



Government of Barbados

Damage Assessment and Needs Analysis Plan

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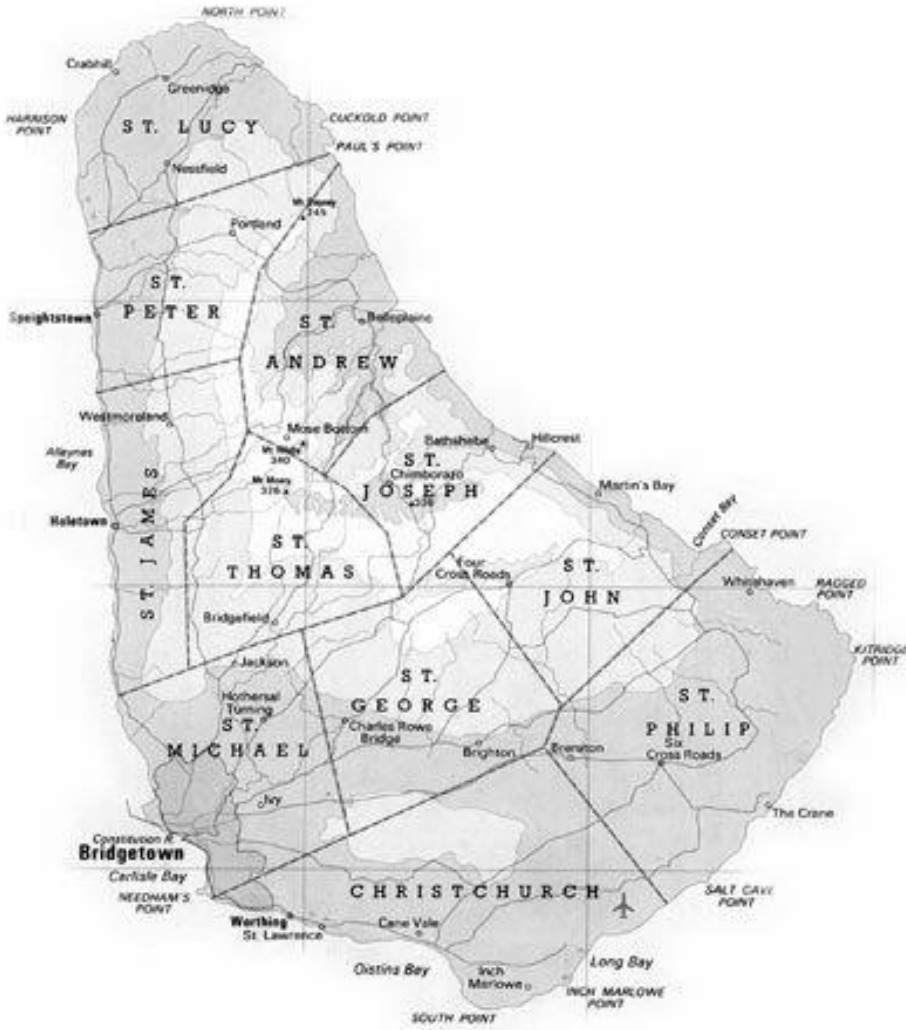
Emergency
Management Plan

*Approved by Emergency
Management Advisory Council*

[Date of Approval]

Approved by the Cabinet of Barbados

[Date of Approval]



CONTENTS

	Page
BARBADOS DAMAGE ASSESSMENT PLAN	
1.0 INTRODUCTION	6
2.0 AUTHORITY	6
3.0 PURPOSE OF PLAN	7
4.0 SPECIFIC OBJECTIVES	7
5.0 CONCEPT OF OPERATIONS	7
6.0 DAMAGE ASSESSMENT PROCESS	8
7.0 INSTITUTIONAL FRAMEWORK FOR DAMAGE ASSESSMENT PLANNING AND EXECUTION	9
STANDARD OPERATING PROCEDURES FOR BARBADOS	
1.0 INTRODUCTION	17
2.0 NOTIFICATION AND WARNING	17
3.0 ACTIVATION OF THE DAMAGE ASSESSMENT PROCESS	17
4.0 RESOURCES AND EQUIPMENT REQUIREMENTS	19
5.0 FORMS TO BE USED	20
6.0 REPORTING PROCEDURES	21
7.0 FINANCIAL ARRANGEMENTS FOR DAMAGE ASSESSMENT	22
8.0 RELATIONSHIP TO OTHER PLANS	22
9.0 DEACTIVATION OF THE DAMAGE ASSESSMENT PROCESS	22
10.0 COORDINATION OF EXTERNAL DAMAGE ASSESSORS	23
APPENDICES	
Appendix I - Focal Points	24
Appendix II(a). - Information Management Team	26
Appendix II(b). - Detailed Damage Assessment Team	27
Appendix III – Damage Assessment Forms used	28
Acronyms	32

RECORD OF REVISIONS AND AMENDMENTS

SERIAL	REVISION / AMENDMENTS	DATE	SIGNATURE
	Revision 1.3	July 2004	
	Revision	October 2004	
	Revision	May 2012	
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	Revision	May 2015	

DISTRIBUTION LIST

1. Barbados Statistical Department
2. The Department of Emergency Management (DEM)
3. The Ministry of Health (MOH)
4. Data Processing Department (DPD)
5. The Barbados Defence Force (BDF)
6. The Royal Barbados Police Force (RBPF)
7. The Barbados Fire Service (BFS)
8. The Ministry of Agriculture, Food , Fisheries (MAFFW)
9. The Ministry of Public Works (MTW)
10. The Ministry of Tourism (MOT)
11. The Barbados Water Authority (BWA)
12. Welfare Department (WD)
13. The Amateur Radio Society of Barbados (ASRB)
14. Rural Development Commission (RDC)
15. Urban Development Commission (UDC)
16. Government Information Service (GIS)
17. Barbados Light and Power (BL&P)
18. LIME Barbados.
19. National Housing Corporation
20. Ministry of Housing and Lands
21. Lands and Surveys Department
22. The Town and Country Planning Department
23. Coastal Zone Management Unit

BARBADOS DAMAGE ASSESSMENT PLAN

1.0 INTRODUCTION

The Government of Barbados is committed to meeting the needs of its population in the threat of natural and human-made hazards. As part of this commitment, the Department of Emergency Management (DEM) has been mandated to ensure that there are national systems in place to cope with multi-hazards within a Comprehensive Disaster Management framework that is within the context of all phases of the Disaster Continuum: Prevention and Mitigation, Preparedness, Response, Recovery: Rehabilitation and Reconstruction.

Damage Assessment is an important activity conducted during the Response Phase and is the mechanism used for determining the impact and magnitude of damage caused by a disaster. It is the process by which the extent of damage, following a major hazard impact, is defined through the systematic collection and analysis of damage information. This information is used to ultimately determine the needs of victims and to create strategies for appropriate assistance to restore the affected area to a sense of normality in the shortest possible time.

This Damage Assessment Plan is a sub section of the Barbados Multi-hazard Disaster Management Plan. It outlines the framework through which damage assessments are to be conducted in Barbados. The plan outlines the Authority, Purpose and Objectives along with the Institutional Framework for planning, in addition to the Standard Operating Procedures which governs the actions to be undertaken in the event of a response.

2.0 AUTHORITY

This Plan derives its authority from the **Emergency Management Act 2006**.

3.0 PURPOSE OF PLAN

The purpose of the plan is to provide a systematic framework within which damage information is collected and analyzed. Information gathered during this process will be used to determine the extent of damage and the impact on the community resulting from a disaster to justify funding, and the declaration or proclamation of an emergency or disaster. The damage assessment data will also influence response and recovery actions.

4.0 SPECIFIC OBJECTIVES

The Plan will:

1. Define the phases of the Damage Assessment process and the strategies used to facilitate them.
2. Ensure the rapid collection of information concerning damage occurring after any hazard impact.
3. Standardize the instructions used to respond and recover from damage sustained after an event.
4. Guide the processes of assessing and estimating the input of damage.
5. Facilitate the Recovery phase by identifying the facilities for urgent rehabilitation and long-term reconstruction, and persons who qualify for aid.

5.0 CONCEPT OF OPERATIONS

- 5.0 The Damage Assessment process will involve the collection, compilation and analysis of information based on damage caused by severe weather, tropical storm, hurricane or any other hazard event.
- 5.1 After the "All Clear is given, teams will be deployed at various times to undertake, rapid, initial and detailed assessments. Details of deployment are contained in Standard Operating Procedures annexed to this Plan.
- 5.2 The Damage Assessment and Statistics Standing Committee is led by the Director of Statistical Service. If an emergency has been declared, members of this damage assessment team will meet at the DEM's Emergency Operations Center (EOC), to collate and analyse the data, and determine the following:

- Extent and type of Damage
 - Identify the resources required for a more detailed assessment
 - Identify the needs of the affected population
- 5.3 The EOC Management Mechanism, based on the analysis, will then make recommendations to Government on the course of action which should be taken.
- 5.4 A Needs Assessment Process will be conducted to allow for the determination of housing rehabilitation and welfare needs of victims.

6.0 DAMAGE ASSESSMENT PROCESS

The Damage Assessment process comprises of the following components:

- Information, needs and resources identification
- Data Gathering
- Data Analysis and Interpretation
- Reporting
- Response

6.1 Information, needs and resources identification

This first stage involves the recording of the emergency event, the identification of the resources which will be required based on the reports from the Rapid Situation Overview Team, anticipation of the needs of the persons affected and estimating the magnitude of the event (Reference 7.3.1). This occurs within 12 hours after the **All Clear** is given

6.2 Data Gathering

This second stage is concerned with the confirmation of the reported event, identifying, characterizing and quantifying the populations at risk as a result of the hazard impact. This involves the deployment of the Initial Damage Assessment Team, as determined by the Rapid Situation Overview, in accordance with its Standard Operating Procedures. It is conducted within 12 – 48 hours after the All Clear is given.

6.3 Data Analysis and Interpretation

This 3rd stage focuses on the analysis of the data obtained from the Initial Damage Assessment and provides information to the EOC management mechanism which will determine the following:

- Define and prioritize the actions and resources needed to reduce suffering and deaths
- Identify the existing local and functional response capacity
- Anticipate future problems, making use of GIS systems and or any such analytical programmes.

6.4 Reporting

This 4th stage relates to the information analyzed in stage 3. The results of the analysis will be sent to relevant response agencies for their immediate action. This may result in the activation of the Detailed Damage Assessment Team.

6.5 Response

This is the final stage of the assessment process and it entails the implementation of actions, identified at stage 3, required to respond to the disaster situation and aid persons in need. This stage is also concerned with the designing and modification of existing disaster response plans, as the situation deteriorates or improves.

7.0 INSTITUTIONAL FRAMEWORK FOR DAMAGE ASSESSMENT PLANNING AND EXECUTION

Under the National Emergency Management mechanism the responsibility for damage assessment planning is vested in the Damage Assessment and Statistics Standing Committee.

7.1 Composition of Committee

The membership is comprised of the following:

- Director of Statistical Service - Chairman
- Chief Housing Planner, Ministry of Housing and Lands - Deputy Chairman
- Chief Technical Officer, MTW
- Director of Data Processing Department
- Chief Agricultural Officer, Ministry of Agriculture
- Chief Town Planner, Town Planning Department
- Chief Welfare Officer, Welfare Department
- Chief Technical Officer, National Housing Corporation
- Commissioner of Police, Royal Barbados Police Force
- General Manager, Barbados Water Authority
- Director, UDC/RDC
- General Manager, Barbados Light and Power Co. Ltd.
- The Chief Executive Officer, Lime

- The Chief Executive Officer, Digicel
- The Chief Executive Officer, FLOW
- Director of DEM
- The National Representative, District Emergency Organisation

Damage Assessment will be coordinated jointly by the Director, BSS and the Chief Housing Planner, prior to the commencement of field work.

7.2 Roles and Responsibilities of the Committee

- To devise a system for the collection and collating of damage statistics.
- To process any data about the disaster as the need arises.
- To ensure that information is collected in a scientific way.
- To develop survey report forms.
- To select survey teams and train personnel in obtaining information.
- To review and update the DA Plan, as necessary.

7.3 Composition of Damage Assessment Teams

Damage Assessment will be undertaken by three (3) Teams, which will be comprised of a group of technical and professional persons, trained in the field of data collection as it relates to the varying needs of affected communities. They will also be able to recognize the varying types of damage. These three Teams are the following:

- Rapid Situation Overview Team (RSOT)
- Initial Damage Assessment Team (IDAT)
- Detailed Sectoral Damage Assessment Team (DDAT)

7.3.1 1st Phase: Rapid Situation Overview (RSO)

This is the first phase of the damage assessment process, which is carried out to obtain rapidly a broad picture of the extent of the damage caused by the hazard.

Information collected at this stage allows officials to determine immediate actions necessary to respond to the effects of the disaster. This information is collected within 12 hours of the all clear and will therefore:

- Provide a general overview of the extent and magnitude of the damage as it relates to buildings, roads and bridges, utilities

- Determine the need for a Disaster Declaration
- Provide information that would inform the responses of the International and Regional Donor Community
- Assist in determining the initial response to the event
- Help to determine the need for the second phase of the assessment process.

The RSOT will consist of representatives of the following agencies:

The Royal Barbados Police Force
 The Barbados Fire Service
 The Barbados Defence Force
 The Barbados Citizens Band Radio Association (BCBRA)
 Barbados Light Aeroplane Club
 Government Information Service
 Lands and Surveys Department

7.3.1.1 Methodology for the conduct of RSO

The Rapid Situation Overview will be carried by aerial and ground reconnaissance teams which will be made up of the following:

Aerial Team

A representative from the following agencies:
 Government Information Service
 Royal Barbados Police Force
 Barbados Defence Force
 Lands and Surveys

Ground Teams

Royal Barbados Police Force
 The Barbados Defence Force
 The Barbados Fire Service
 The Barbados Citizens Band Radio Association (BCBRA)
 District Emergency Organisations
 Structural Engineer, MTW

The arrangements for the execution of ground and aerial reconnaissance will be established by Memorandum of Understanding between DEM and the Parties.

7.3.1.2 Roles and Responsibilities of the RSOT

The role of the RSOT is to confirm the reported incident and estimate the overall magnitude of the damage.

- Identify, characterize and quantify populations at risk in the disaster.
- Identify and classify the type of damage.
- Identify access routes and the levels of entry into the affected area(s)
- Identify damage to critical buildings, infrastructure or facilities
- Estimate the extent of the damage
- Identify existing and potential threats

Needs Assessment Process

Information gathered in this process will be gleaned from several sources including:

- The Media
- The Constituency Branches of the Members of Parliament
- Direct calls or
- Visits to Department of Emergency Management headquarters/EOC
- District Emergency Organisation
- Emergency Services Network
- Emergency Telecommunication Providers
- Other Sources

This information will be included in a database managed by representatives of the Information Management Team under the EOC.

Team composition, terms of reference and shifts (in EOC procedures) - reference Appendix II(a).

This information will provide the basis on which the housing rehabilitation and welfare needs are determined and resources deployed to provide humanitarian assistance. Activities are to be carried out by the Civil Military Coordination (CIMIC) mechanism embodied in the Housing Recovery Plan and Standard Operating Procedures. The socio-economic assessment surveys, coordinated by the Chief Welfare Officer, will be carried out in tandem with the housing emergency response functions.

Survey forms to be used will be widely distributed to the agencies mentioned above which are expected to use this process.

The Head of Information Management Team will be expected to manage this process and pass the information to the EOC for appropriate analysis and deployment.

7.3.2 2nd Phase: Initial Damage Assessment (IDA)

This is the 2nd phase of the Damage Assessment Process that will be carried out on the completion of the Rapid Situation Overview and depends on the result of the RSO.

This will be done to obtain an initial evaluation of the damage to each sector and it is typically carried out within the first forty-eight (48) hours after the all clear is given. It involves a number of trained damage assessors making observations of the extent of the damage to buildings, other assets and infrastructure.

7.3.2.1 Composition of the Initial Damage Assessment Team (IDAT)

The Initial Damage Assessment process will require a minimum of 700 persons, including assessors and supervisors, to provide island-wide coverage.

These will be drawn from the following agencies:

- District Emergency Organisations
- Ministry of Housing and Lands
- Ministry of Transport and Works
- Statistical Service
- Urban Development Corporation
- Rural Development Corporation
- Town and Country Planning Department
- Lands and Surveys Department
- Ministry of Health
- Ministry of Agriculture
- Environmental Engineering Unit
- Coastal Zone Management Unit
- Land Tax/Land Valuation *
- Customs Department *
- Inland Revenue Department *
- Electoral Office
- National Insurance Department
- Immigration Department
- General Post Office
- Youth Commissioners
- Service Clubs: Kiwanis, Lions, Rotarians, Optimists,

* Now amalgamated in the Barbados Revenue Authority.

7.3.2.2 Roles and Responsibilities of the IDAT

To collect data on damage to buildings, other assets and infrastructure according to the agreed methodology.

Ensure that the data is passed on to the Chairperson of the Damage Assessment and Statistics Committee for analysis.

The information from the IDAT will be used by the EOC to:

- Quantify the extent of the damage and loss
- Estimate humanitarian needs
- Determine the need for a detailed damage assessment.
- Determine the priority needs as a result of the event.
- Determine what types of short-term assistance needs are to be provided.
- Prepare an initial estimate of the cost of the event.

7.3.3 3rd Phase: Detailed Damage Assessment

The Detailed Damage Assessment (DDA) will be carried out following the first 48 hours after the all clear is given, or in the case of some sectors, earlier than 48 hours. The DDA will be undertaken on completion of the initial Damage Assessment to obtain a detailed and accurate evaluation of the damage caused to each sector in an effort to determine, among other things, the economic cost of the damage and the national recovery programme.

This phase of the assessment will help to:

- Determine the overall economic impact of the disaster
- Determine the rehabilitation and reconstruction needs of each sector
- Determine the types of long term assistance required
- Determine the types of action necessary to minimize damage from future events.

7.3.3.1 Composition of the DDA Sector Teams (DDAT)

The DDAT will be composed of individual teams and/or persons with technical knowledge of the specific sectors. Ministries with a mandate for the specific sectors will be responsible for organizing the teams to cover their sectors. These specialists will conduct the detailed assessments.

The sectoral teams will include engineers, architects, economists, agricultural extension officers, health sector professionals, etc. from agencies and organisations operating in each of the following sectors:

- Manufacturing
- Industry and Commerce
- Agriculture
- Tourism
- Distribution
- Health
- Welfare
- Housing
- Public Utilities
- International Business
- National and International Transport
- Education and Sports
- Financial and Other Services

Specific agencies/ organizations are listed in Appendix II(b). Each sector (ministry, department or agency) will therefore be responsible for determining their own teams to cover the area of specialised work that falls under its portfolio.

7.3.3.2 Roles and Responsibilities of Sector Teams.

- To collect detailed sector information on the impact of disaster as it relates to all sectors inclusive of agriculture, manufacturing, tourism, transportation, etc.
- Estimate the overall magnitude of the damage within the sector.
- Identify and classify type of damage to critical infrastructure and facilities within the sector.
- Estimate the extent of the damage
- Identify, characterize and quantify populations at risk in the disaster

7.3.3.3 National Recovery Committee

The data collected will be collated by the sector groups and the information submitted to the appropriate ministry which will provide the overall sector assessment to the National Recovery Committee (NRC), which will prepare the macro-

socio-economic documentation for the consideration of Cabinet.

The NRC will be chaired by the Chairman of DEM and will include representatives from the following:

- Ministry of Finance and Economic Affairs
- Town Planning Department
- Ministry of Housing and Lands
- Chairman, Damage Assessment and Statistics Committee
- Director of Emergency Services
- Private Sector Representative

Other members may be co-opted as necessary.

7.4 Training

All Damage Assessors will receive the required training before they are deployed in the field.

7.5 Public Awareness

The Chair of the Damage Assessment and Needs Analysis Standing Committee will ensure that all agency personnel are aware of their respective roles and responsibilities as outlined in the Damage Assessment Plan. The Chair will also seek to utilize the media through the Government Information Services to sensitize the various publics. Other methods of sensitization will be used for example training and sensitization sessions so that persons can be oriented to the damage assessment function.

7.6 Updating of the Plan

This plan will be updated biennially or after an event by the Damage Assessment and Needs Analysis Standing Committee.

DAMAGE ASSESSMENT AND STATISTICS COMMITTEE
STANDARD OPERATING PROCEDURES FOR BARBADOS

1.0 INTRODUCTION

The following are the Standard Operating Procedures, which will govern the actions of the Damage Assessment Process in Barbados following a hazard impact, whether localized or national. Procedures are designed specifically to provide sequential actions to be undertaken by members of the Damage Assessment and Statistics Teams from the activation to deactivation of the process.

2.0 NOTIFICATION AND WARNING

The Director of Meteorological Services and or the Director of Emergency Services or any other relevant person responsible for the issuance of warnings for any other hazard impact will issue a warning for severe weather, tropical storm, and hurricanes or any other hazard.

3.0 ACTIVATION OF THE DAMAGE ASSESSMENT PROCESS

On receiving the warning, the Director of Statistical Service in his/her capacity as Chairperson of the DEM Standing Committee on Damage Assessment Statistics will activate the damage assessment process in accordance with the procedures of the prescribed Call Out and Notification Cascade attached to this SOP.

Phase I: The Rapid Situation Overview

The Director of Emergency Services in collaboration with the Chairperson of the Damage Assessment and Statistics Committee will conclude arrangements for an aerial reconnaissance of the island and will activate the Rapid Situation Overview Team.

The existing network of the Royal Barbados Police Force, The Barbados Defence Force, The Barbados Fire Service, the Barbados Citizen's Band Radio Association, The District Emergency Organisation and The Barbados Amateur Radio Society will also be activated to provide information at this first phase.

Information may also be gleaned from reports to the Media, the Constituency Branches of the Members of Parliament, and direct calls or visits to the Emergency Operations Center of the Department of Emergency Management.

The data collected by these means will be analysed by the Damage Assessment and Statistics Committee representatives within the EOC. Information and recommendations will then be discussed within the EOC and passed to the Executive Policy Group through the Chairman of DEM and the Director of EOC.

Refer to Section 7.3.1. of the Basic Plan.

The assumption is that the Emergency Operations Centre will also be activated on the issue of a warning for Barbados.

Phase II: Initial Damage Assessment Process

There are five hundred and eighty three (583) Enumeration Districts which will provide the framework for the IDA process. At least one Damage Assessment Officer will be required to canvass each Enumeration District (ED), which is a geographical area containing about two hundred buildings.

Senior supervisors will have overall responsibility for the damage assessment exercise. They will manage area supervisors who will each supervise approximately five (5) Damage Assessment Officers.

Damage Assessment officers will be allocated to Focal Points (FPs) located in each parish of the island. These FPs will become their base of operations after a major hazard impact according to the Focal Point List (reference Appendix I).

The Data Analysis Group will be located in the EOC. It will be composed of the core group of persons to be determined by the Director of Statistical Service. Representatives of Data Processing Department will be included. A core of Information Technology specialists operating the Geographic Information System (GIS) and other relevant software will be support for this Group as required.

Members of the Data Analysis and IT support group are listed at Appendix II(a).

At the time of the IDA, the Welfare Department will be responsible for conducting socio-economic assessments of potential welfare candidates, to determine their eligibility for public assistance – using information submitted from the IDA. Data collected will inform the needs analysis process in accordance with approved Welfare and Relief Protocols.

Phase III: Detailed Damage Assessment Process

The Detailed Damage Assessment will be carried out following the first 48 hours. It will be undertaken on completion of the initial Damage Assessment to obtain a detailed and accurate evaluation of the damage caused to each

sector in an effort to determine, among other things, the economic cost of the damage and the national recovery programme.

The Detailed Damage Assessment Team's composition, roles and responsibilities are outlined in Section 7.3.3 of the Basic Plan.

National Recovery Committee

The data collected will be collated by the sector groups and submitted to the appropriate ministry which will provide the overall sector assessment to the National Recovery Committee (NRC), which will prepare the documentation for the consideration of Cabinet. (Reference Section 7.3.3.3 of the Basic Plan)

4.0 RESOURCES AND EQUIPMENT REQUIREMENTS

Deployment of the various teams will require access to and use of appropriate equipment and supplies (reference 4.4 below). The Department of Emergency Management, in accordance with agreed arrangements outlined in formal Memorandum of Understanding or other agreements will provide these resources.

4.1 Ground Transportation

Ground Transportation for Damage Assessment Teams at all phases of the Damage Assessment Process will be provided from the pool of All terrain Vehicles owned by the Government of Barbados, either within the Public Service or Statutory Corporations and agreed to by the DEM Standing Committee on Transport within the Ministry of Transport and Works. According to transportation SOP, vehicles are to be assembled at various predetermined locations/ depots.

4.2 Air Transportation

The Rapid Situation Overview Team will require access to a helicopter and or light aircraft transport. Arrangements have been put in place through a signed Memorandum of Understanding (MOU) with the Barbados Light Airplane Club, to facilitate aerial reconnaissance and transport. Other aircraft resources may be sourced through RSS, British High Commission and the USAID/OFDA.

*Memorandum of Understanding is to be developed between DEM and the Barbados Light Airplane Club.

4.3 Computer Equipment

The EOC of the DEM Secretariat will provide laptops to be used for the rapid collating of data to the Data Analysis Group. The Ministry of Home Affairs has been identified as an additional resource for computers.

4.4 Damage Assessment Kits

Damage Assessment Kits will be supplied to all Damage Assessors conducting field operations. The Kit will consist of the following items:

- Copies of the Damage Assessment Forms
- Note Pads
- Pencils, sharpeners and erasers.
- A clipboard.
- Waterproof document folder.
- Raincoat, waterproof boots.
- Umbrella
- A map of the Enumeration District to which the assessor is assigned, along with the description of its boundaries; or, in the case of a supervisor, a map of the supervisory area, showing features such as highways, roads, tracks, rivers, bridges, etc. These will be indicated by symbols, which will be spelt out in the Key located at the bottom left hand side of the map.
- Identification Card will be issued to all assessors. These must be prominently displayed when conducting fieldwork.

❖ Damage Assessment Forms are included in Appendix III.

5.0 FORMS TO BE USED

Rapid Situation Overviews

CDEMA Situation Assessment form will be used as a guide.

For the Initial Damage Assessment:

Field Tally Sheets (2) – used to record the quantity and type of damage to the housing stock (residences and other buildings/shelters) in specified locations (see Appendix III – forms CTS1 and CTS2).

Field Observation Sheet – used to record the physical and functional condition of the island’s infrastructure, utilities and environment in specified locations (form CF01, in Appendix III).

Localized Assessment

Household Damage Survey Form: – after 2007, a household listing form was instituted to capture information on damaged residences and their occupants (form CDA3, in Appendix III). This form replaced the Field Tally Sheet A (form CTS1). It will be used in situations that do not overwhelm the island’s resources (i.e. not requiring external assistance).

For Detailed Damage Assessment

Appropriate Forms may be developed in accordance with the specific sector, by the responsible ministry/agency.

6.0 REPORTING PROCEDURES

Each assessment type requires a different reporting format and template to generate the specific reports, which are listed in the Table I below.

These templates are designed to assess information on whether there is:

- A life threatening situation and the need to deploy search and rescue teams.
- The need for emergency food, water, shelter and medical assistance.
- The need for restoration of critical facilities and services.
- The need for removal/clean-up of debris;
- The restoration of basic utilities.

Table I Types of Assessment Reports, for Emergency Relief.

Type of Assessment	Time Period	Purpose
Rapid Situation Overview Report	0 – 12 hours after the hazard impact has occurred and or the <i>All Clear</i> has been given.	To determine the extent and scope of the disaster and the need for outside assistance
Initial Damage Assessment Report	12 – 48 hours after the hazard impact has occurred and or the <i>All Clear</i> has been given.	To provide information on the overall damages (the extent, severity and location) to facilitate the <i>needs analysis</i> process and the allocation of critical supplies
Detailed Damage Assessment Report	From 48 hours, or earlier, after the hazard impact has occurred.	To provide information for recovery of services and the physical stock on the island

Supervisors will supply all materials to assessors. All forms and questionnaires must be return to supervisors, who will be stationed at one of the focal points around the island.

Supervisors are to take assessors around the boundaries of their Enumeration Districts, before a hazard impact.

7.0 FINANCIAL ARRANGEMENTS FOR DAMAGE ASSESSMENT

Financial arrangements for meeting the cost of damage assessment may be met from the following sources in an emergency situation:

- Funds provided under DEM’s Head 212: Item to meet some aspects of the emergency response.

8.0 RELATIONSHIP TO OTHER PLANS

All other existing Plans and SOPs must bear relationship to this Plan.

9.0 DEACTIVATION OF THE DAMAGE ASSESSMENT PROCESS

On the decision of the Emergency Operation Center, the Director of Emergency Services, or an appropriate representative of the DEM Secretariat, will inform the Chairperson of the Damage Assessment and Statistics Committee when to “stand down” the operations.

10.0 COORDINATION OF EXTERNAL DAMAGE ASSESSORS

There are several damage assessors that will enter the country to carry out assessment in their own interests. These will be drawn from the following agencies:

UN-ECLAC: United Nations Economic Commission for Latin America and the Caribbean

OFDA: Office of Foreign Disaster Assistance (USAID)

UNDAC: United Nations Disaster Assessment and Coordination (UNDAC teams can deploy at short notice [12-48 hours] anywhere in the world).

ECDG: Eastern Caribbean Donor Group

APPENDICES

Appendix I - Focal Points

	Focal Point Name	Address	Parish
1	Arthur Smith Primary School	Pleasant Hall Land, St. Matthias	Christ Church
2	Cane Vale Seventh Day Adventist Church	Cane Vale	Christ Church
3	Christ Church Foundation School	Church Hill	Christ Church
4	Gordon Walters Primary	St Patricks	Christ Church
5	St. Bartholomew's Primary School	St Bartholonew	Christ Church
6	St. Christopher's Primary School	St Christopher	Christ Church
7	St. Lawrence Church	St Lawrence	Christ Church
8	Vauxhall Primary School	Vauxhall	Christ Church
9	Deighton Griffith Secondary School	Kingsland	Christ Church
10	Alleyne Secondary School	Belleplaine	St. Andrew
11	Cuthbert Moore Primary School	St Helen's	St. George
12	Ellerton Primary School	Ellerton	St. George
13	St. George Secondary School	Constant	St. George
14	St. Judes Primary School	St. Jude's	St. George
15	St. Luke's-Brighton Primary School	St Lukes	St. George
16	Workman's Primary School	Workmans	St. George
17	Good Shepherd Primary School	Fitts Village	St. James
18	Orange Hill Church of God	Orange Hilll	St. James
19	Queen's College Secondary School	Husbands	St. James
20	St. James Secondary	Trents	St. James
21	West Terrace Primary School	West Terrace	St. James
22	Lodge Secondary School	Massiah Street	St. John
23	St. John Anglican Church Hall	Glebe Land	St. John
24	Grantley Adams Memorial Secondary School	Blackmans	St. Joseph
25	St Swithun Church Hall	Greenidges	St. Lucy
26	St. Lucy Secondary School	Trents	St. Lucy

Appendix I - Focal points (cont'd)

	Focal Point Name	Address	Parish
27	Eagle Hall Primary School	Eagle Hall	St. Michael
28	Bay Primary School	Bayville	St. Michael
29	Combermere Secondary School	Waterford	St. Michael
30	Eden Lodge Primary School	Eden Lodge	St. Michael
31	Ellerslie Secondary School	Black Rock	St. Michael
32	Garrison Secondary School	Paddock Road	St. Michael
33	Grazettes Primary School	Grazettes	St. Michael
34	Harrison's College	Crumpton Street, Bridgetown	St. Michael
35	Hindsbury Primary School	Hindsbury Road	St. Michael
36	Lawrence T Gay Memorial School	Spooners Hill	St. Michael
37	Luther Thorne Primary School	Wildey	St. Michael
38	Parkinson Memorial Secondary School	Pine	St. Michael
39	Springer Memorial School	Government Hill	St. Michael
40	St. Barnabas Anglican Church	St. Barnabas	St. Michael
41	St. Leonard's Boys Secondary School	Richmond Gap	St. Michael
42	St. Mary's Primary School	Mason Hall Street	St. Michael
43	St. Matthews Primary School	St. Matthew's	St. Michael
44	St. Michael's Secondary School	Martindales Road	St. Michael
45	St. Stephen's Primary School	St Stephen's, Black Rock	St. Michael
46	Westbury Primary School	Westbury Road	St. Michael
47	All Saints Primary School	All Saints	St. Peter
48	Coleridge and Parry Secondary School	Ashton Hall	St. Peter
49	Roland Edwards Primary School	Battaleys	St. Peter
50	Bayleys Primary School	Merricks	St. Philip
51	Hilda Skeene Primary School	Ruby	St. Philip
52	Princess Margaret Secondary School	Six Roads	St. Philip
53	Rices Methodist Church	Rices	St. Philip
54	St. Mark's Primary School	St Marks	St. Philip
55	St. Martin's Anglican Church	St Martins	St. Philip
56	St. Philip's Primary	Church Village	St. Philip
57	Clifton Hill Moravian School	Clifton Hill	St. Thomas
58	Hillaby / Turners Hall Primary School	Hillaby	St. Thomas
59	Holy Innocent's Primary School	Welchman Hall	St. Thomas
60	Lester Vaughn Secondary School	Cane Gardens	St. Thomas

Appendix II(a). - Information Management Team

This Team consists of the following agencies and departments:

- Director of Statistical Service
- Chief Housing Planner, Ministry of Housing and Lands
- Director of DEM
- Chief Technical Officer, MTW
- Director of Data Processing Department
- Chief Surveyor, Lands and Surveys Department
- **Commissioner of Land Tax/ Land Valuation ***
- Chief Agricultural Officer, Ministry of Agriculture
- Chief Town Planner, Town Planning Department
- Barbados Defence Force

Other entities may be coopted as necessary.

Terms of Reference:

- a) Assist with the database management and spatial data analysis, aimed at improving DANA;
- b) Assist in the analysis of data produced in the IDA;
- c) Provide Data Entry support to the Emergency Operations Centre;
- d) Facilitate ICT support in the Emergency Operations Centre.

Roles

- a) For database management and spatial data analysis - Data Processing Department, Statistical Service, Lands, Surveys Department, Town Planning Department, DEM.
- b) Assist in the analysis of data - add MTW, Ministry of Housing and Lands, Ministry of Agriculture, **Land Valuation ***.
- c) Provide Data Entry support - Barbados Defence Force.
- d) Facilitate ICT support - Data Processing Department, Lands and Surveys Department, Town Planning Department.

Support Agencies:

These agencies provide technical information and valuations as needed that would enable reliable cost estimates of the damage to be made.

- Barbados Association of Professional Engineers
- Barbados Association of Valuers
- Barbados Association of Architects


* **Now amalgamated in the Barbados Revenue Authority.**

**Appendix II(b). - Detailed Damage Assessment Team
List of Specific Agencies involved:**

- Ministry of Health : Health
- Welfare Department : Welfare
- Ministry of Social Care
- Community Development
- Ministry of Housing and Lands : Housing
- National Housing Corporation
- Urban Development Corporation
- Rural Development Corporation
- Ministry of Agriculture : Agriculture
- Ministry of Tourism : Tourism
- Ministry of Transport and Works : National Transport
- Barbados Water Authority : Public Utilities
- National Petroleum Corporation
- Barbados Light and Power
- Government Electrical Engineering Dept.
- Cable and Wireless
- Coastal Zone Management Unit
- Ministry of Education : Education and Sports
- Ministry of Finance : Financial and Other Services
- Ministry of Commerce, Consumer Affairs and Business Development : Manufacturing; Industry and Commerce
- Barbados Investment & Development Corporation


Appendix III – Damage Assessment Forms used

Form CTS1 – Field Tally Sheet A (IDA)

 DEPARTMENT OF EMERGENCY MANAGEMENT Barbados - Initial Damage Assessment				
Agency _____	FIELD TALLY SHEET (A)			Assessor _____
Event _____				Date Assessed _____
Area Assessed (ED) _____				
Parish _____				
RESIDENCES	Level 1	Level 2	Level 3	Level 4
Single-storey dwellings (e.g. bungalow)	Total	Total	Total	Total
Multi-storey dwellings	Total	Total	Total	Total
Single-storey apartments	Total	Total	Total	Total
Multi-storey apartments	Total	Total	Total	Total
Other residences	Total	Total	Total	Total
Other real/personal property (e.g. tractors, cars, machinery, etc.)	Total	Total	Total	Total
Boats	Total	Total	Total	Total
Other observations				
Notes. Level 1 - No significant damage: Structure is useable and can be occupied. Repairs required are minimal. Level 2 - Minor damage: Structure is useable and can be occupied after urgent temporary measures are taken. Level 3 - Major damage: Structure is not useable and cannot be occupied until after repairs are made. Level 4 - Destroyed: Structure is not useable and cannot be repaired. It must be rebuilt.				

Appendix III – Damage Assessment Forms used (cont’d)

Form CTS2 – Field Tally Sheet B (IDA)

 DEPARTMENT OF EMERGENCY MANAGEMENT Barbados - Initial Damage Assessment				
Agency _____	FIELD TALLY SHEET (B)			Assessor _____
Event _____				Date Assessed _____
Area Assessed (ED) _____				
Parish _____				
BUILDINGS	Level 1	Level 2	Level 3	Level 4
Schools	Total	Total	Total	Total
Hospitals/clinics	Total	Total	Total	Total
Government Buildings	Total	Total	Total	Total
Community Centres	Total	Total	Total	Total
Other (Shelters, Churches, etc.)	Total	Total	Total	Total
Hotels / Guest Houses	Total	Total	Total	Total
Other observations				
Notes:				
Level 1 - No significant damage: Structure is useable and can be occupied. Repairs required are minimal.				
Level 2 - Minor damage: Structure is useable and can be occupied after urgent temporary measures are taken.				
Level 3 - Major damage: Structure is not useable and cannot be occupied until after repairs are made.				
Level 4 - Destroyed: Structure is not useable and cannot be repaired. It must be rebuilt.				

Appendix III – Damage Assessment Forms used (cont'd)

Form CDA3 – IDA Household Listing Form

CDA3

DEPARTMENT OF EMERGENCY MANAGEMENT
INITIAL DAMAGE ASSESSMENT LISTING FORM

Page _____ of _____

Date: ____/____/____

yy mm dd

AREA (ED): _____

PARISH: _____

Agency/DEO: _____

Assessor Name: _____

Listing of Residences/Households with Damage (Codes below to be used under the columns indicated)

Line No.	Name of Occupant (Head of Household)	Address Location	Age (of Head)	ID Card No. (of Head)	Contact Telephone Number (H/W/C)	House Tenure (code)	Type of Residence (code)	House Insured? (code)	No. of Persons in the Household		No. of Disabled Members (code)	Housing required? (code)	Assistance in Kind (code)	Level of Damage (code)	Indicate Damage to the Main Elements of the Structure (under the relevant columns; use the codes at bottom of page)					Remarks			
									Adult	Children (under 18 years)					(15)	(16)	(17)	(18)	(19)		(20)		
1	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)		
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							
15																							
Totals																							

Codes used:

Col. 6: 1 = Owned Col. 7: 1 = Single-story dwellings Col. 8, 12: 1 = Yes Col. 13: 1 = Food Col. 14: 1 = No Significant Damage	2 = Rented/Leased 2 = Multi-story dwellings 2 = No 2 = Clothing 2 = MINOR DAMAGE 3 = Rent Free 3 = Single-story apartments 3 = Furnishings 3 = MAJOR DAMAGE 4 = Medication 4 = DESTROYED 5 = Postheats (e.g. glasses, hearing aids, artificial limbs)
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Codes used:

Col. 15 - 20: 1 = Partial 2 = Total
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Acronyms

BCBRA - Barbados Citizens Band Radio Association
BDF - Barbados Defence Force
BSS - Barbados Statistical Service
DEM - Department of Emergency Management
DEO - District Emergency Organisation
DDA - Detailed Damage Assessment
DDAT- Detailed Sectoral Damage Assessment Team
ECDG - Eastern Caribbean Donor Group
ED - Enumeration District
EOC - Emergency Operations Centre
IDA - Initial Damage Assessment
IDAT - Initial Damage Assessment Team
GIS - Geographic Information System
MOU - Memorandum of Understanding
MTW - Ministry of Transport and Works
NRC - National Recovery Committee
OFDA- Office of Foreign Disaster Assistance (USAID - United States Agency for International Development)
RSO - Rapid Situation Overview
RSOT - Rapid Situation Overview Team
SOP - Standard Operating Procedures
UDC/RDC - Urban Development Commission/ Rural Development Commission
UNDAC - United Nations Disaster Assessment and Coordination
UN-ECLAC - United Nations Economic Commission for Latin America and the Caribbean