

MSME Guide to Disaster Resilience



Business Continuity Planning

Business continuity is of paramount importance to Commerce and Industry as it ensures the resilience and sustainability of local businesses, thereby safeguarding the economic well-being of the nation.

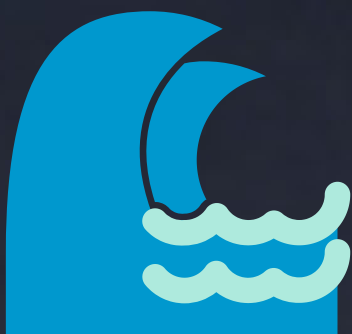




TABLE OF CONTENTS



Why the need to prepare?



Preparing Your Business



Four Priority Thematic Areas



Risk Mapping



Lessons learnt

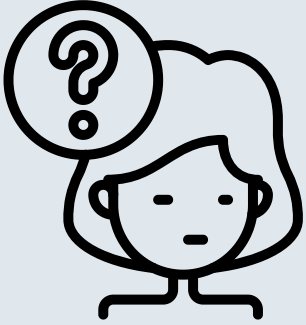


Emergency Contact List

SECTION ONE

**WHY THE
NEED TO
PREPARE?**





Why the need to prepare?

Disasters are catastrophic events arising from natural or human-induced hazards that create significant damage in the community and disruption in the functioning of a society.

A disaster gives rise to casualties on properties, infrastructure, environment, essential services, and other human losses that exceed the affected community's capacity to cope using its own resources. Disasters, specifically, can have life altering effects on individuals and communities, leading to human, material, economic, and environmental losses.

Natural hazards
Predominantly associated with natural processes and phenomena

Hydrometeorological hazards
Of atmospheric, hydrological, or oceanographic origin

- Tropical Cyclones
- Floods
- Drought
- Storm Surge
- Tsunami

Geological or geophysical hazards
Originate from internal earth processes

- Earthquake
- Volcanic Activity
- Landslide



Human-induced hazards
Induced entirely or predominantly by human activities and choices

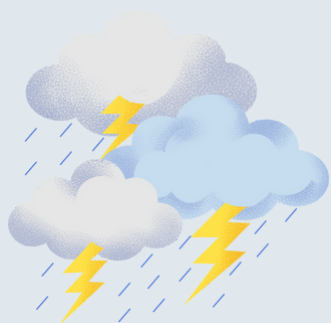
- Fires
- Accident
- Aircraft crash
- Pollution
- Civic disturbance
- Terrorist attacks
- Explosions
- Armed conflict

In recent years, there has been a reported increase in weather-related disasters. Due to population growth in the country, the social and economic cost of disasters in the country have relatively increased



21 Atlantic Basin Tropical Cyclone names for 2023 .

Of these, between five and nine of the storms are expected to become hurricanes, and between one and four are expected to become hurricanes ranging in strength from categories one and three.



Highest rainfall during Hurricane Lisa was recorded in Altun Ha, Belize District. 214 mm or 8.4 inches



Total Damage was estimated \$131.1 million Belize dollars for Hurricane Lisa.



Total loss was estimated \$62.8 million Belize dollars for Hurricane Lisa.

Effects of disasters do not stop at the individual level. Greater risks are posed within the community and economic level, as well. One of the most affected sectors in the country are the Micro, Small, and Medium Enterprises (MSMEs).

Most local businesses in this sector have not done risk-informed planning and disaster preparedness measures in the past. And so, there is a need for MSMEs to work towards minimizing their vulnerability to hazards through the creation and implementation of business continuity plans and disaster resilience programs.



Local businesses, with help from the government and concerned public and private organizations, must actively work toward protecting the MSME sector with the aim of outlasting the ravages of any disaster and making our communities as resilient and sustainable as possible.



Disasters paralyze socio-economic activities, impair local economies, and results to the injury and death of many. Impacts are evident on public infrastructure and private properties



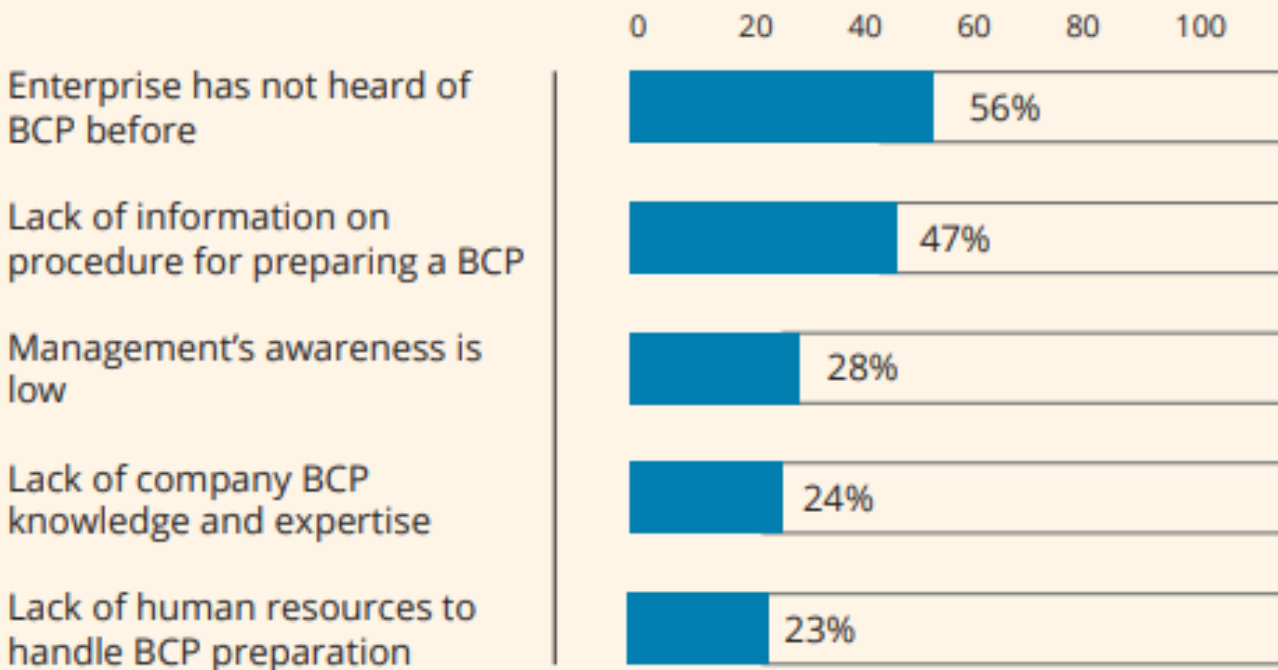
The 2019 World Risk Report, which indicates the disaster risk of 180 countries in the world, ranks the Belize as the **63rd** most at-risk when it comes to disasters.



Exposure	17.14
Vulnerability	46.78
Susceptibility	27.21
Coping Capacities	74.19
World Risk Index	8.02

I. WHY THE NEED TO PREPARE?

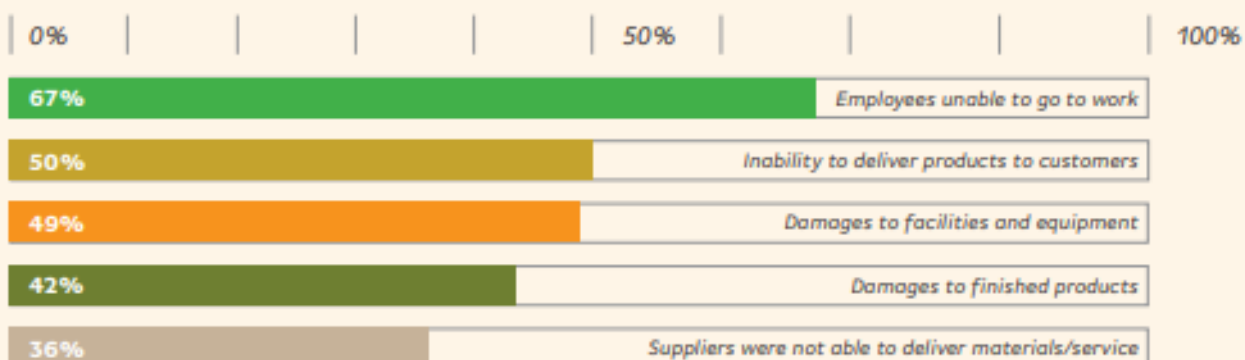
REASONS FOR NOT PREPARING A BCP



Disruption in business activities impact the ability of local economies in disaster-stricken areas to recover. However, due to competing priorities and low awareness on business continuity, a percentage of MSMEs still continue to operate without an effective business continuity plan in place. Many enterprises have not even heard of business continuity planning before or do not have the technical knowledge and skills to develop their own business continuity plan. This may eventually leave these businesses susceptible to a variety of emerging and existing risks.

Disruption in business activities impact the ability of local economies in disaster-stricken areas to recover. However, due to competing priorities and low awareness on business continuity, a percentage of MSMEs still continue to operate without an effective business continuity plan in place. Many enterprises have not even heard of business continuity planning before or do not have the technical knowledge and skills to develop their own business continuity plan. This may eventually leave these businesses susceptible to a variety of emerging and existing risks.

DISASTER IMPACTS ON BUSINESSES





CHECKPOINT (10 MINS):

From your own understanding, what are the possible impacts of disasters to your:



Home?



Community?



Livelihood?



“As it seems, it’s the worst, but looking at it on the bright side, we’re hoping for something better to come. We had a complete loss, we can consider it a total, but I mean we are positive on the next side, you know.” **Admiral’s Employee**

“As you may know, dis da di third time, right, I get damage, but this one hit hard because everything destroyed, destroyed. But I have life, thank God. That’s the best thing that has happened to me. Ah got mi family, mi neighbors, friends weh check pan mi, so ah good fi right now.” **Resident**

“I lost a house, a brand new house and the reason why that house went down was because we never strengthened the footing and the fence was always, it was a hurried thing to put up the fence in the early days. Now, a gwein back cement. So even though that this breakdown and it’s really much a lot of work in cleaning, but the house is not going to be a wooden house again, it’s going to be a cement house.”
Resident

“The whole roof, the interior inside, the appliances, everything gone. Nothing saved. That happened bout three o’clock, yes, when the weather was passing.” **Resident**

Why?

SECTION TWO

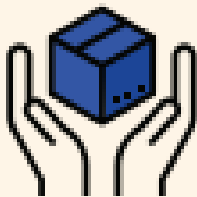


**PREPARING
YOUR
BUSINESS**



I. KNOWING THE IMPORTANT ACTIVITIES WITHIN THE BUSINESS

Planning should include knowing how the business will be able to recover once impacted by a disruptive scenario. Determining which activity within the business should be recovered first will help in an orderly and timely recovery.

GUIDE QUESTIONS TO ASK IN IDENTIFYING PRIORITIZED ACTIVITIES:

-  **1** What is the lifeline product or service of your enterprise?
-  **2** Which product or service should be recovered first?
-  **3** Which business activity makes a top selling product?

RESILIENT BUSINESS TOOLKIT

Business Continuity Planning Workbook

SECTION 3: KNOWING YOUR RESOURCE REQUIREMENTS AND IMPORTANT BUSINESS ACTIVITIES (PRIORITIZED ACTIVITIES)

RESOURCES NEEDED

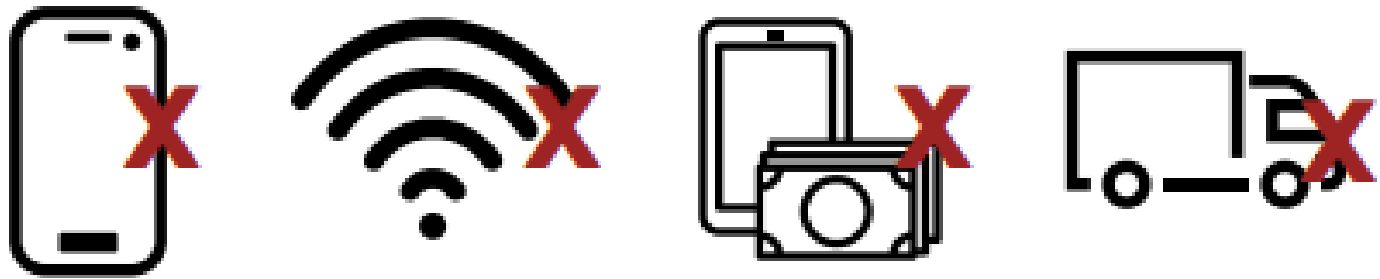
- 1. PEOPLE:** "How many people are needed to perform a business activity?"
- 2. EQUIPMENT:** "What vital equipment do you need to perform the business activity?"
- 3. RAW MATERIALS:** "What resources are needed? Who are your critical suppliers?"
- 4. UTILITIES:** "What utility services (e.g., power, water, connectivity) do you need to perform the business activity?"

BUSINESS ACTIVITIES

- "What activities are needed to be performed by the enterprise?"
- "What activities should be protected against possible disruptions?"
- "What activities should be recovered or performed immediately in order for the business to remain operational?"

II. IDENTIFYING RESOURCES NEEDED BY THE BUSINESS

ASK YOURSELF: "What will you do if there are no telecommunication services, no connectivity, no banking services, no accessibility/logistics services?"



Identify what resources are needed in order for the business to operate:



Internal Resources

- Building
- Equipment
- Personnel
- Raw materials
- Inventory



Essential Utilities

- Fuel
- Power
- Telecommunications
- Water



Business Partner

- Vital suppliers
- Major clients
- Telecommunications
- Government institutions

III. UNDERSTANDING MY BUSINESS' DISASTER RISKS

MSMEs constitute a large chunk in terms of contributing to the country's economic growth and employment generation. To strengthen the presence and the continuous contributions of the MSMEs in the Philippines, we must understand how disaster risks easily threaten an enterprise and its prioritized actions, processes, partners, and products.

III. UNDERSTANDING MY BUSINESS' DISASTER RISKS

MSMEs constitute a large chunk in terms of contributing to the country's economic growth and employment generation. To strengthen the presence and the continuous contributions of the MSMEs in the Philippines, we must understand how disaster risks easily threaten an enterprise and its prioritized actions, processes, partners, and products.

Some basic terms to understand:



HAZARD

Any situation or human activity that may potentially cause loss of life, damage to property, disruption of social and economic processes, or environmental degradation¹



EXPOSURE

The situation of people, properties, production capacities, and other assets in hazard-prone areas that are subject to potential losses²



VULNERABILITY

The conditions determined by physical, social, economic and environmental factors, which increase the susceptibility of a community or an individual and reduce their ability to prepare for and cope with the impact of hazards³



CAPACITY

The combination of strengths and resources present in a community or organization that may help reduce vulnerabilities and strengthen resilience⁴



RISK

The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time⁵

WHAT IS THE CONCEPT OF RISK?

RISK

=

HAZARD × VULNERABLE × EXPOSURE

CAPACITY

What hazards can

affect an MSME?



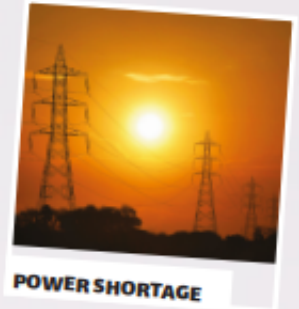
VOLCANIC ERUPTION



TSUNAMI



FIRE INCIDENTS



POWER SHORTAGE



EL NIÑO



FLASH FLOOD



CIVIL UNREST



EPIDEMICS



Knowing the Important Activities within the Business



Identifying Resources Needed by the Business



Understanding My Business' Disaster Risks



Planning for Preparedness, Response and Recovery

READY?






UNDERSTANDING YOUR DISASTER SCENARIOS








QUESTION 1: What are the possible threats to your business? Think of possible threats that can affect your business.

QUESTION 2: How can these threats affect your business? Think in terms of how your business (store facility, equipment, products), your employees, your customers and other business partners will be affected.

QUESTION 3: What is the likelihood that this will happen to your business? Think in terms of the following simple likelihood rating of 1-5:

	RATING	IMPACT LEVEL	DESCRIPTION
	5	Almost Certain	There is an 81% - 100% chance of the event occurring.
	4	Likely	There is a 61% - 80% chance of the event occurring.
	3	Possible	There is a 41% - 60% chance of the event occurring.
	2	Unlikely	There is a 21% - 40% chance of the event occurring.
	1	Rare	There is 1% - 20% chance of the event occurring.

QUESTION 4: If the scenario happens, how will this affect your business? What will be the impact? Think in terms of the following impact rating of 1-5:

	RATING	IMPACT LEVEL	DESCRIPTION
	5	Extreme	<p>Determine impact, from extreme (5) to incidental (1), based on the following questions:</p> <ul style="list-style-type: none"> On People: "Will my employees or customers be harmed or injured? Will this affect their safety?" On Profit: "Will my business profit be affected? Will I suffer financial loss?" On Reputation/Brand Image: "Will this lead to negative customer feedback which can affect my business/ brand image?"
	4	Major	
	3	Moderate	
	2	Minor	
	1	Incidental	

CHECKPOINT:

List down some examples for the following concepts related to risk:

- Hazard
- Vulnerability
- Capacity

Using Hazard Hunter, identify your business location's exposure to the following:

- Seismic Hazards
- Volcanic Hazards
- Hydrometeorological Hazards

- **QUESTION 5:** What is the business currently doing to protect itself from these potential scenarios?

THREAT IDENTIFICATION AND RISK ASSESSMENT					
What are possible threats to my business?	How will this affect my business (What will be the risk)?	What is the likelihood that this will happen? (Likelihood; Rating of 1-5)	If it happens, how badly will it affect my business? (Impact; Rating of 1-5)	Risk Score (Likelihood x Impact)	What is my business currently doing to control these risks?
Fire					
Earthquake					
Tropical Cyclone/Typhoon					
Others					

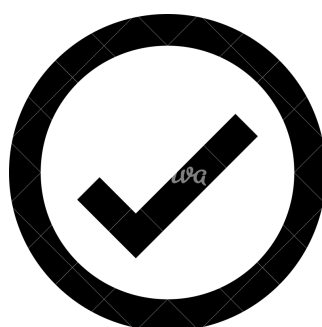


IV. COMING UP WITH A PLAN

RESILIENCE STRATEGIES

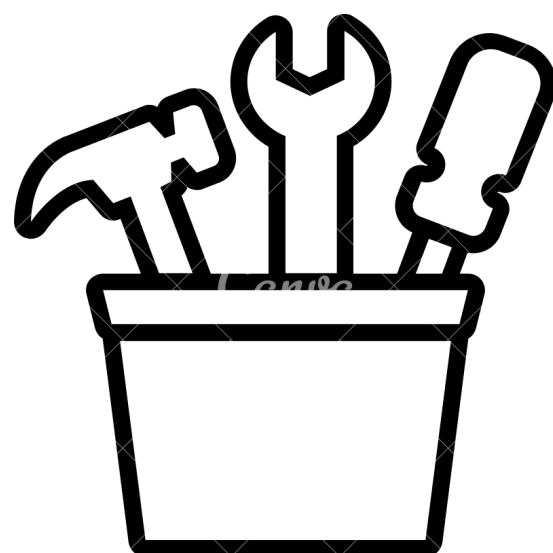
In developing your emergency preparedness plan, it is important that your enterprise has resilience strategies in place that can help you during a disaster. Come up with your own Resilience Strategies for your resources (people, equipment, stocks, building, records, business partners and suppliers) during disaster preparedness, response, and recovery.

RESOURCES TO PROTECT	DISASTER PREPAREDNESS MEASURES <i>(What to do before?)</i>	DISASTER RESPONSE MEASURES <i>(What to do during?)</i>	BUSINESS CONTINUITY AND RECOVERY <i>(What to do to recover and continue the business?)</i>
People			
Equipment			
Stocks or Inventory			
Building/Facility			
Records			



EMERGENCY PREPAREDNESS CHECKLIST

EMERGENCY EQUIPMENT AND TOOLS	QUANTITY NEEDED
Batteries	
Fire Extinguisher	
Ropes	
Hard Hats/Helmet	
Utility Knives	
Hammer	
Pliers	
Crow Bar	
Spill Kit	
Broom and Mop	
Bucket and Pail	
Disinfectant	
Shovel	
Cloth Rags	
Gloves	
Ladder	



EMERGENCY EQUIPMENT	QUANTITY NEEDED
Tape (duct, masking, electric)	
Extension Cord/s	
Communication-devices (two-way radio, cellphone)	
Battery-powered items (fans, lamps, etc.)	
EMERGENCY SUPPLIES	QUANTITY NEEDED
Drinking Water (3 liters/person for 3 days)	
Emergency Food Supply (3 day-supply per person)	
Sanitation Supplies (toilet paper, sanitary napkin, etc.)	
Eating Utensils (plates, cups, spoon and fork)	
Plastic or Garbage Bag	
Blankets or Sleeping Bag	
First Aid Kit	
Flashlight	
Can Opener	
Plastic or Garbage Bag	
Blankets or Sleeping Bag	

EMERGENCY SUPPLIES	QUANTITY NEEDED
Whistle	
Malong or Sarong	
Toothpaste and Toothbrush	
Soap and Shampoo	
Support for Getting People Home	

Business Continuity Template

BUSINESS CONTINUITY PLAN

VERSION HISTORY				
VERSION	APPROVED BY	REVISION DATE	DESCRIPTION OF CHANGE	AUTHOR

PREPARED BY		TITLE		DATE	
APPROVED BY		TITLE		DATE	

TABLE OF CONTENTS

1. BUSINESS FUNCTION RECOVERY PRIORITIES	3
2. RELOCATION STRATEGY	3
3. ALTERNATE BUSINESS SITE	3
4. RECOVERY PLAN	4
5. RECOVERY PHASES	4
A. DISASTER OCCURRENCE	4
B. PLAN ACTIVATION	4
C. ALTERNATE SITE OPERATION	4
D. TRANSITION TO PRIMARY SITE	4
6. RECORDS BACKUP	5
7. RESTORATION PLAN	5
8. RECOVERY teams	5
A. TEAM ROLES	5
B. TEAM CONTACTS	5
C. TEAM RESPONSIBILITIES	5
D. DEPARTMENTAL RECOVERY TEAMS	6
9. RECOVERY PROCEDURES	6
A. POTENTIAL RECOVERY PROCEDURE	6
10. APPENDICES	7
A. Employee Contact List	7
B. Recovery Priorities	7
C. Alternate Site Resources	7
D. Emergency Operations Center (EOC) Locations	7
E. Vital Records	7
F. Vendor Lists	7
G. IT System Reports and Resources	7
H. Alternate Site Transportation Information	7
I. Impact and Risk Assessments	7
J. Business Impact Analysis	7
K. Recovery Task Lists	7
L. Office Recovery Plan	7

1. BUSINESS FUNCTION RECOVERY PRIORITIES

Used to recover essential business operations at an alternate location site. This is an offsite strategy that is put into effect by the Disaster Recovery Teams. IT functions will be restored by the Information System and IT teams based on critical business functions.

2. RELOCATION STRATEGY

3. ALTERNATE BUSINESS SITE

The alternate business site and relocation strategy will be used in the event of a disaster or disruption that inhibits the continuation of the business processes at the original business site. This strategy should include both short-term and long-term relocation sites, in the case of both types of disruptions.

4. RECOVERY PLAN

5. RECOVERY PHASES

These are the activities most needed for the business to continue, and the recovery plan should target these essential business functions. The recovery plan should proceed as follows:

A. DISASTER OCCURRENCE

A disaster is declared and decisions are made to activate the rest of the recovery plan.

B. PLAN ACTIVATION

The Business Continuity Plan is put into effect during this phase. This phase will continue until the alternate business site is secured, and the business operations are relocated.

C. ALTERNATE SITE OPERATION

This phase continues until the primary facility can be restored.

D. TRANSITION TO PRIMARY SITE

This phase continues until the business operations can appropriately be moved back to the original business site.

6. RECORDS BACKUP

7. RESTORATION PLAN

All important records that are vital to the continuation of business operations, and that would be affected by a facilities disruptions or disasters, are maintained, controlled, and periodically checked on by Disaster Recovery/IT teams. The most critical files are periodically backed up and stored at an offsite location.

8. RECOVERY TEAMS

Recovery teams are established and participants are divided into the appropriate teams, based on job role and title. Each team is given a designated team leader and all other team members are assigned to a specific role or duty among the team.

A. TEAM ROLES

Team Leader, Backup Team Leader, Team Member

B. TEAM CONTACTS

Stored in the Contact List Appendix

C. TEAM RESPONSIBILITIES

Incident Commander, HR/PR Officer, Information Technology, Finance/Admin, Legal/Contacts

D. DEPARTMENTAL RECOVERY TEAMS

Business Continuity Coordinator, EOC Communications Team, EOC Human Resources Team, EOC Administration Team, Emergency Response Team, Information Technology Recovery Team

9. RECOVERY PROCEDURES

Specific activities or tasks that should be carried out to recovery normal and critical business operations are detailed. Each strategy is described through a specific set of action activities and tasks to recover appropriately.

A. POTENTIAL RECOVERY PROCEDURE

- i. Disaster Occurrence
- ii. Notification of Management
- iii. Preliminary Damage Assessment
- iv. Declaration of Disaster
- v. Plan Activation
- vi. Relocation to Alternate Site
- vii. Implementation of Temporary Procedure
- viii. Establishment of Communications
- ix. Restore Data Process and Communications with Backup Location
- x. Begin Alternate Site Operations
- xi. Manage Work
- xii. Transition Back to Primary Operations
- xiii. End Alternate Site Procedures
- xiv. Relocate Resources Back to Primary Site

10. APPENDICES

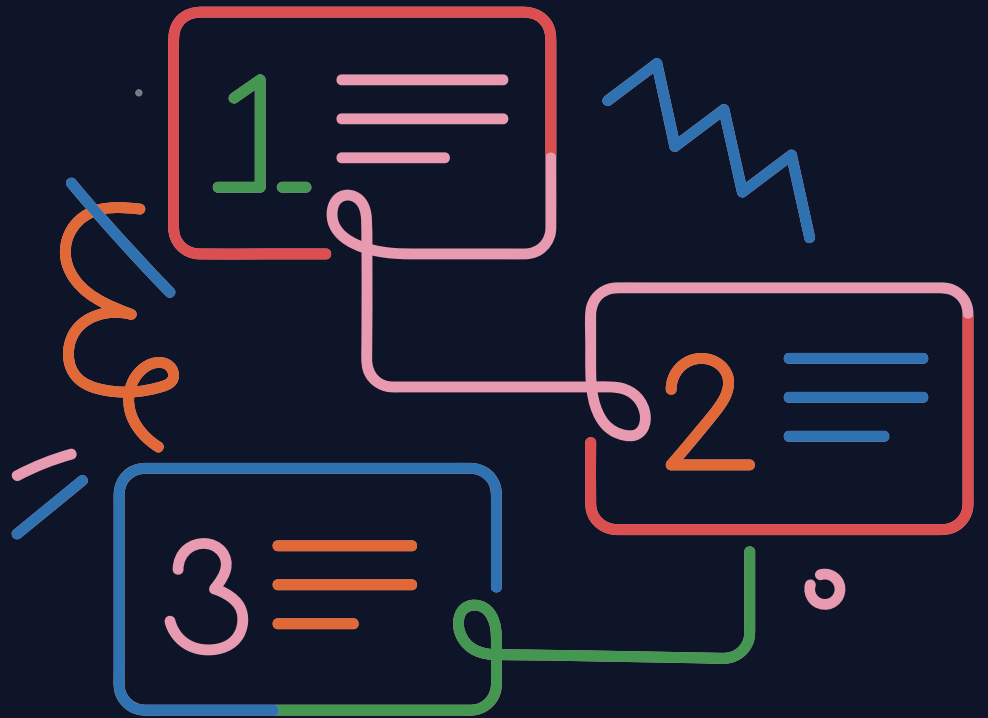
This section lists all important appendices needed to carry out a BCP. These appendices include:

- A. EMPLOYEE CONTACT LIST**
- B. RECOVERY PRIORITIES**
- C. ALTERNATE SITE RESOURCES**
- D. EMERGENCY OPERATIONS CENTER (EOC) LOCATIONS**
- E. VITAL RECORDS**
- F. VENDOR LISTS**
- G. IT SYSTEM REPORTS AND RESOURCES**
- H. ALTERNATE SITE TRANSPORTATION INFORMATION**
- I. IMPACT AND RISK ASSESSMENTS**
- J. BUSINESS IMPACT ANALYSIS**
- K. RECOVERY TASK LISTS**
- L. OFFICE RECOVERY PLAN**

SECTION

THREE

**FOUR
PRIORITY
THEMATIC
AREAS**



Four Priority Thematic Areas



**Disaster
Prevention and
Mitigation**



**Disaster
Preparedness**



**Disaster
Response**



**Disaster
Rehabilitation
and Recovery**



**Disaster
Prevention and
Mitigation**

- Hazards and risk assessment
- Vulnerability analyses
- Identification of hazard-prone areas
- Development of early warning systems
- Structural and non-structural interventions
- Developing policies, ordinances and laws
- Mainstreaming DRRM and Climate Change Adaptation (CCA) into development plans





Disaster Preparedness

- Increasing awareness and capacities of individuals, institutions and communities in DRRM
- Contingency planning
- Pre-positioning and stockpiling
- Conduct of local drills and simulations
- Organizing responders
- Development of national and local disaster preparedness policies, plans and systems
- Public Service Continuity Planning (PSCP) for government agencies and entities
- Business Continuity Planning (BCP) for the private sector



Disaster Response

- Contingency plan activation
- Rapid damage and needs assessment
- Evacuation
- Search, rescue and retrieval
- Management of evacuation centers
- Relief operations
- Psychosocial first aid
- Early recovery activities





Disaster Rehabilitation and Recovery

- Post-disaster needs assessment
- Review of policies and plans to improve DRRM mechanisms
- Housing and resettlement
- Repair and restoration of infrastructure and lifeline facilities
- Revival of economic activities
- Provision of new sources of livelihood



SECTION FOUR

RISK MAPPING



Risk Mapping

Risk mapping for MSMEs (Micro, Small, and Medium-sized Enterprises) is an essential practice in today's dynamic business environment. These enterprises form the backbone of many economies, contributing significantly to employment and economic growth. However, they often face unique challenges and vulnerabilities that can jeopardize their sustainability. Therefore, creating a risk map specifically tailored to MSMEs is crucial for their long-term success.

RISK ASSESSMENT MATRIX		CONSIDER THE LIKELIHOOD OF A HAZARDOUS EVENT OCCURRING				
		Very unlikely to happen	Unlikely to happen	Possibly could happen	Likely to happen	Very likely to happen
CONSIDER THE SEVERITY OF INJURY/ILLNESS	Catastrophic (e.g fatal)	Moderate	Moderate	High	Critical	Critical
	Major (e.g Permanent Disability)	Low	Moderate	Moderate	High	Critical
	Moderate (e.g Hospitalisation/Short or Long Term Disability)	Low	Moderate	Moderate	Moderate	High
	Minor (e.g First Aid)	Very Low	Low	Moderate	Moderate	Moderate
	Superficial (e.g No Treatment Required)	Very Low	Very Low	Low	Low	Moderate

“Insurance is important in business. It just makes sense that we share risk for low probability high impact events.”

SECTION

FIVE

**LESSONS
LEARNT**



Humanitarian Response

One Million Forty- Five Thousand, One Hundred Sixty-Five Dollars (\$1,045,165) was required for additional procurement of Cleaning Supplies and water.

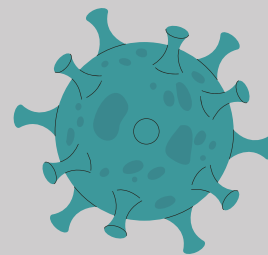


Four Thousand Three Hundred and Eighty-Three Households (4,483) were assessed, indicating that fourteen thousand seven hundred eighty-nine people including children (14,789) persons were directly affected.



HUMAN IMPACT

Hurricane Lisa following swiftly on the heels of the COVID-19 pandemic have harmed the livelihoods of over 172,000 persons or approximately thirty-nine (39%) of the population, limiting capacities to generate income and resulting in significant personal income losses



Statistical and econometric models show the likelihood of GDP's growth rate dropping around 0.38% points in 2022 due to this disaster

Total Damage and Loss by Sector

The estimated value of the effects to physical infrastructure and assets arising from Hurricane Lisa in Belize amounted to BZ\$131.1 million while loss because of the disruption in the production of goods and services and access to goods and services, governance and emerging risks amounted to BZ\$62.8 million.

The Social Sector accounted for 51.1% of the damage but only 7.2% of the Loss. As expected, the Productive sector accounted the largest proportion of the change in economic flows or Loss, amounting to 84.3% of the total value of loss while accounting for a significant proportion of the value of damage accounting for some 34% overall. Infrastructure accounted for 14.9% of the value of damage and 8.2% of the value of loss. Table 2 below presents the detailed summary of Damage and Loss as a result of Hurricane Lisa.

Sector	Damage	Loss
Social Sub Total	66,990,084	4,489,268
Housing	54,391,262	3,509,541
Education	10,572,494	406,037
Culture	2,026,329	573,689
Productive Sub Total	44,603,014	52,902,867
Agric., Fish, Fors.	31,433,760	33,370,330
Tourism	6,591,861	18,744,063
Commerce	6,577,393	788,474
Infrastructure Sub Total	19,520,575	5,123,681
Infra. & Trans	13,959,325	4,157,681
DRM		268,339
TOTAL	131,113,673	62,784,155

SECTION

SIX



**EMERGENCY
CONTACTS**





Emergency Contact List



911 or 990(Western Area only)



225-2174 or 610-6037



936 or 990 (Western Area Only)



911 or 990 (Western Area Only)



222-5632



HOTLINE: 0-800-664-2273

TEL: +501 822-2325