reliable data on patterns of mobility, as well as to understand the links with environmental degradation, climate change and crises to inform and foster policy coherence (IOM, 2014a), is of particular relevance for the purposes of this study. In this regard, IOM recognizes as one of its key commitments the need to link research and policy in support of efforts by national governments towards achieving effective migration governance (Melde et al., 2017). It is thus within the remit of enhancing policy, based on the availability and importance of timely and reliable data, that this study assesses the national data systems on migration, environment, disaster and climate change of Saint Kitts and Nevis.

2.2. Methodological approach and data

The research approach for this study is based largely on a triangulation of methods including desk reviews, interviews with officials, national agencies and departments, as well as international/regional organizations. For the data collection, the study began with an extensive desk review (October–November 2020). The desk review involved the identification and mapping of global, regional and national sources of information and data sharing systems, as well as governance frameworks on migration, climate and environmental change across the OECS. A description of the whole research process is further elaborated in Section 2 of the Regional Report.

In Saint Kitts and Nevis, three main national agencies were identified as relevant sources of data and statistics on climate and environmental change, disasters and human mobility. These agencies are the Immigration Department, Department of Statistics and NEMA. These agencies received 3 out of the

¹ See Section 2 of the Regional Report for detailed discussion of the Foresight Mobility Framework.

18 questionnaires that were distributed to all the national agencies identified as relevant sources of data across the six OECS countries of focus. Ten other questionnaires were sent to regional stakeholders (Annex I). Two different questionnaires² were deployed to cater for the distinct stakeholders identified. Although the questionnaires were developed in this way to allow for distinction between the different stakeholders, the questions did not differ much. The questions presented were mostly open ended and allowed for the collection of qualitative data. Both questionnaires solicited information relating to climate change impacts at both regional and national levels, existing climate, disaster and migration governance frameworks, available official and secondary sources of data at the national and regional levels, as well as gaps in the data and in data collection and management, and options to enhance data on migration, environment, disaster and climate change at all levels.

As a follow-up to the questionnaires distributed, complementary online interviews were conducted with the three national agencies that had received the questionnaires. With the support of IOM Dominica, several other national agencies and ministries that collect some level of data on the topic, but were not identified during the mapping process, were also engaged. These included: the Ministry of Foreign Affairs and Aviation; Ministry of Health, Social Services, Community Development, Culture and Gender Affairs; and Ministry of Tourism, Transport and Ports (Saint Kitts Tourism Authority). Together with the three main national agencies, these other agencies and ministries were extensively consulted as part of the national validation workshop that was held in March 2021. The national workshop provided critical insights into the issues of climate and environmental change, disasters and human mobility data in Saint Kitts and Nevis.

With analysis, the secondary quantitative data and information helped to ascertain the availability of data on the topic, and to what extent these data were being collected in Saint Kitts and Nevis. The quantitative data also served as reference in discussing the issues that came up in the qualitative interviews and data. Based on the findings of the study and consultation process, technical guidelines for enhanced data collection, management and dissemination on migration, environment, disaster and climate change in Saint Kitts and Nevis have also been formulated. Alongside this, a checklist of proposals or recommendations have been formulated to assist in building national capacities, and to facilitate a better understanding of what is required to effectively address climate change and disaster impact on human mobility at the national level.

² The questionnaire deployed for the national level is presented in Annex IV of this report.

3. DATA ON CLIMATE AND ENVIRONMENTAL CHANGE, DISASTERS AND HUMAN MOBILITY: A FOCUS ON SAINT KITTS AND NEVIS

3.1. Country profile

Saint Kitts and Nevis is composed of two islands in the Lesser Antilles, in the eastern Caribbean Sea (Figure 1). With a combined total land surface area of 269 km² (Edward and Robertson, 2017), the twin-island State hosts an estimated total population of 53,000 people as of mid-2019 (UN DESA, 2020) (Table 1). Although the country's economy has for many years thrived on agriculture (in particular the sugar industry), tourism and related activities have been prominent in contributing to the growth of the national economy in recent times. In 2013, for example, the tourism sector contributed 6.2 per cent of the total gross domestic product (GDP), and is expected to reach 8.6 per cent of the national GDP by 2024 (Government of Saint Kitts and Nevis, 2015). The World Bank (2020) estimates that, in 2019, the GDP per capita for the country was USD 19,935, with the annual GDP growth pegged at 2.8 per cent.

Figure 1. Map of Saint Kitts and Nevis



Source: Encyclopædia Britannica, 2021.

Note: This map is for illustration purposes only. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the IOM.

Table 1. Background of key socioeconomic information on Saint Kitts and Nevis

Capital	Basseterre
Form of government	Constitutional monarchy
Location	Lesser Antilles, Eastern Caribbean
Total land area	269 km ²
Population	53 000 (2019)
Main economic activities	Agriculture and tourism
GDP (annual growth)	2.8% (2019)
Hazards that may lead to displacement	Cyclonic wind, storm surge, earthquake and tsunami
Risk of future displacement	No available data

Source: Government of Saint Kitts and Nevis, 2015; Edward and Robertson, 2017; IDMC, 2019; UN DESA, 2020; World Bank, 2020.

Considering that most of the population in Saint Kitts and Nevis is settled in close proximity to coastal areas, the impacts of ongoing global climatic changes – for example, sea level rise, storm surges, flooding and salt-water intrusion – are expected to accelerate coastal erosion and pose direct threats to populations and livelihood systems. In this regard, the increased occurrence and severity of hurricanes across the (Eastern) Caribbean has not only resulted in the destruction of critical infrastructure in the country, but has also been a major cause of population displacement and economic loss (Government of Saint Kitts and Nevis, 2015). As shown in Table 2, between 1626 and 2014 a total of 506 disasters of various kinds were recorded in Saint Kitts and Nevis, indirectly affecting approximately 1.3 million people (UNDRR-DisInventar Database, 2020).

Table 2. Impact of disaster by event type: Saint Kitts and Nevis (1626–2014)

Event	No. of occurrences	Deaths	Injured	Missing	Houses destroyed	Houses damaged	Directly affected	Indirectly affected	Relocated	Evacuated
Accident	5	245	5				342	342		91
Biological	1		31				31	31		
Coastal erosion	57							17 776		
Conflict	1	2 000					2 000	2 000		
Contamination	2									
Drought	41							135 524		
Epidemic	3	4 811	89							
Fire	33	5	5		14	1	77	35 649	23	80
Flood	33	232					100	111 139		
Hurricane	139	20			490	1 637	6 804	384 941	54	3 000
Intoxication	1		6				6	6		
Rains	130							428 120		
Structural collapse	1	1	2							
Windstorm	57							190 724		
Total	506	7 326	138		504	1 638	9 360	1 306 352	77	3 171

Source: UNDRR-DisInventar Database, 2020.

3.2. National governance of the climate and environmental change, disaster, and human mobility nexus

A total of 10 policy and legal documents were identified and thoroughly examined to ascertain the extent to which they acknowledge human mobility in the context of climate and other environmental changes (including disasters), as well as to identify provisions that have been made to establish reliable sources of information and data sharing mechanisms on related topics in Saint Kitts and Nevis.

As illustrated in Table 3, the issues associated with human mobility have not been given much prominence across the national agendas. Whilst the existing policy and legal frameworks commit to responding to the State's vulnerability to climate change impacts on the population, there is little focus on climate change and disaster-related population movements. Similarly, attention to the collection, management and dissemination of timely and reliable data on the topic as critical for effective planning is also limited at the national level.

Table 3. Policies related to migration, environment, climate change and disaster risk reduction in Saint Kitts and Nevis

Governance sphere	Year	Policy	Acknowledgment of the climate and environmental change, disaster, and human mobility nexus	Provisions on data sharing mechanisms
Migration	2006	Immigration Act (Act No. 2 of 2006) (Amendment) ^a	No	No Provisions
Climate change	2001	Initial National Communication on Climate Change ^b	No	No Provisions
	2015	Second National Communication on Climate Change ^c	Yes	No Provisions
	2016	Nationally Determined Contribution ^d	No	No Provisions
Disaster risk reduction	1967	Emergency Powers Act (Act No. 15 of 1967) ^e	No	No Provisions
	1998	National Disaster Management Act (Act No. 5 of 1998) ^f	No	No Provisions
	1999	National Disaster Plan ^g	No	No Provisions
	2000	Development Control and Planning (Act No. 14 of 2000) ^h	No	No Provisions
	2001	National Natural Hazard Mitigation Policy and Plan ⁱ	No	No Provisions
	2002	National Disaster Management Act (Chapter 19:06) (Revised) ^j	No	No Provisions

Source: ^aGovernment of Saint Kitts and Nevis, 2006; ^bGovernment of Saint Kitts and Nevis, 2001a; ^cGovernment of Saint Kitts and Nevis, 2015; ^dGovernment of Saint Kitts and Nevis, 2016; ^eGovernment of Saint Kitts and Nevis, 1967; ^fGovernment of Saint Kitts and Nevis, 1998; ^gGovernment of Saint Kitts and Nevis, 1999; ^hGovernment of Saint Kitts and Nevis, 2000; ⁱGovernment of Saint Kitts and Nevis, 2001b; ^jGovernment of Saint Kitts and Nevis, 2002.

3.2.1. (Im)migration policies and legislation

The main legislation governing (im)migration in Saint Kitts and Nevis is the Immigration Act (Act No. 2 of 2006). The Act outlines the conditions and requirements for persons who may be seeking entry or residence for purposes such as tourism, visiting, studies, employment and family reunification (Government of Saint Kitts and Nevis, 2006). In addition to prescribing the process to undergo in seeking residency, the Act sets out that individuals may be granted permanent residence when they have resided in the country for at least seven years and have assets in the territory (Bayat and Seddik, 2020). For all foreigners seeking entry into the country, the Act stresses that the national authority may only grant entry for up to six months in the first instance.

Whilst some foreigners may require visas to enter Saint Kitts and Nevis, citizens of Caribbean States are entitled to visa-free entry under the CSME and OECS movement arrangements. As a national migration management legislation, however, the Immigration Act does not make any provisions for the special recognition and regularization of persons who may be displaced or on the move as a result of disaster and climate change impacts. The Act is also not explicit on the need to collect and share disaggregated and reliable data on the phenomenon. Whilst this may be merely a gap in thematic focus, the seeming lack of clarity in stipulating the need for an institutionalized data sharing mechanism may constrain effective planning and decision-making on the subject.

3.2.2. Climate and environmental change policies and legislation

As highlighted in Table 3, the second national communication on climate change is the only national climate policy document that refers to human mobility (Government of Saint Kitts and Nevis, 2015). The damages associated with extreme events have often manifested in the destruction of housing, public buildings and facilities, as well as significant impacts on the tourism and service sectors as main drivers of the economy (ibid.). In outlining potential adaptation options to address climate change impact on human settlements and infrastructure, the national Government considers the relocation of key infrastructure and settlements from locations of high vulnerability to less vulnerable areas. In particular, areas of high elevations that are less prone to storm surges and floods have been identified as ideal locations that could significantly reduce the impact of climate change and related hazards (ibid.).

The second national communication also indicates the lack of data on climate change and related socioeconomic aspects in the country. Whilst some data on greenhouse gas inventories, as well as on precipitation and temperature patterns, are available at the national level, there is no database and there are no explicit attempts to collect data on climate and disaster impacts on human mobility. The document emphasizes the importance of establishing a detailed national data collection, management and dissemination system on topics linked to climate change for the country (ibid.). The development of these critical data infrastructure and management systems would greatly advance the country's preparedness and management of climate and disaster impacts in the country.

3.2.3. Disaster management policies and legislation

In Saint Kitts and Nevis, emergency responses and disaster preparedness are implemented under the authority of the Emergency Powers Act (Act No. 15 of 1967) and the National Disaster Management Act (Act No. 5 of 1998 – revised Cap. 19.06, Dec/2002). The Emergency Powers Act enables the provision of assistance in times of war, public calamity or public disturbance (Government of Saint Kitts and Nevis, 1967). The National Disaster Management Act establishes the legal framework for disaster management in the country (Government of Saint Kitts and Nevis, 1999). Despite the overarching focus of these legislations on comprehensive disaster management and preparedness, none of the different national DRR policies and institutional frameworks that have been examined for Saint Kitts and Nevis makes any explicit reference to climate change and disaster impacts on human mobility. There are also no identifiable provisions to effectively address displacement or to respond to the specific needs of migrants in this context. The commitment to address the State's vulnerability and the impact of disasters on the population is evident in the existing policies and legislative frameworks. However, the importance of the collection and sharing of reliable data on the human mobility dimensions to the climate and disaster policy design and planning processes has not been made sufficiently clear.

3.3. Sources of information and/or data on migration, climate and environmental change and disaster risk reduction in Saint Kitts and Nevis

To assess the availability of sources of information and data sharing mechanisms on migration, climate and environmental change and disasters at the national level, and to examine the extent to which they capture data on human mobility in the context of climate and environmental change and disasters, the insights from three national agencies – the Immigration Department, Department of Statistics and NEMA – have been considered and presented as part of the analysis.

3.3.1. *The Immigration Department*

All passengers entering the country – including nationals from the OECS and CARICOM member States – are required to fill out the same generic entry immigration/customs form (Saint Kitts Tourism Authority, 2020). In addition to allowing for the collection of demographic information (age, sex, marital status, date and country of birth, nationality and home address), the form includes other information such as duration of stay and purpose of the visit. The possible choices presented as reasons for “purpose of visit” are: “vacation”, “study”, “convention”, “business”, “visiting” “friends/relatives”, “honeymoon/wedding”, “meeting”, “sports event” and “other (respondent should specify)”. The data collected is thus limited to only administrative information on passengers and visitors arriving in the territory. Even though the form does not capture data on population movements that result from disasters, the opportunity to specify the reason for travelling or seeking entry under the option of “other” presents an avenue to gather information on the topic.

It is, however, unclear whether the Immigration Department collects information associated with immigration and emigration (that is, persons seeking to relocate permanently or for longer periods than the initial instance of 6 months). What this suggests is that there is no established database that specifically details reliable and disaggregated information on immigration/emigration in Saint Kitts and Nevis other than the basic information on passengers and visitors. The information which is based on the number of people coming by air and sea, and whether they are residents or non-residents, is hosted in the BMS. This information is periodically shared with other national agencies such as the statistics and tourism departments but is not available to the public or any interested parties.

3.3.2. *Department of Statistics*

The Department of Statistics presents data related to consumer price index, labour force, merchandise trade, population and socioeconomic aspects. The Department generates statistics around three broad topics: demographic and social statistics; economic statistics; and environmental statistics. Despite having a cluster on population under the topic of demographic and social statistics, there is no information or data on environmental migration and related issues. However, the Department does present specific statistics and indicators on the environment (Department of Statistics, 2021a). Neither the statistics on “travel and tourism” and “international merchandise trade,³ nor indicators on “population” and “passenger/tourist arrivals”, generate information that could be associated with human mobility. The cluster dealing with “environmental statistics” presents statistics and indicators including electricity, temperature, humidity, production, rainfall, waste, water, wind direction and speed. Yet, there is no information on climate and environmental change-related events and disasters at the national level. According to the Department of Statistics, data on disasters and related impacts on the population are mostly captured by NEMA.

³ Tourism and travel statistics include: monthly arrivals by category (2019); passenger arrivals and departures by air (2010 to 2019); Saint Kitts sea port cargo throughout (tons) (2010 to 2019); visitors by country of residence (2010 to 2019); cruise passenger arrivals and calls (2010 to 2019) (see Department of Statistics, 2021a).

The 2011 population and housing census is much the same. There is no comprehensive written report for the 2011 census, except for the basic statistics presented on demographic dynamics, as well as infrastructural and socioeconomic indicators (Department of Statistics, 2021b). Nevertheless, the census household questionnaire included a specific section on international migration (Department of Statistics, 2011b). In addition to asking about household members who had moved or were living abroad during the intercensal period (2001 and 2011), the questionnaire further probed the main reason for migration at time of departure. The choices presented as responses to this question included “higher income”, “employment”, “study”, “medical”, “marriage”, “family reasons”, “crime rate” and “other”.

Section 5 of the person questionnaire (questions 44–56) also focused on migration by posing questions on birthplace and residence (Department of Statistics, 2011a). On the question related to the main reason for returning to Saint Kitts and Nevis, the following answer options were offered: “regard it as home”, “family is here”, “retired”, “homesick”, “employment/work”, “involuntary return/deported”, “to start a business” and “other”. Specifically, the individual questionnaire presented a section focused on migration. By asking the reasons why the respondent returned and/or moved to Saint Kitts and Nevis, the questionnaire included “the weather” as a possible option, thus acknowledging the possible role of environmental factors in the decision to migrate (Department of Statistics, 2011c). In addition to allowing for the capture of information on reasons for departing or returning migration, the design of the 2011 census enabled the incorporation of climatic and weather conditions in the response options. Yet, the alternative option of “other” could further be exploited or revised to solicit information on persons temporarily or permanently displaced due to disasters and related emergencies. This would, however, depend on the individuals’ perception of the role of environmental stressors in the decision to move.

With regard to household and other demographic (population-based) surveys developed by the Department, the questionnaire developed for the 2015 labour force survey presented questions related to migration in the section dealing with national demographic characteristics, education and training. However, the questions do not probe the reasons for migration (Department of Statistics, 2015). On the part of the survey of living conditions and household budgets (SLC-HBS), conducted between 2006 and 2007, the questionnaires that were deployed for the activity included queries related to the reasons for returning to the country. These queries took environmental factors (“the weather”) into account (Department of Statistics, 2006a, 2006b).

3.3.3. *The National Emergency Management Agency*

In the context of disaster response in Saint Kitts and Nevis, the NEMA is the main agency responsible for coordination, management and recovery in the wake of a national emergency. Besides providing resource support to institutions to effectively tackle national emergencies, the NEMA also focuses on capacity-building by providing adequate training and education to the different actors and institutions. In line with its mandate, the NEMA also works extensively with the Nevis Disaster Management Department. Having been set up by the Nevis Island Administration, its core mandate is to specifically deal with any emergencies and disasters in the context of Nevis. The associated committee set up within the department actively works with the NEMA in coordinating disaster response and emergencies alongside the District Emergency Organisations. Currently, disaster management activities are carried out in accordance with the Disaster Management Plan (1999) and the National Natural Hazard Mitigation Policy and Plan (2001). As outlined in these plans, disaster planning and response are organized through district and local committees. In this context, the NEMA collaborates with local and district committees to develop capacities and contingency plans in the wake of a disaster event and related emergencies. Both plans present proactive approaches to reducing the vulnerability of Saint Kitts and Nevis to natural hazards through capacity-building, as well as effective engagement and partnership with other governmental and non-governmental organizations.

In the wake of a disaster or related emergency, the NEMA automatically proceeds with the established protocols towards recovery. This process involves the development of an ISO within the 24 hours of the event, which is aligned with Stage 2 of the CDEMA DANA Continuum. As it is a qualitative report that helps to ascertain the extent of impact, a subsequent quantitative assessment is then initiated

(IDHNA, Stage 3 of the DANA Continuum). The NEMA conducts the IDHNA within seven days of the event to support the national Government and responsible agencies in better managing the impacts and recovery process, focusing on the most pressing needs in the aftermath of the event.

According to the NEMA, Saint Kitts and Nevis has adjusted its forms to meet the CDEMA DANA Continuum recommendations. Although the Agency has not presented any form as to how it proceeds to gather information for the development of the ISO, the NEMA adopts the PHICA (see Annex II) for the IDHNA phase during a disaster. The PHICA (revised in 2019) enables the compilation of disaggregated data by age, sex and disabilities, but it does not collect any information on human casualties (such as deaths, injured and missing people). Given that the form is often deployed to capture information at the household level, it could be useful for the form to allow for assessment of the number of people evacuated (shelters) or displaced due to the emergency. However, the form does not have any field that could provide the needed information to quantify this aspect. Whilst the form does not have any field that could allow for the capture of data on human mobility dimensions, the number of affected people could be implied from the number of households interviewed and the number of family members in each of them. Similarly, there is the possibility to imply the number of displaced persons from the information recording the number of houses damaged, and the level of damage done. Indeed, data on displacement could be inferred from information about houses that have been destroyed.

Aside from the information that is collected through the CDEMA DANA Continuum, the national Department of Statistics has been categorical in indicating that data on national disasters and related impact on people is captured by the Nevis Disaster Management Department. Despite the procedures to collect information to inform recovery processes, there is no identifiable official database on disasters at the national level. The only information the NEMA offers is a list of past disaster events in Saint Kitts and Nevis, spanning 1626 and 2008. These events are classified by date and a brief description of the emergency. Yet the information presented does not account for any information related to human mobility (such as number of evacuated, displaced or relocated people).

Normally, the information that is generated from the PHICA – corresponding to Stage 3 of the CDEMA DANA Continuum – is submitted to the regional agency only after it has been scrutinized and approved by the Cabinet. That is, aside the possibility that some information may not be deemed appropriate for publication during the approval process, the assessment circulates only among relevant national departments and the CDEMA, but not amongst the general public. With the information lodged at CDEMA, the management of the data generated ultimately falls under the responsibility of the intergovernmental agency.

3.3.4. Other national agencies

Aside from the Immigration Department, Department of Statistics and NEMA, several other national agencies were examined to ascertain the extent to which data on human mobility in the context of climate and environmental change and disasters is being collected, managed and disseminated in Saint Kitts and Nevis. These other national agencies examined included: (i) Ministry of Foreign Affairs and Aviation; (ii) Ministry of Health, Social Services, Community Development, Culture and Gender Affairs; and (iii) Ministry of Tourism, Transport and Ports (Saint Kitts Tourism Authority).

All these national ministries and agencies were engaged as part of the national workshop. From the discussions, it was revealed that all the aforementioned national agencies were actively involved in some form of data collection on different forms of population mobility in Saint Kitts and Nevis. Whereas some of the ministries reported collecting information relating to labour mobility and international migration, none of these agencies specifically collect data on climate- and disaster-related mobility. The kinds of data and sharing mechanisms that these aforementioned ministries and national agencies present, and the corresponding gaps and opportunities to promote the effective collection of data on climate- and disaster-related mobility, are elaborated in Annex III.

3.4. Gaps and limitations to enhanced data collection, analysis and dissemination on human mobility in the context of climate and environmental change and disaster

With global warming projected to continue into the future, the expectation is that climate change risks and impacts will become more frequent and widespread – and will have increasingly devastating outcomes – in vulnerable regions of the globe. Because of their location and exposure as SIDS, Eastern Caribbean countries like Saint Kitts and Nevis will bear the brunt of extreme events due to ongoing climate change. Addressing climate change and disaster impacts on human mobility across the country will require strategic planning and appropriate measures. In this regard, the need for effective data collection and management systems remains key to informed policies, climate adaptation, and disaster preparedness, response and recovery. To promote coherent data collection where that has not yet been streamlined, this section gives an overview of the major gaps and limitations in data availability that have been identified amongst the distinct national agencies and departments examined as part of this study. Besides the gaps, the section also identifies opportunities as a basis to outline guidelines and recommendations to enhance the availability, quality and accessibility of data on climate change and disaster-related human mobility in Saint Kitts and Nevis.

3.4.1. Identified data gaps in relation to the Immigration Department

With all persons arriving or departing, either by air or sea expected to fill out the generic entry/departure form, the established procedures at the various ports of entry and departure provide the opportunity to revise the data-collection processes to allow for the capture of information on the human mobility in the context of climate and environmental change and disasters. With regard to data collection on the topic by the Immigration Department, the following limitations were identified:

- i. Despite including purpose of the visit or seeking entry into Saint Kitts and Nevis, the immigration/customs form does not include climate- and environment-related stressors as options or possible reasons for movement.
- ii. There are no established protocols or procedures outlining the management and sharing of collected data within the Department. Although the data collected is periodically shared with the Department of Statistics, the extent to which data is managed and shared with other relevant national agencies is not clear.
- iii. The Immigration Department does not have any official database or established repositories. The data collected is normally hosted in the BMS and mainly limited to the number of passengers and residents entering or leaving the country (with no information on immigration and emigration). It does not make provision to capture environmental factors as potential drivers for seeking entry or moving.

3.4.2. Identified data gaps in relation to the Department of Statistics

Generating data on human mobility in the context of climate and environmental change and disaster depends not only on enhanced data collection, but also on the development of statistics and indicators on the environment and human mobility. Whereas statistics on the environment should encompass variables on climate risks and disasters, statistics on human mobility should include variables on migration, displacement and planned relocation, as well as acknowledging other aspects of mobility (for example, evacuation, and relocated or resettled populations). In this context, gaps and limitations on how the Department of Statistics collects, manages and disseminates data on the topic include:

- i. Despite being the main national agency in charge of developing statistics for national development planning and policy formulation, the Department of Statistics does not develop or present specific statistics or indicators on climate change and disasters (and related migration).
- ii. Aside from the collection and presentation of statistics on population and other socioeconomic aspects, there is no indication of statistics and indicators on climate-related migration and other forms of human mobility.

- iii. The 2011 population and housing census – individual/person/household questionnaires present questions related to migration, and specifically probes the reasons for moving. However, the individual questionnaire is the only one that makes provision for the capture of environmental factors as reasons for migration (“the weather”). In addition to not presenting a comprehensive written report for the 2011 population and housing census, except for the basic statistics presented on demographic dynamics, the collection of data on migration seems to have been done in a generic way. The analysis suggests that the primary focus was on the number of foreign-born individuals (net migration).
- iv. With household and other demographic (population-based) surveys conducted by the office at the national level, the questions presented often do not enable the collection of data on the climate and environmental change, disaster, and human mobility nexus. For instance, the 2015 labour force survey does not consider the role of environmental stressors in the decision to stop and/or quit an employment, and the 2006/2007 SLC-HBS does not consider the extent to which environmental stressors contribute to deteriorating living conditions (often leading to population movements).

3.4.3. Identified data gaps in relation to the National Emergency Management Agency

As the main agency that deals with disaster management, impact assessment and response, the development of data on the human mobility dimensions of disasters by NEMA is vital to planning, as well as ensuring a holistic approach to disaster response in Saint Kitts and Nevis. In view of this, there is a need to examine the state of disaster data collection and ways to promote the availability, quality and accessibility of information on disaster-induced displacement in the context of the NEMA. In terms of data collection, management and dissemination on the topic of disaster and impact on human mobility, a host of gaps and constraints have come to light:

- i. The NEMA does not have an established or set template for the development of the ISO (Stage 2 of the DANA Continuum; stages and procedures of the CDEMA DANA Continuum are detailed in the Regional Report).
- ii. Secondly, the PHICA form, used for Stage 3 (IDHNA) of the DANA Continuum, does not collect data directly linked to the human mobility dimension other than just compiling quantitative information on the extent and damage caused by a disaster.
- iii. Also, the NEMA does not have any identifiable or established official database or repository on disaster that could serve as a reference or portal that could be readily accessed by any relevant national agency and interested party.

4. GUIDELINES FOR IMPROVED AND STANDARDIZED DATA ON THE CLIMATE AND ENVIRONMENTAL CHANGE, DISASTER AND HUMAN MOBILITY NEXUS IN SAINT KITTS AND NEVIS

The need for enhanced data collection and to establish reliable databases has widely been acknowledged as critical to evidenced-based policies, development planning, climate adaptation and effective disaster preparedness and response. Given the lack of clear definitions and parameters surrounding the climate and environmental change, disaster, and human mobility nexus, the generation of data and evidence on the topic calls for proactive actions. In addition to establishing harmonized databases, this report recommends that the distinct national agencies consider developing common methodologies and protocols (both at national and regional levels) to enable harmonized data collection, management and dissemination. These guidelines and opportunities are further elaborated in the Regional Report.

The following activities or guidelines are proposed to enhance data on human mobility in the context of climate, disaster and other environmental changes in Saint Kitts and Nevis. They include the necessary first steps and effective ways to identify and develop a baseline for data availability, quality and accessibility at the national level. This would allow for collaboration, as well as promote a system to support the generation of comparable data, analysis and reports for policy.

Step 1: *Coordinate and exchange information for improved decision-making.*

Objective: *Contribute to evidence-based decision-making process through the development of a TWG to promote regular information exchange and strengthened coordination of migration, environment, disaster and climate change data at the national level.*

Developing a common set of protocols and methodologies for data collection using similar indicators requires effective coordination and cooperation amongst national agencies. As a first step, therefore, the three main national agencies (Immigration Department, Department of Statistics and NEMA) could consider establishing a TWG. This TWG could be tasked with coordinating or having oversight over data collection in relation to questions of human mobility in the context of climate and environmental change and disaster in Saint Kitts and Nevis. A national TWG of this kind could contribute to maintaining focus on addressing the impact of climate change and disaster on human mobility. The activities of the TWG could also allow for transparency across agencies as basis for building and sharing reliable data for informed policymaking and decision-making. This could be done in collaboration with, or with the support of, international and regional organizations such as IOM and in particular GMDAC to help establish the structures and build capacity.

To facilitate its work, the TWG could be a network of national migration, environment, disaster and climate change data focal points. This could include officers from the Immigration Department, Department of Statistics and NEMA, as well as representatives from all national agencies dealing with data collection, management and dissemination. The TWG could designate an official with expertise in data management as a liaison between national authorities and the TWG. Alternatively, a regular task force could foster cooperation and promote effective liaison between the TWG and other national agencies producing data.⁴

⁴ See Section 6 of the Regional Report for elaboration on this activity.

Step 2: *Adopt new practices and common protocols that harmonize with regional and international standards.*

Objective: *Assist in establishing new practices and developing common methodologies and protocols that harmonize with international and regional standards on migration, environment, disaster and climate change data.*

Procedures that guide the collection, management and dissemination of data on the topic of climate and disaster-related mobility at the national level could be standardized. The focus for this could be developing protocols with harmonized methodologies to be employed by the national agencies. The common protocols and methodologies could be guided by or aligned with international standards, and they could be drafted using glossaries with standardized indicators, categories and concepts for data collection (see Section 6 of the Regional Report for further details), as outlined by the United Nations Statistical Commission's Decisions on International Migration Statistics (UNSC, 2021:19), as well as the ILO guidelines concerning statistics of international labour migration (ILO, 2018). As an example, data indicators highlighted in Box 2 of the Regional Report could also serve as pointers or reference for the collection of data on climate and environmental change and disaster-related mobility at the national level.

Step 3: *Establish thematic data collection and management processes.*

Objective: *Foster availability and quality of migration, environment, disaster and climate change data management process.*

In regard to aspects of data collection and compilation at the national level, the Immigration Department could take up responsibility as the lead agency for coordinating the collection of data on cross-border movements associated with climate and other environmental changes, including disaster at the regional scale. By revising its immigration/customs form, the Department could ensure the incorporation of distinct environmental factors amongst the options on purpose of visit or stay. That is, state explicitly not only disaster-related impact, but also other environmental changes (such as weather conditions, food scarcity, soil erosion/fertility, deterioration of livelihoods) as reasons for seeking entry.

On the part of the NEMA, the focus could be more on gathering data on (forced) internal population movements as a result of disasters and related emergencies. The predetermined form that CDEMA provides for the development of IDHNA (Stage 3 of the DANA Continuum) presents an opportunity in terms of quantifying disaster impact. As such, revising or adapting the current forms being used could facilitate the collection of disaggregated data (such as by age and sex), information related to human casualties (such as deaths, injured and missing people) and houses that have been damaged or destroyed. It could also facilitate effective accounting of human mobility (number of displaced, evacuated and relocated persons) at the national level.

Additionally, the collection of data related to human mobility in the context of slow-onset processes could also be strengthened. This aspect has been proven to be more difficult to capture by national departments related to migration and disaster management. Available data is usually related to rapid-onset events and focused more on the emergency moment. The focus is mostly on evaluating, for instance, evacuation and housing damages. Nevertheless, attention may also be shifted to promoting data collection and analysis of population movements that are more likely instigated by slow-onset events like drought, which most often tend to affect more people on aggregate as compared to rapid-onset events. In view of their distinct nature, information on human mobility related to slow-onset processes could be captured by the Department of Statistics through regular household and other demographic (population-based) surveys or environmental statistics compendiums. For instance, the Department could consider (depending on availability of necessary resources) conducting regular surveys dedicated to assessing human mobility patterns, where the associated slow-onset processes (for example, sea level rise, coastal erosion/salinization, land degradation) and impact on mobility could be one critical thematic focus.

As revealed by this study, none of the three national agencies have a specific repository for data storage. But with financial constraints often a challenge to enhanced data collection, management and

dissemination, the data initially compiled by the Immigration Department, Department of Statistics and NEMA could be integrated and synchronized in a common database under the responsibility of the Department of Statistics. In this way, the Department of Statistics could take up the responsibility for processing all the information provided in a systematic way. As part of the process, provision could be made to enable the production of statistics and indicators on all the dimensions of human mobility in the context of climate change and other environmental impacts. For this reason, data collected should easily be convertible to statistics, in line with the recommendations advanced by EGRIS (European Union and United Nations, 2018b), as well as on international migration statistics (UNSC, 2021).

Step 4: *Arrange for the Department of Statistics to disseminate statistical outputs on human mobility in the context of climate change and other environmental impacts and raise awareness.*

Objective: *To enhance knowledge on the linkages between migration, environment, disaster and climate change and to make the statistics produced/generated by the Department of Statistics available and accessible for wider use.*

Once the data have been processed, the Department of Statistics could – in its periodic reports – dedicate specific sections to analysis and presentation of the human mobility situation in the context of climate change and other environmental impacts in Saint Kitts and Nevis. This analysis, and the generation of compendiums and reports, could take place in close collaboration with other data providers like the Immigration Department and NEMA. In line with this, establishing a timetable, as well as a uniform format or structure for the reports, would be desirable. This could facilitate the production of a national profile when it comes to data on the topic. These reports could be designed in a way that enables their (electronic) availability to the general public and other relevant stakeholders. In this sense, the development of (extra) internal reports would guarantee the confidentiality of possible sensitive information.

As a start, the Department of Statistics could take advantage of already-existing data on the topic, mostly provided by international databases (see Annex I in the Regional Report) to create a national portal or platform. This could serve as a first step and basis to continuously refine and integrate critical aspects or themes of interest in building a robust and reliable thematic national database.

Step 5: *Develop comprehensive legal and policy frameworks at the national level for enhanced mobility governance.*

Objective: *To effectively manage human mobility in the context of climate change and other environmental impacts.*

Implementing the aforementioned steps would enable the development of a country-specific profile on human mobility in the context of climate change and other environmental impacts in Saint Kitts and Nevis. This could in turn foster evidence-based policy formulation that considers all relevant aspects related to human mobility. Hence, in addition to acknowledging the topic in national policy and legal frameworks, the robust and reliable set of data generated in the country could facilitate the establishment of effective measures and strategies through informed planning and decision-making. For instance, disaster preparedness measures, as part of broader DRR strategies, can significantly increase resilience and reduce the need to move.

Furthermore, measures or strategies could also be instituted to enhance knowledge and data production through capacity-building, extensive scientific research and data collection on the impacts of climate and other environmental changes in Saint Kitts and Nevis. Besides establishing adequate funding mechanisms, the national Government could consider providing and applying the state-of-the-art technology to support research, data collection and hosting as crucial elements to enhance data reliability and security. Regular, extensive research and use of different methodologies could facilitate better insights into the dynamics of human mobility in disaster or emergency situations, as well as a much more comprehensive capture of data on the topic. The availability of credible and reliable data would contribute to disaster response, planning and development of adaptation strategies at the national level.

5. CONCLUSION AND RECOMMENDATIONS FOR ENHANCED DATA COLLECTION, MANAGEMENT AND DISSEMINATION

This report is an assessment of Saint Kitts and Nevis' national data systems in relation to migration, environment, climate change and disaster to identify strengths, weaknesses and opportunities to enhance the collection, management and dissemination of data on human mobility in the context of climate and environmental change and disasters. Whilst data on the topic is still scant at the national level, the development of country-specific, disaggregated and comprehensive data on climate- and disaster-related human mobility in Saint Kitts and Nevis calls for coordination, collaboration and proactive actions amongst national agencies and departments (especially the Immigration Department, Department of Statistics and NEMA).

Generating information on climate change and disasters as potential drivers for population movements could be enabled by adjusting established forms and procedures at the existing ports of entry and departure in Saint Kitts and Nevis, developing specific statistics and indicators on environment and human mobility, and considering the status of human displacement and other forms of human mobility (such as evacuation and relocation) in the collection of disaster data. Data availability, quality and accessibility on the topic is key to helping the national Government plan and develop evidence-based and holistic policies and strategies. This would help to effectively address the negative impacts of climate and other environmental changes, as well as promote adequate disaster management at the national level. To promote and enhance the collection and availability of data on the climate and environmental change, disaster, and human mobility nexus in Saint Kitts and Nevis, the following strategies and recommendations are outlined for the three main relevant national agencies.

Strategies and recommendations for enhanced data collection, analysis and dissemination within the Immigration Department

The following actions are recommended for improved and standardized data-collection processes and data sharing systems on human mobility in the context of climate and environmental change and disaster within the frame of the Immigration Department:

- i. Encourage the revision of the immigration/customs form by incorporating environmental factors (such as weather conditions and disasters) amongst the options available in response to “purpose of the visit”. In this regard, climate- or disaster-related impacts could be listed amongst reasons for seeking entry.
- ii. The immigration/custom form already collects personal information – date and country of birth, nationality and home address – that enables the identification of CARICOM and OECS citizens. Whilst this helps to distinguish community citizens, the Department could consider integrating a field to allow for the capture of information on the sex or gender of persons arriving into or departing from the island. This could facilitate the collection of disaggregated data on the topic at the various ports of entry. This would help to plan, mobilize resources and target responses in the wake of a disaster. It could also help , for example, to ascertain housing needs, in the spatial planning of settlements and shelters, as well as informing planning in terms of health-care delivery.
- iii. The Department could also consider developing a robust data system or including new variables in the BMS. This would allow for hosting data not only on passenger arrivals and departures, but also immigration and emigration, as well as climate- and disaster-related mobility that may be detected at the ports. This could serve to be a one-stop national repository with data on mobility.

In this case other national agencies and the Department of Statistics could draw on this proposed repository to inform national development planning and policy processes.

- iv. To support the improvement and expansion of the BMS, the Department could consider prioritizing or enhancing the collection, analysis, reporting and sharing of environment-related migration data by designating an officer with responsibilities to monitor the process, as well as facilitating capacity-building. Complementary capacity-building for officials through training and acquisition of software tools and technology would contribute to improving the data collection and management system of the Department. The prioritization could be complemented by developing methodologies and common protocols that clarify how data could be collected at the existing ports of entry, as well as how this information could be subsequently managed and disseminated.
- v. The BMS could also be harmonized with the systems of other national agencies or Eastern Caribbean States that collect related data on mobility. Expanding and harmonizing the BMS with other national agencies would help to establish a common database that covers the different dimensions of mobility (such as climate and environmental change and disaster mobility). This common data system could help mitigate information duplication and, hence, improve the quality of the data being collected.

Strategies and recommendations for enhanced data collection, analysis and dissemination within the Department of Statistics

In view of the gaps and constraints in terms of data collection and availability, the following recommendations are proposed to strengthen statistical information on migration, environment, disaster and climate change in Saint Kitts and Nevis:

- i. In addition to the statistics regularly generated on population and other socioeconomic aspects at the national level, the Department could also develop specific statistics on the environment and related indicators on climate change and disasters. These statistics could also focus on the human mobility dimension. Given that the Department is already planning to integrate disaster impact as one of the reasons for migration in all upcoming data-collection processes, considerations could be made for detailed disaggregation (such as age and sex) and defined categories (such as displaced, evacuated and relocated people). Similarly, indicators relating to climate change could include different aspects such as drivers, impacts and adaptation, with specific focus on vulnerable communities (see UNSC, 2018a).
- ii. The next census questionnaires could be designed (or revised) to allow for the visibility and capture of data on human mobility categories, such as internal and cross-border migration, displacement, relocation, as well as other forms of movement. Specific questions related to the reason or motivation that led to international migration and/or internal displacement or migration in the census activity could include environmental aspects (such as weather conditions, disasters) in the response options. Although the individual questionnaire deployed for the 2011 population and housing census in Saint Kitts and Nevis included environmental factors (“the weather”) in the question related to migration, the queries in the next census questionnaire could further be elaborated by taking the population censuses of Colombia and Ethiopia (2018), Djibouti (2005), and Somalia (2013/2014) as examples (see UNSC, 2020:51–54).

With the questionnaire that was prepared for the Ethiopia population census, for example, there was a specific question on “reasons for migration”. The options or responses presented included: “search for job”; “join family”; “education, marriage/divorce”; “drought/environmental degradation”; “dispute/conflict”; “health” and “other”. Similarly, the 2005 Djibouti population census also asked about “years at place of residence. Last place of residence, reason for move.” The options provided as responses included: “professional reasons (hiring, transfer, establishment of business)”; “urgent reasons (drought, flooding, food shortages, war)”; “personal reasons (family reunification, health reasons)”; “school reasons”; “seeking amenities”. These are national censuses that could provide good and practical references in formulating the questionnaires of upcoming population censuses

in Saint Kitts and Nevis. This would also help capture data that also accounts for environmental factors as drivers for movement.

- iii. In regard to upcoming and subsequent household surveys and other demographic (population-based) surveys, emphasis could be placed on not only the collection of data on the human mobility dimension, but also disaggregated data collected on a regular basis (see UNHCR, 2019). As already successfully piloted in the Péten-Guatemala (Grandia et al., 2001; Laczko and Aghazarm, 2009), household demographic and welfare surveys could endeavour to incorporate queries about climate and environmental risks and migration into the respective questionnaires (UNSC, 2018b). In particular, the next labour force survey could, for instance, consider integrating queries on both the role of environmental factors in the decision to migrate or possible reasons for quitting/changing jobs. This could enable the collection of data on people who became unemployed because of climate and other environmental changes. Similarly, the next SLC-HBS to be conducted by the Department could ask specific questions that allow for data on individuals' perception of environmental factors and disasters, as well on the impacts of those factors on livelihoods, economic situation, security and possible influence on the decision to move.
- iv. To ensure that data collected are of good quality and reflect current developments, population-based surveys (covering, for example, the population's living conditions) could be conducted on a "regular" basis. Depending on the availability of resources, a design to conduct regular surveys would support the development of a robust and reliable database to support informed decision-making and planning. As a strategy, the Department of Statistics could consider allocating some funding and resources to conduct specific surveys that could be dedicated to only assessing human mobility patterns. This would enable the production of detailed information associated with climate and other environmental changes (including disasters), contributing to decision-making and planning at the national level.

Strategies and recommendations for enhanced data collection, management and Dissemination within the National Emergency Management Agency

The following actions are recommended to improve and standardize data on disaster displacement in the context of the NEMA:

- i. The NEMA could consider exploiting the opportunity presented by the predetermined form from CDEMA to develop an ISO. The ISO form has a specific field on "no. of people in shelters", "displaced populations" and "others".⁵ Revising this field and deploying the form in the wake of a disaster could help to collect information on displacement, evacuation and persons who may have relocated or forced to move in this context.
- ii. Other than the information on houses damaged and destroyed that the PHICA Form collects as part of the IDHNA (Stage 3 of the DANA Continuum), the form could be revised to facilitate the effective accounting of human casualties (deaths, injured and missing people), as well as of the human mobility dimension (number of displaced, evacuated and relocated persons). This could be complemented by also developing proxies to determine displacement instigated by disasters, if it is not possible to directly capture data on persons who may have fled or been forced to move as a result of an emergency.
- iii. The NEMA could develop a common national database on disaster data from which the information compiled and kept in the format of reports could be managed and disseminated. This common repository could allow for the validation of data collected, and to also present data on the human mobility dimensions of disaster in Saint Kitts and Nevis.
- iv. To ensure that the proposed national disaster database is robust and up-to-date, there is a need to establish, validate and harmonize methodologies and protocols on how to collect, manage and

⁵ See Annex III in the Regional Report.

disseminate raw data on disaster at the national level (with standardized/common categories and definitions). The harmonized methodologies and protocols should clearly highlight the criteria for categorizing human damage (ensuring, among other things, the incorporation of a specific category on displacement) (see European Union and United Nations, 2018a). This could guide the activities of all the national actors involved in the collection of disaster data, and also offer opportunities for data cleaning and for ensuring high quality data.

GLOSSARY

Arrival/departure card: “A card filled out for customs, and immigration and emigration procedures by an individual prior to or upon arrival in or departure from the country of destination and presented (along with identity documents and, if requested, a visa) to officials at the border crossing point” (IOM, 2019:11).

Climate migration: “The movement of a person or groups of persons who, predominantly for reasons of sudden or progressive change in the environment due to climate change, are forced to leave their habitual place of residence, or choose to do so, either temporarily or permanently, within a State or across an international border” (IOM, 2019:31).

Disaster Displacement: “The movement of persons who have been forced or obliged to leave their homes or places of habitual residence as a result of a disaster or in order to avoid the impact of an immediate and foreseeable natural hazard” (IOM, 2019:51).

Disaster: “A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts” (IOM, 2019:50).

Displacement: “The movement of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters” (IOM, 2019:55).

Emigration: “From the perspective of the country of departure, the act of moving from one’s country of nationality or usual residence to another country, so that the country of destination effectively becomes his or her new country of usual residence” (IOM, 2019:64).

Entry: “In the migration context, any crossing of an international border by a non-national to enter into a country, whether such a crossing is voluntary or involuntary, authorized or unauthorized” (IOM, 2019:64).

Environmental migration: “A person or group(s) of persons who, predominantly for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are forced to leave their places of habitual residence, or choose to do so, either temporarily or permanently, and who move within or outside their country of origin or habitual residence” (IOM, 2019:65).

Evacuation: “Facilitation or organization of transfer of individuals or groups from one area/locality to another in order to ensure their security, safety and well-being” (IOM, 2019:65).

Hazard: “A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation” (IOM, 2019:89).

Human mobility: “A generic term covering all the different forms of movements of persons. Note: The term human mobility reflects a wider range of movements of persons than the term “migration”. The term is usually understood as encompassing also tourists that are generally considered as not engaging in migration. As an example of the emergence of this term, the international organizations members of the Advisory Group on Climate Change and Human Mobility created in the context of the Parties of the UN Framework Convention on Climate Change have started to use the term human mobility to cover all the broad range of types of movements that can take place in the context of climate change” (IOM, 2019:93).

Immigration: “From the perspective of the country of arrival, the act of moving into a country other than one’s country of nationality or usual residence, so that the country of destination effectively becomes his or her new country of usual residence” (IOM, 2019:103).

Migration: “The movement of a person or a group of persons, either across an international border, or within a State. It is a population movement, encompassing any kind of movement of people, whatever its length, composition and causes; it includes migration of refugees, displaced persons, economic migrants, and persons moving for other purposes, including family reunification” (IOM, 2014b:13).

Migration management: “A term used to encompass numerous governmental functions within a national system for the orderly and humane management for cross-border migration, particularly managing the entry and presence of foreigners within the borders of the State and the protection of refugees and others in need of protection. It refers to a planned approach to the development of policy, legislative and administrative responses to key migration issues” (IOM, 2014b:15).

National: “A person having a legal bond with a State” (IOM, 2019:143).

Net migration: “Net number of migrants in a given period, that is, the number of immigrants minus the number of emigrants” (IOM, 2019:146).

Planned relocation: “In the context of disasters or environmental degradation, including when due to the effects of climate change, a planned process in which persons or groups of persons move or are assisted to move away from their homes or place of temporary residence, are settled in a new location, and provided with the conditions for rebuilding their lives” (IOM, 2019:157).

Residence: “The act or fact of living in a given place for some time; the place where one actually lives as distinguished from a domicile. Residence usually means bodily presence as an inhabitant in a given place” (IOM, 2019:184).

Visitor: “In the migration context, the term is used in some national legislation to designate a non-national authorized to stay temporarily on the territory of a State without participating in a professional activity” (IOM, 2019:228).

ANNEXES

ANNEX I. LIST OF REGIONAL STAKEHOLDERS AND NATIONAL DEPARTMENTS INVOLVED IN THE QUESTIONNAIRE ACTIVITY

REGIONAL	
Stakeholder	Department
Organisation of Eastern Caribbean States (OECS)	Climate Change and Disaster Resilience Unit (CCDRU)
Caribbean Community (CARICOM)	Secretariat
Africa Caribbean Pacific (ACP) Group of States	Special Committee on Disaster Risk Reduction
Global Climate Change Alliance (GCCA)	Caribbean Planning for Adaptation to Climate Change Project (CPACC)
Caribbean Portal for Migration Governance (CPMG)	Secretariat
Caribbean Disaster Emergency Management Agency (CDEMA)	Secretariat
Caribbean Natural Resources Institute (CANARI)	Secretariat
University of the West Indies (UWI)	The Disaster Risk Reduction Centre (DRRC) – Institute for Sustainable Development
Caribbean Policy Development Centre (CPDC)	Secretariat
United Nations Office for Disaster Risk Reduction (UNDRR)	Regional Office for the Americas and the Caribbean

National	
Country	Department
Antigua and Barbuda	Department of Immigration
	Statistics Division
	National Office for Disaster Services (NODS)
Dominica	Immigration Division
	Central Statistics Office
	Office of Disaster Management (ODM)
Grenada	Immigration and Passport Department
	Central Statistics Office
	National Disaster Management Agency (NaDMA)
Saint Kitts and Nevis	Immigration Department
	Department of Statistics
	National Emergency Management Agency (NEMA)
Saint Lucia	Immigration Department
	Central Statistical Office
	National Emergency Management Organisation (NEMO)
Saint Vincent and the Grenadines	Passport and Immigration Department
	Statistical Office
	National Emergency Management Organisation (NEMO)

ANNEX II. POST-HAZARD IMPACT COMMUNITY ASSESSMENT FORM

St. Kitts-Nevis National Emergency Management Agency (NEMA)

Post Hazard Impact Community Assessment Form

1. Event: _____ Date of Event: _____ District No.: _____
2. Name (Head of Household-HOH): _____ Male/Female
3. Alias(es) /Nick Name(s): _____ Age/Range: _____
4. Address: _____
5. Contact Numbers a) Home: _____ b) Work: _____ c) Cell: _____
6. Employer/Workplace: _____

(a)Address: _____

Wg/Sal.	Med. Cond.	Disabilities

(b)Occupation: _____

7. List ALL additional family members who occupy this household. Ensure the list includes the employed, dependents, and persons with medical conditions and disabilities. (Fold bottom of form and see codes attached.)

First Name	Last Name	Sex	Age / Age Range	*Employer / Workplace	Wage/ Salary	Med. Cond.	Disabilities

8. a) Level of damage to the house: _____ b) Describe damages: _____

Level 1 (Cosmetic)		_____
Level 2 (Repairable)		_____
Level 3 (Structure intact)		_____
Level 4 (Destroyed)		_____

9. Do you own: a) House? _____ b) Land? _____. Is Home Insured? _____ Insurance Company: _____

10. Were any of the following services affected? If yes, explain how?
- A. Electricity YES ☐ NO ☐ _____
- B. Water YES ☐ NO ☐ _____
- C. Telephone YES ☐ NO ☐ _____
- D. Cable YES ☐ NO ☐ _____

11. List personal items lost during the event: _____

I hereby certify to the best of my knowledge that the information given here is completely true and accurate.

Interviewee's Name (print): _____ Signature: _____

Interviewer's Name (print): _____ Signature: _____

Date interview conducted: _____

Revised April 2019

St. Kitts-Nevis National Emergency Management Agency (NEMA)
Post Hazard Impact Community Assessment Form

1. Event: _____ Date of Event: _____ District No.: _____
2. Name (Head of Household-HOH): _____ Male/Female
3. Alias(es) /Nick Name(s): _____ Age/Range: _____
4. Address: _____
5. Contact Numbers a) Home: _____ b) Work: _____ c) Cell: _____
6. Employer/Workplace: _____
- (a)Address: _____
- (b)Occupation: _____
- | Wg/Sal. | Med. Cond. | Disabilities |
|---------|------------|--------------|
| | | |

7. List ALL additional family members who occupy this household. Ensure the list includes the employed, dependents, and persons with medical conditions and disabilities. (Fold bottom of form and see codes attached.)

First Name	Last Name	Sex	Age / Age Range	*Employer / Workplace	Wage/ Salary	Med. Cond.	Disabilities

8. a) Level of damage to the house: _____ b) Describe damages: _____

Level 1 (Cosmetic)	
Level 2 (Repairable)	
Level 3 (Structure intact)	
Level 4 (Destroyed)	

9. Do you own: a) House? _____ b) Land? _____. Is Home Insured? _____ Insurance Company: _____

10. Were any of the following services affected? If yes, explain how?
- A. Electricity YES ☐ NO ☐ _____
- B. Water YES ☐ NO ☐ _____
- C. Telephone YES ☐ NO ☐ _____
- D. Cable YES ☐ NO ☐ _____

11. List personal items lost during the event: _____

I hereby certify to the best of my knowledge that the information given here is completely true and accurate.

Interviewee's Name (print): _____ Signature: _____

Interviewer's Name (print): _____ Signature: _____

Date interview conducted: _____

Revised April 2019

ANNEX III. COLLECTION OF DATA BY OTHER NATIONAL AGENCIES

Department	Data on the climate and environmental change, disaster, and human mobility nexus	Data collected associated with the human mobility dimension	Data storage (Database)	Limitations to enhanced data collection, management and dissemination	Recommendations for enhanced data collection, management and dissemination
Ministry of Foreign Affairs and Aviation	No	Demographic statistics (i.e. age, sex, occupation) on nationals overseas.	No	Lack of human, financial and technological capacities.	Data on climate or disaster-induced mobility could be captured by probing questions on the reasons/ purposes for living abroad or returning to Saint Kitts and Nevis. These questions could include environmental factors, such as weather conditions and disasters, as possible options.
Ministry of Health, Social Services, Community Development, Culture and Gender Affairs	No	Data on the human mobility dimension includes general declaration of health for persons arriving by air/sea, as well as the health status and demographic details of persons on board (particularly those who are sick).	No	Lack of human, financial and technological capacities.	Information gathered by the Ministry could be further explored, enabling the collection of data on the number of people in need of health assistance in the wake of a disaster, i.e. the number of injured and dead people as a result of an emergency. This could be done in collaboration with established agencies, like the NEMO, which already collates data on the number of injured and dead people during and in the aftermath of disasters.
Ministry of Tourism and Ports (Saint Kitts Tourism Authority)	No	Data collected includes: cruise visitor arrivals per month and per year; type of accommodation; estimated expenditure; number of days visited; activities done during the visit; among others. It also uses the information provided by the Immigration Department through the ED Card.	No	Lack of human, financial and technological capacities.	In collaboration with the Immigration Department, Saint Kitts Tourism Authority could consider revising the "Immigration/Custom Form". The revision could incorporate environmental factors (e.g. weather conditions and disasters) among purposes of the visit. Furthermore, the mandate of the national Tourism Authority in primarily focusing on tourism development could be revised or extended to include the collection of data on the human mobility dimensions of disasters and related emergencies.

ANNEX IV. QUESTIONNAIRE – NATIONAL LEVEL

Regional Dialogue to Address Human Mobility and Climate Change Adaptation in the Eastern Caribbean

Migration, Environment and Climate Change Data

Antigua and Barbuda, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia,
and Saint Vincent and the Grenadines

Diogo Andreola Serraglio

Stephen Adaawen

Benjamin Schraven

September 2020

Project

Regional Dialogue to Address Human Mobility and Climate Change Adaptation in the Eastern Caribbean – Migration, environment and climate change data.

Duration

From September 2020 to April 2021.

Organizational Context and Scope

Established in 1951, IOM is the leading UN Agency in the field of migration and works closely with governmental, intergovernmental and non-governmental partners. IOM is dedicated to promoting humane and orderly migration for the benefit of all. It does so by providing services and advice to governments and migrants.

The "Regional Dialogue to Address Human Mobility and Climate Change Adaptation in the Eastern Caribbean" project aims to build a regional dialogue series in Eastern Caribbean States that will enhance governments' capacities to collect, analyse and utilize data on human mobility and vulnerability derived from environmental change. The project is implemented by IOM in six independent member states of the Organization of Eastern Caribbean States (OECS), namely Antigua and Barbuda, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines.

Objective

Assessment of national and regional data systems of the six countries in relation to migration, environment and climate change to identify strengths, weaknesses and opportunities to enhance available evidence on environmental migration.

Methodology

Conduct six migration, environment and climate change data assessment through a questionnaire for expert interviews and desk review of existing sources of information and data sharing mechanisms on environmental migration for each of the six countries: Antigua and Barbuda, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines.

Expected Results

Development of technical guidelines on migration, environment and climate change data, as well as a data workshop for each of the six countries.

QUESTIONNAIRE

National Level

This questionnaire aims to investigate existing sources of information and data sharing mechanisms on migration, environment and climate change in the Eastern Caribbean States, with special attention to six selected countries – Antigua and Barbuda, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines – providing an overview of how data related to human mobility in the context of climate and other environmental changes has been collected, managed and disseminated.

IOM Glossary

Key definitions on migration, environment and climate change¹

Climate migration: “The movement of a person or groups of persons who, predominantly for reasons of sudden or progressive change in the environment due to climate change, are forced to leave their habitual place of residence, or choose to do so, either temporarily or permanently, within a State or across an international border. *Note:* This is a working definition of the International Organization for Migration with an analytic and advocacy purpose which does not have any specific legal value. Climate migration is a subcategory of environmental migration; it defines a singular type of environmental migration, where the change in the environment is due to climate change. Migration in this context can be associated with greater vulnerability of affected people, particularly if it is forced. Yet, migration can also be a form of adaptation to environmental stressors, helping to build resilience of affected individuals and communities.”

Disaster Displacement: “The movement of persons who have been forced or obliged to leave their homes or places of habitual residence as a result of a disaster or in order to avoid the impact of an immediate and foreseeable natural hazard. *Note:* Such displacement results from the fact that affected persons are (i) exposed to (ii) a natural hazard in a situation where (iii) they are too vulnerable and lack the resilience to withstand the impacts of that hazard. It is the effects of natural hazards, including the adverse impacts of climate change, that may overwhelm the resilience or adaptive capacity of an affected community or society, thus leading to a disaster that potentially results in displacement. Disaster displacement may take the form of spontaneous flight, an evacuation ordered or enforced by authorities or an involuntary planned relocation process. Such displacement can occur within a country (internal displacement), or across international borders (cross-border disaster displacement).”

Disaster: “A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts. *Note:* The International Law Commission adopted the following alternative definition of disaster, which includes an express reference to mass displacement: ‘disaster’ means a calamitous event or series of events resulting in widespread loss of life, great human suffering and distress, mass displacement, or large-scale material or environmental damage, thereby seriously disrupting the functioning of society.”

Environmental migration: “A person or group(s) of persons who, predominantly for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are forced to leave their places of habitual residence, or choose to do so, either temporarily or permanently, and who move within or outside their country of origin or habitual residence. *Note:* There is no international agreement on a term to be used to describe persons or groups of persons that move for environment related reasons. This definition of environmental migrant is not meant to create any new legal categories. It is a working definition aimed at describing all the various situations in which people move in the context of environmental factors.”

¹ See 'International Organization for Migration (2019), Glossary on Migration, IML Series No. 34.'

Hazard: “A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation. *Note:* Each year millions of people are displaced by the adverse effects of natural hazards, such as floods, tropical storms, earthquakes, landslides, droughts, saltwater intrusion, glacial melting, glacial lake outburst floods, and melting permafrost. Of these, the great majority is displaced by weather- and climate- related hazards. The largest increases in displacement resulting from the effects of natural hazards are related to sudden-onset weather and climate-related hazards, and floods in particular. In addition, people are increasingly forced to move because of the slow-onset effects of sea level rise, desertification or environmental degradation. Climate change, combined with people’s increasing exposure and vulnerability, is expected to magnify these trends, as extreme weather events become more frequent and intense in the coming decades.”

Human mobility: “A generic term covering all the different forms of movements of persons. *Note:* The term human mobility reflects a wider range of movements of persons than the term ‘migration’. The term is usually understood as encompassing also tourists that are generally considered as not engaging in migration. As an example of the emergence of this term, the international organizations members of the Advisory Group on Climate Change and Human Mobility created in the context of the Parties of the UN Framework Convention on Climate Change have started to use the term human mobility to cover all the broad range of types of movements that can take place in the context of climate change.”

Planned relocation: “In the context of disasters or environmental degradation, including when due to the effects of climate change, a planned process in which persons or groups of persons move or are assisted to move away from their homes or place of temporary residence, are settled in a new location, and provided with the conditions for rebuilding their lives. *Note:* The term is generally used to identify relocations that are carried out within national borders under the authority of the State and denotes a long process that lasts until relocated persons are incorporated into all aspects of life in the new setting and no longer have needs or vulnerabilities stemming from the Planned Relocation.”

Vulnerable group: “Depending on the context, any group or sector of society (such as children, the elderly, persons with disabilities, ethnic or religious minorities, migrants, particularly those who are in an irregular situation, or persons of diverse sex, sexual orientation and gender identity (SSOGI)) that is at higher risk of being subjected to discriminatory practices, violence, social disadvantage, or economic hardship than other groups within the State. These groups are also at higher risk in periods of conflict, crisis or disasters.”

‘Trapped’ populations: “Populations who do not migrate, yet are situated in areas under threat, [...] at risk of becoming ‘trapped’ or having to stay behind, where they will be more vulnerable to environmental shocks and impoverishment. *Note:* The notion of trapped populations applies in particular to poorer households who may not have the resources to move and whose livelihoods are affected.”

Personal and contact information

1. Respondent information

- 1.1. Name of respondent: _____
- 1.2. Gender of respondent: _____
- 1.3. Job title of respondent: _____
- 1.4. National department/agency of respondent: _____
- 1.5. Country: _____

General overview on the impacts of climate change at the national level

2. How would you assess the severity of the impact of climate change in the country?

No/hardly any impact	Little impact	Medium impact	Severe/significant impact	Very severe/devastating impact
1	2	3	4	5

Comments:

3. What are the current/recurring impacts of climate change – disasters – in the country? Please tick as appropriate.

Climate-related “disaster”/“hazard” in the region	Frequency in the past two decades (2000–2020)		
	Does not/hardly occurs ²	Occurs occasionally ³	Occurs frequently ⁴
Hurricane			
Drought			
Heat wave			
Coastal inundation (sea level rise)			
Flash flood			
Landslide			
Fires			
Others: ⁵ _____			

4. Are you aware of any scientific projections on the nature and impacts of climate change in the country? (a) Yes _____ (b) No _____

4.1. If yes, please describe, and please share relevant documents.

² “Does not/hardly occurs” – not occurring at a regular interval, not often, seldom, rarely.

³ “Occasionally” – occurring from time to time, now and then, once in a while, irregularly at infrequent intervals.

⁴ “Occurs frequently” – frequent intervals.

⁵ Others may include geophysical activities (earthquakes, volcanic activity), disease or civil strife.

5. What are the main sources of information about the impacts of climate change and other climate-related risks in the country? (If possible, please list some of the relevant documents.)

5.1. Do you know if these sources capture or account for human mobility in the context of climate and other environmental changes? If yes, how?

6. Do these sources account and/or capture “human mobility” related to climate and other environmental changes? (a) Yes _____ (b) No _____

6.1. If yes, how is the impact of climate and other environmental changes on mobility captured (e.g. by event, type or nature of mobility)? Please explain.

6.2. If no, why not? Please explain.

7. At the national level, are there certain groups of people/communities that are most vulnerable to climate and other environmental changes? If yes, which groups of people/communities, and why?

National Disaster Risk Reduction (DRR) Policy Framework

8. Does the country have specific policy and legal frameworks dealing with DRR?

(a) Yes _____ (b) No _____

8.1. If yes, please name and list them.

9. Do these national legal frameworks recognize and address “human mobility” in the context of climate and other environmental changes (rapid and/or slow onset events/processes)?

(a) Yes _____ (b) No _____

9.1. If yes, in what context and how?

10. Which state actor is responsible for reporting the implementation of the United Nations Office for Disaster Risk Reduction (UNDRR) at the national level?

National Migration Policy Framework

11. Does the country have specific policy and legal frameworks dealing with migration and related issues? (a) Yes _____ (b) No _____

11.1. If yes, please name and list them.

12. Do these national legal frameworks recognize and address “human mobility” in the context of climate and other environmental changes (rapid and/or slow onset events/processes)?

(a) Yes _____ (b) No _____

12.1. If yes, in what context and how?

13. Which state actor is responsible for reporting the implementation of the Global Compact on Safe, Orderly and Regular Migration at the national level?

14. In the case of cross-border movements, who is responsible for data collection?

Official Sources of Information and Data Sharing Mechanisms at the National Level

15. Do national legal frameworks on DRR and migration – listed above – establish or make provisions for data sharing mechanisms on migration, environment and climate change?

(a) Yes _____ (b) No _____

15.1. If yes, please indicate.

16. Which are the main agencies or actors on DRR and migration responsible for collecting, managing and disseminating data on migration, environment and climate change at the national level?

16.1. Which are – please name – the main actors in the field of:

- (a) Migration, population statistics and related issues? Do they collect data related to ‘human mobility’ in the context of climate and other environmental changes?

- (b) Climate and other environmental changes? (e.g. Climate/Environment Agencies/Departments) Do they collect data related to “human mobility” in the context of climate and other environmental changes?

- (c) How do the existing actors at the national level cooperate and/or exchange information about data and data collection?

17. To the best of your knowledge, what are the methodologies and means by which data and related information on environment/climate change-related migration is collected, analysed, shared and disseminated? (e.g. Format: anonymized, report, raw data; Collection: paper and/or electronic record.)

18. Are there any specific forms or templates to collect the data? (a) Yes _____ (b) No _____

* If yes, please attach a sample to the (submitted) questionnaire.

19. How do the national legal frameworks on DRR and migration (if at all) define or conceptualize “human mobility” related to climate and other environmental changes?

19.1. Migration:

19.2. Displacement:

19.3. Planned Relocation:

20. In what way or to what extent do the legal framework on DRR and migration integrate data on climate/environmental-related “human mobility” (migration, displacement and planned relocation) in the existing data sharing mechanism or related source of information?

21. Is the data on “human mobility” – if existing – disaggregated? (e.g. age, duration, location, nationality, sex, others.) (a) Yes _____ (b) No _____

21.1. Please outline disaggregation categories.

22. Is human mobility data monitored and updated, or is it limited to the emergency moment – post-disaster? If yes, how frequently is data revised and updated?

23. What are the main constraints or challenges to effective data collection, analysis and sharing on climate-related migration?

Secondary Sources of Information and Data Sharing Mechanism at the National Level

24. Are you aware of any secondary – or unofficial – sources of information and data-sharing mechanisms for “human mobility” (migration, displacement and planned relocation) in the context of climate and other environmental changes at the national level? (a) Yes _____ (b) No _____

24.1. If yes, please list them:

Source	Responsible agency/actor for collecting data	Type/kind of data collected	Frequency of data collection	Disaggregated? (Yes/no)	Climate/environment-related data? (Yes/no)

25. Do you or your agency make use of these data sources? (a) Yes _____ (b) No _____

25.1. If yes, how or for what purposes?

Overview of Information and Data Sharing Mechanisms at the National Level

26. Looking at the available sources of information and data sharing mechanisms on “human mobility” (migration, displacement and planned relocation) in the context of climate and other environmental changes at the national level:

26.1. What synergies do you see?

26.2. What are the gaps and inconsistencies?

27. How do you see or rate the status of data on “human mobility” in the context of climate and other environmental changes at the national level? Please insert a check mark in the appropriate box:

1. Insufficient	2. Bit better	3. Adequate	4. Sufficient	5. Very sufficient

Comments:

Options at enhancing effective data collection and sharing

28. What options, strategies or measures could be considered in improving data collection and sharing on “human mobility” in the context of climate and other environmental changes at the regional level and regionally?

29. In what way could the strategies listed be deployed to adequately capture climate/environment-related migration for informed decision or policymaking?

30. Do you have any other suggestions, comments or opinions to add?

Case Studies of Human Mobility in the Context of Climate and Environmental Changes
Involving Sources of Information and/or Data Sharing Mechanisms

31. List examples of cases of “human mobility” associated with climate and other environmental changes at the national level, with the following information:

31.1. Location of the event: _____

31.2. Type of event (rapid- or slow-onset process): _____

31.3. Duration of the event: _____

31.4. Source of information and/or data sharing mechanism used to collect data on “human mobility” (migration, displacement and planned relocation) in the context of climate and other environmental changes at the national level?

31.5. Number of displaced people: _____

31.6. Measures taken by national authorities (if any):

31.7. Current displacement situation (return, relocation, shelters, other):

* Add other relevant references and sources related to the case study.

Thank you!

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